SPECTATOR COURT
An Urban Multi-use Complex
Terre Haute, Indiana

SUSAN RIDENS FOX
14 May 1984
College of Architecture and Planning
Ball State University
Muncie, Indiana
PREFACE

The pages of this book contain the discourse of an architectural thesis. It has been written for the purpose of permanently recording the results of 33 weeks of research and design activity. The content exemplifies the concerns, processes, and product of the thesis. An expose of the conclusions drawn upon realization of the project completes the dissertation.
ACKNOWLEDGEMENTS

Professor Bruce Meyer, Thesis Critic
Professor Jack Wyman, Thesis Critic
Professor Anthony Costello, Outside Critic

R. Marc Elliot, Terre Haute
    Redevelopment Commission Director
Stan Geda, Landplus West
John Hanley, Terre Haute
    Area Planning Department

Mr. & Mrs. Bernard Ridens, for their special encouragement and assistance
Dr. Joe B. Fox, for his inspiration and support
Mrs. Louise Dempsey, for her generosity and concern
Julie Beers, for her special friendship
Geoff Lisle, Dave Stone, Todd Thackery, Bill White, and Dan Wyckoff for their camaraderie and sense of humor
# TABLE OF CONTENTS

I. INTRODUCTION ............................................. 1  
II. ABSTRACT ................................................... 5  
III. METHODOLOGY ............................................ 9  
  A. Site Selection .......................................... 10  
  B. Site Analysis .......................................... 10  
  C. Objectives and Concerns ............................. 12  
  D. Project Selection .................................... 13  
  E. Building Type Analysis .............................. 14  
IV. PHILOSOPHICAL GOALS ................................. 17  
V. DESIGN INTENT ........................................... 21  
  A. Organization of Parts ............................... 22  
  B. Circulation .......................................... 24  
  C. Penetrations ......................................... 25  
  D. Systems .............................................. 25  
  E. Scale .................................................. 26  
  F. Aesthetics ............................................ 26  
VI. DESIGN DEVELOPMENT ................................. 27  
VII. PROGRAM ............................................... 33  
VIII. SOLUTION .............................................. 37  
IX. CONCLUSION ............................................ 55  
X. RETROSPECT ............................................. 59  
XI. APPENDICES ............................................. 63  
XII. BIBLIOGRAPHY .......................................... 71
INTRODUCTION
The architectural entity which is exemplified in the following pages is the consequence of nine months of intellectual effort. The design which evolved is an urban multi-use complex located in the central business district (CBD) of Terre Haute, Indiana. Included in the project are retail, commercial, office and residential spaces. The intention of the design was to create a stimulating environment, an island of excitement in the vast expanse of emptiness into which the CBD has evolved. It was hoped that the project would serve as a catalyst for the rejuvenation of the area.
ABSTRACT

The project will be explained by following the design process in the order in which it was executed. Site selection will be discussed first, followed by a summary of the analysis and inventory of the site. More indepth data on this analysis may be obtained from the appendices, if desired.

Goals of the project are explained in the next section, after which the problems confronting development are stated. Statistics are included to support the assumption that the problems exist.

The next portion of the book explains the reasoning behind the selection of the project type. Once it was decided upon, an inventory of similar buildings was taken. A list of the buildings studied is included, followed by a brief discussion of a few of the concepts implemented in these buildings.

The ensuing section examines design development. The philosophy behind the project is explained, then demonstrated through the concepts and organization behind the design. A detailed program describing each spatial type follows, including a summary of the square footages for each area.

Immediately following the program, the final solution is illustrated by a set of presentation drawings, which should give the reader a more complete understanding of the project. Conclusions drawn by the designer are the final entry.
SITE SELECTION

Selection of a site was the first step of the design process. The site is located at the intersection of Sixth Street and Wabash Avenue in Terre Haute, Indiana. It extends southward to Ohio Street and eastward to the existing buildings on the block. The site is in the heart of the central business district.

The major reason for choosing this site was its location. The desolate downtown area of Terre Haute deserves serious consideration as a design problem, and consequently, a well thought out urban plan should be resolved for its CBD. This would expedite the rejuvenation of a once prominent city which still has many positive aspects, and a great deal of potential.

The specific site was decided upon because of its cardinal position in the CBD. A vacant lot, which is approximately the area of a city block, the site is in the center of the retail core. It is conveniently located between the city/county government center (three blocks to the west), and Indiana State University (two blocks to the north), which are the chief activity zones of the present downtown area. It is also located at the intersection of major vehicular and pedestrian paths, and is adjacent to the convergence point of all routes of the mass transit system. Its central location has tremendous potential for the creation of a new image exceptional to Terre Haute.

SITE ANALYSIS AND INVENTORY

An indepth site analysis was performed to determine the most suitable building type for the site. Many different aspects were studied. A summary of the results is listed below. (More indepth information regarding the site inventory may be found in the appendices).

1. LAND USE:
   The five major uses of the surrounding area in descending order are retail, office, wholesale, institutional, and residential. The intended use of the area is as a major center for government, finance, offices, retail, services and high density residential.

2. HISTORICAL USAGE:
   The site was originally a pioneer cemetery. It has historically been utilized for retail, wholesale, office, institutional and financial space.

3. BUILDING CONDITION:
   Out of 190 buildings in the area studied, 38 (20%) have been declared unsafe, and four are in need of major repair or demolition. Fifty of the buildings have been declared eligible for the Historic Register.

4. TRANSPORTATION:
   The street system stresses a one-way loop system using Cherry, Ohio, First, and Ninth Streets. Alternating one-way streets running north and south intersect with the loop. Several federal and state highways (U.S. 40, 41, 150; S. R. 48, 46, 63) meet in the CBD, providing excellent access from surrounding counties. The Terre Haute Mass Transit System routes interchange at Seventh Street and Wabash Avenue, radiating outward to cover all areas of the city.
5. PARKING:
A total of 3,547 spaces exist in the area, 20% on street, and 80% off street. There are no parking structures in existence. Although parking is close to sufficient for demands, it is dispersed and non-uniform, which restricts its usage and appeal.

6. POPULATION:
Downtown: 166 senior citizens
Indiana State University: 11,587 students (1983-84 school year)
Terre Haute: 70,286
Vigo County: 114,528 (136,705 estimated by 1995)
Four County Metro Area: 175,143
Trade Area*: 254,350 (263,450 estimated by 1988)
*Encompasses area within a 60 mile radius

7. EMPLOYMENT STATISTICS:
The highest percentage of the population is employed in manufacturing (22.6%), followed closely by retail trade, services, and state and local government. Employment has declined 42% from 1970 to 1981, a loss of 2,273 jobs.

8. PUBLIC SERVICES:
Fire and police protection, public library.

9. PUBLIC UTILITIES:
Sewers, water, fire hydrants, natural gas, electricity, street lights, telephone, cable TV, traffic lights and building fire alarms are provided, and are adequate for future use.

10. ZONING:
C-4 CBD, which permits a wide variety of uses.

11. ENVIRONMENTAL STATISTICS:
Precipitation: 40 inches annually
Sunshine: 50% annually
Freeze-free days: 180
Mean Wind Speed: 10.9 miles per hour

12. SENSORY CHARACTERISTICS:
Visual: generally unpleasant images
Auditory: relatively quiet
Olfactory: occasionally malodorous
OBJECTIVES

A. FUNCTIONAL:
1. Promote the concentration of retail activity in the central business district.
2. Provide a wide range of public amenities.
3. Diversify functions and activities at street level.
4. Improve pedestrian and vehicular movement.
5. Utilize the urban plaza as a focal point, interaction space, and pedestrian link.
6. Improve traffic movement and parking availability.

B. PHYSICAL:
1. Rejuvenate the desolate downtown area.
2. Enhance the visual image.
3. Reduce the existing barriers.
4. Preserve the existing structures.

C. SOCIAL/CULTURAL:
1. Synthesize the needs of the community into a design of exciting scope.
2. Strengthen the community.
3. Increase interaction between the community and the university.
4. Create a positive image which is uniquely Terre Haute.
5. Create a 'PLACE'; a people environment for seasonal day and night use.
6. Encourage participation by all age groups.

CONCERNS

A. PROBLEMS:
1. Functional arrangements no longer provide necessary conveniences.
2. Retail trade has been reduced by movement of people to suburbs.
3. A feeling of abandonment characterizes the area as a result of empty and dilapidated structures.
4. Inadequate parking organization.
5. Inadequate and congested access to and circulation within the downtown area.

B. FACTORS CONFRONTING DEVELOPMENT:
1. Functional: accessibility and convenient parking.
2. Physical: character, condition and organization.

C. EVIDENCE OF 'BLIGHT':
50% of buildable ground area vacant or parking
19% demolition of existing structures
42% decline in employment
22% of buildings unsafe
10% reduction of retail trade
PROJECT SELECTION

Because the wish to bring vitality to the blighted downtown area cannot be fulfilled with one building type, and because the site is large enough to house a wide variety of activities, a multi-use building was chosen as the project type for the site.

A prime consideration in the type selections within the multi-use complex was maintenance of the retail core. Therefore, it was important to include retail space, especially at street level. Retail was also chosen because of its appeal to people. A department store is the ultimate retail enticement because of the diversity of products which it offers the consumer; therefore, it was included to act as a major draw to the project.

A major objective was to bring people back to the vacant area. One of the best ways to accomplish this goal is by creating housing. For this reason, it was decided to include residential units in the project. Permanent residents insure people presence, and people attract more people; therefore, persons actually living in the area should attract others to it because there will already be some degree of activity there. Residential units would be a special amenity for the CBD.

It was decided that office space would provide a necessary buffer between the retail and the residential space. Office usage has traditionally occurred in the area. Offices would also serve to bring more people to the site.

Although it is plausible that the dynamic interplay between these varied spaces could result in a provocative milieu, the complex would have a better chance of being successful if it included some type of special attraction; a 'one of a kind' landmark which would act as an 'image-giver'. It was determined that a dinner theatre would be a good choice to fill this description, due to the fact that Terre Haute does not have this specific type of entertainment facility, yet enthusiastically supports many similar types of facilities. A theatre would also be conducive to unique architectural design, one quality which makes a landmark recognizable and memorable.
BUILDING TYPE ANALYSIS

1. Bay Charles Towers, Toronto; Klein & Sears
2. 10-16 Bridge Street, Cambridge; Saunders Boston
3. Butler Square, Minneapolis; Miller Hanson Westerbeck Bell
4. C. D. Howe Bldg, Ottawa; Adamson Associates
5. Frankel House, Margate, New Jersey; Louis Sauer
6. Galleria, New York City; David Kenneth Spector
7. La Cite, Montreal; Eva Vecsei
8. Harborplace, Baltimore; Wallace, Roberts & Todd
9. Rental Units, New Haven, Connecticut; Louis Sauer
10. One United Nations Plaza, New York; Kevin Roche John Dinkeloo Associates
11. Pastorius Mews, Philadelphia; Louis Sauer
12. Peachtree Center, Atlanta; John Portman
13. Raouche Centre, Beirut; John S. Bonnington Partnership
14. Renaissance Center, Detroit; Colden Florance
15. Rochester Row, London; Chapman Taylor Partners
16. Stadthauser Ohne Stadt; Louis Sauer
18. Waverly Street Townhouses, Philadelphia; Louis Sauer
BUILDING TYPE ANALYSIS

FOUNDRY MALL, 1055 Jefferson Street, Georgetown, contains a two level retail piazza. A reflective pool is at the center with a generous stair poised above. Jutting down at an intriguing angle of handrails and landings, the stair provides an impetus to go down and look. The piazza is lined with shop windows, signboards, and recessed lights at every perspective, which creates the illusion of being in a shop window. The mall also contains five office floors which are terraced to minimize their intrusiveness. The building is clad in warm brick and wood finishes complemented by crisp reflective surfaces of metal and glass.

HARBORPLACE, Baltimore, has porticos which make places for people to see through the buildings and encourage them to come in from both sides. There is no front or back. The narrow aisles bring people in close proximity to the merchandise and to each other. Restaurants are located along the edges, with a 'food hall' down the center containing low rent spaces.

ROCHESTER ROW, London has a rhythm and scale similar to the surrounding buildings. An effort was made to turn the corner with style.
PHILOSOPHICAL GOALS
The principle underlying thought behind the generation of this project was to design a combination of buildings within a concentrated area which would provide the setting for a dynamic mixture of provocative activities intended to stimulate the rejuvenation of the downtown area. To improve the environment extant, the complex should be an 'explosion' from the desolate, dull, and disjointed atmosphere which exists to one which is exciting, unique and rhythmical. This would be accomplished through the interaction of interior and exterior space, and the interlacing of historical and contemporary elements. The most important consideration for the design was how it would affect people, for they are the major component necessary for the successful propagation of the downtown area. Without people, architecture has no purpose; therefore, the needs of the potential users of a building should always be of prime concern.
A. ORGANIZATION OF PARTS

The overriding objective behind the organization of the project is that it be understandable by its users. It should be simple and straightforward, yet interesting and exciting. It should allow for the integration of a mixture of uses, and provide flexibility for the division of spaces. It should recognize major access points, and provide circulation paths where the users want or need to go.

The major ordering element of the design is the central atrium space. This space is essential to achieve the primary goal of the project. It should provide a central gathering space in the downtown area, and act as a point of orientation. The entire project is organized around this space, which is located at the intersection of the pathways which connect the major access points.

1. Retail: To continue and enhance the streetscape, while reinforcing the retail core, the retail spaces are located on the first two levels along Wabash Avenue. Shop windows at street level will arouse the curiosity of passersby and lure them into the interior. The continuation of the retail facade along Sixth Street and the alley will also serve the purpose of enticing the public to enter, especially at the intersection of Spectator Court and the alley. Space for a department store is allotted on the corner of Sixth Street and Wabash Avenue. The department store will act as an anchor at one end of the complex to draw people through the other retail spaces. The location of all retail spaces will provide easy access, both pedestrian and vehicular, from all directions. A service level is located in the level below grade to provide storage space and delivery access to all shops and restaurants. This level will be flexible enough to allow shopkeepers to utilize portions of it as viable retail space, if desired. All retail spaces are organized around a central atrium space which will serve as the fundamental organizational element.

2. Restaurants: A multi-restaurant area is suggested as the usage of the second level. The placement of all restaurants on this level will aid the user in his understanding and utilization of the space, and allow greater flexibility in dining opportunities. Seating areas are provided which are common to all food and drink establishments, permitting people to obtain food from their favorite restaurant and eat with friends who have chosen another. The seating areas are located off of the main circulation path, at points where the views are most captivating.

3. Offices: Space to be utilized for offices will encompass the entire third level. Situated between the retail and the residential spaces, the office level will act as a visual and an acoustical buffer. The location of the office space above the retail levels will also give the employees a sense of importance. Proximity of the office space to the Terre Haute First National Bank will afford the bank with the opportunity to expand its offices into the project.
4. Residential: The residential units are situated on the upper level of the project between Wabash Avenue and the alley. The major considerations in the placement of the residential spaces were view, privacy, sense of identity, and quality of light. The height of the upper level will maximize sight lines. Organization of the units will be around the perimeter of the building, so that the central space may be sanctioned as a community green space. Private subspaces will pull away from it at each unit entrance. These subspaces should provide the residents with feelings of privacy and identity.

5. Theatre: The theatre will be located on the corner of Sixth Street and Ohio Street. It is most appropriate on Ohio Street because it will not interrupt the retail core. Its usage is more similar to those of the buildings along Ohio. The theatre should take advantage of the prominence of the corner site along a major thoroughfare by displaying a sculptural quality which will denote it as a landmark. The placement of the theatre next to the church provides the opportunity for strong contrast. An urban plaza located between the church and the theatre will serve as a separation element; however, it will be utilized by both as a major pedestrian area. The theatre is situated upon the site in a manner which allows it to integrate with the remainder of the complex, while still retaining its own identity. The parts of the theatre are arranged so that the support facilities are located along Ohio Street for ease of delivery, and the major activity spaces are oriented toward the atrium space on the ground floor for ease of pedestrian access.

6. Parking Garage: The structure will be placed on a part of the site which is already utilized for parking. Locating it along Ohio Street, which is one-way, provides smooth vehicular access and egress, while promoting maximum safety. It is essential, however, that the garage not infringe upon the church.
B. CIRCULATION

Pedestrian and vehicular circulation occurs along the north, south, and west edges of the site, and through the center along the alley. The urban edge has been maintained by emphasizing the paths along the street edge. The alley corridor will be developed as a pedestrian arcade, focusing on the magnificent framed view of the courthouse. The alley which runs north and south, once known as Spectator Court, will serve as a major connection between Wabash Avenue and Ohio Street. Within the building, the circulation will follow the cross paths which people are most likely to traverse to move from one major zone to another.

Vehicular traffic will continue on all three sides of the site. It is suggested that Wabash Avenue be narrowed to two lane traffic to provide diagonal parking along the sidewalk. A drop-off for the theatre as well as the complex will be located at the intersection of Sixth Street and the alley. All traffic through the drop-off loop will be northbound so that the passenger will be on the side of the arcade entrance. Two way traffic flow on Sixth Street allows easy access from all directions and back to the parking garage.

Vertical circulation is located at four major points:

1. Fire stairs and elevators situated along Spectator Court will be used by the offices and the residential units.

2. Fire stairs along Sixth Street between Wabash Avenue and the alley will be used by the retail, office, and residential levels.

3. Elevators at the southwest corner of the atrium on axis with the entry corridor from Spectator Court will be used by the retail levels.

4. A free-standing stair for the retail levels is boldly perched in the atrium. There is also an escalator situated near the center of the department store which may indirectly be used by all retail areas. Vertical circulation in the theatre consists of fire stairs to the balcony located at each end of the lobby space. Vertical circulation also occurs along the street. These 'sidewalk stairways' are an attempt to recognize a price of the history of Terre Haute, as they were once prominent features of the cityscape.
C. PENETRATIONS

Entrances are located at the primary access points which were determined by the activities which occur in the surrounding area. The major entrance penetrations occur at the corner near the parking garage, at the corner of Sixth Street and Wabash Avenue, and on Wabash Avenue at the pedestrian crosswalk. Minor entrances occur along Sixth Street at the alley, between the church and theatre, and in most of the individual shops. All entrances to shops open onto pathways which converge on the central atrium space, emphasizing its significance as a focal point.

Entrances to the theatre are found at three locations: at the Sixth Street Arcade drop-off; from Ohio Street through the church courtyard; and on axis with the central stairs in the atrium space. The theatre office entrance and ticket booth are also situated near the drop-off. Performer and delivery entrances are located along Ohio Street for easy vehicular access.

Vehicular access and egress to and from the parking garage is from Ohio Street. Pedestrian access is at the intersection of Spectator Court and the arcade.

D. SYSTEMS

1. STRUCTURAL

With the exception of the theatre, the complex is designed on a 20 foot grid system with minimal variation. This system is to allow maximum flexibility in the retail and office spaces, and to provide an appropriate bay size for the residential units. The structural framework will consist of steel beams supported by steel columns clad in concrete. The non-bearing walls will have brick veneer on the exterior and drywall on the interior. A separate wall should be constructed adjacent to the bank, as opposed to sharing the existing wall. Drop ceilings will occur in the majority of the spaces; however, in the residential units, there will be exposed structure. The atrium will be supported by steel trusses. The theatre will be of concrete bearing wall construction built upon a stepped concrete floor slab. Eighteen inch concrete columns will support the parking structure. It will contain one foot concrete floor slabs ten feet apart.

2. MECHANICAL

Mechanical space for the retail and office levels is allocated in the service level. Space for ducts has been provided in the walls and floors. Each residential unit will possess its own mechanical system. In the theatre, the systems will be placed in the backstage area.
E. SCALE

Human scale was the chief concern. The building is not mammoth or overpowering, but proportioned to the street and to the surroundings. Each different building type must be scaled in relation to its function.

F. AESTHETICS

On a large scale, the image of the project is clean, crisp, and clear. On a small scale, it is detailed, interesting and complex. The image in general should be understandably organized, comfortable, exciting, delightful, coherent, and remarkable.

The building complements the streetscape by picking up elements and historical features from the surrounding buildings. However, it also illustrates future development possibilities by establishing a new image. Differences in function are delineated by varied implementation of elements, such as changes in the type and/or rhythm of the fenestration. Variations in the elevations facing the community green space on the residential level will provide identity for the inhabitants.
DESIGN DEVELOPMENT
RETAIL

Curved and diagonal wall configurations guide people into and through the corridors leading to the central atrium space. The repetitive rhythm of the elements entices movement. The atrium acts as a 'light at the end of the tunnel', also serving to lure people into the space. The atrium is a relief from the noise of the street. The free-standing stair is its focal point. Subspaces occur off the circulation pathways and the central space to denote entrances and provide the pedestrian with a chance to pause and observe the merchandise. Entrances to shops should be within view, but on different axes to provide a sense of identity for each establishment. Because an exploded space which breaks up a narrow corridor is likely to become a gathering or meeting place, the walls of the building at the intersection of the arcades were pulled away from each other, creating an unexpected open space in the midst of a tall, relatively narrow corridor. This arrangement opens up the complex to the parking garage, and allows the typesetting building to 'breathe'. Because this space will receive southern exposure, it may be utilized as an open market during warm weather.

Large display windows located at critical points provide optimum advertising opportunity. Signage will be coordinated to insure the aesthetic quality of the facades. The flexibility in the retail spaces allowed by the 20-foot grid system makes it possible for clients to purchase the amount of space proportionate to their needs. The client may insert stairs and elevators as necessary to the service level within his own space.

Assuming that the second level of retail space will be utilized as a multi-restaurant area, seating has been provided which is common to all eating establishments and which capitalizes on the most excellent views. Terre Haute is in need of more variety in restaurants; therefore, this area should serve as a special amenity which will bring people to the complex. The eating areas will be partially secluded and prevent 'objectionable surveillance'; the people eating may look down upon the people moving through the atrium space, who have not established a personal territory, but they may not be looked down upon in their own personal space. A southern exposure highlights the eating area located over the alley next to the theatre. The sidewalk stairs provide the opportunity for a sidewalk cafe.

OFFICE

The office level provides the same degree of flexibility as the retail space. To delineate its functional difference, its fenestration is positioned in a different rhythmical pattern. The abundance of window openings is a result of the concept that a view to the exterior environment will stimulate productivity in a working environment.

These office spaces should serve to draw even more people to the area. The possibility exists within the complex for a living/working environment if employees in the building live in one of the residential units.
RESIDENTIAL

The vertical circulation tower for the offices and residential units is located just off Spectator Court between Wabash Avenue and the alley arcade. This position is semi-private, yet not isolated. It is within close proximity to the parking garage. It should be convenient for the residents and office visitors, as well as provide a sense of safety. An office for the administration of the residential complex is located adjacent to the circulation tower for convenience and protection. South of the circulation tower is a large storage area to be used by the residents for overflow storage. The 24 condominium units are staggered along the interior green space, but maintain the line of the building on the exterior. The units are broken down into five different types. The various types are alternated to allow maximum choice for the residents and promote greater interaction between different types of neighbors. Each unit design has a large open plan and either northern and southern or eastern and western exposure. Fenestration on opposite sides will improve the light quality within the units. Smaller openings occur on the north elevations for energy conservation. The elevations add character and charm to the top of the building by utilizing elements extracted from surrounding historical buildings. Special treatment has been employed at the corner to differentiate it from the rest of the building. The materials on the interior elevations facing the green space will differ from the brick veneered exterior to further enhance the notion of private territory. The interior facades will be more varied and offer more opportunity for personalization. In the community space, the glass walls of the atrium extend up through the space offering the residents a view of the activity below without fear of their personal space being visually or acoustically violated.

The individual pathways which spin off of the chief organic pathway provide a transition from community territory to individual territory. These separate paths create subspaces which may be used by the inhabitants as their own private green space. Although each unit possesses its own identity, the design also affords the residents the liberty to watch who comes and goes from the complex, as a mechanism of defense. Several distinctive attributes demarcate the residential units to inveigle people to live in the downtown area. Every unit includes: a breakfast nook penetrated by a skylight; an open dining/living room overlooked by a loft; a half-bath on the first level; abundant closet space; spacious, open stairways; copious views ranging from the tranquility of the green space to the bustle of the urban streetscape; variable ceiling heights; a balcony on the street side; and a sundeck off the master bedroom oriented to either the south or the east.
Theatre

The sculptural image of the theatre should be recognizable. The configuration of wall planes juxtaposed against the church facade will pull people into the plaza, then catapult them into the atrium. The plaza will be shared by the church, theatre, and retail spaces, allowing activity at many different time periods. The location of the kitchen on the plaza would be conducive to the development of an open air café which would be used during the hours when the theatre was not in operation. In line with the major access points, the entrances are positioned so as to be quickly discerned. Once inside, the auditorium entrances, stairs to the balcony, and coat check are all clearly visible. Centrally located, the restrooms are easily discovered, yet do not interrupt the main lobby space. Large windows in the lobby display the theatre patrons as they arrive. Inside the auditorium, the staggered walls serve dual purposes: to improve the acoustical quality, and to obscure the kitchen entrances. The southeast corner of the theatre is occupied by the kitchen, which will be serviced from Ohio Street. A dumbwaiter will supply food to the balcony. The auditorium seats up to 442 people at tables for two or four. The balcony may be closed off to reduce the seating capacity to 260 seats. Staggered tables on levels which are two and a half feet apart provide excellent sight lines. The waiters and waitresses can easily flow through each row. The walls between the levels are at a height which prevents people from viewing down upon those in the row in front of them, yet are not so high as to block sight lines. Handicapped people may be seated in the last two rows of tables. The rows are laid out at an encirclement of 130 degrees to maximize good views. The proscenium stage will basically be used for single performers or small group acts, but may also be used for dramatic productions not requiring a fly tower. The large storage area directly behind the stage has delivery access from Ohio Street. The backstage area consists of: four dressing rooms which act as acoustical buffers between the green room and the auditorium; one rehearsal room; restrooms; and a large green room which has a door to Ohio Street for quick entry and exit of the performers. Ticket sales are located outside the main theatre space near the drop-off for quick pick-ups. Although connected within, the separate location of the theatre offices allows them to remain open during regular business hours. Covered space has been allocated for potential formation of lines at the ticket office. Retail space on the southwest corner, which infills the urban framework, could successfully be utilized as a corner bar associated with the theatre. This space could be connected from within to the theatre if desired. Interaction between the major retail area and the theatre is encouraged. The theatre billboard, located on axis with the free-standing central stair, is highly visible from the atrium.
PARKING STRUCTURE

The parking structure is intended to complement the existing streetscape while still being recognized as its function. Its relationship to the entire complex has been thoughtfully considered. The design attempts to improve the structure's performance as a parking garage by the following techniques: reduction of narrow lanes, steep grades, and sharp turns; development of open, extended sight lines; provision of abundant illumination; and protection from weather.
PROGRAM

PROJECT TYPE: Urban, mixed-use, multi-level
LOCATION: Terre Haute, Indiana
DESCRIPTION: The project is composed of a variety of spaces which are intended to complement and contrast with each other, as well as with the urban context in which it is located. The juxtaposition of these spaces is an attempt to create an environment which will inspire activity and excitement.

MAJOR SPACES

1. RETAIL:
   A. A department store to act as a lure to the building complex.
   B. Several small specialty shops, many of which may cater to the university population located nearby.
   C. A market area to provide grocery items to the current and anticipated downtown population.

2. RESTAURANT:
   A. A 442-seat dinner theatre in which major entertainers who prefer an intimate atmosphere will perform. Other uses could include dinner meetings, wedding receptions, and small dramatic productions.
   B. A series of small, reasonably-priced restaurants which will be patronized by downtown business employees, shoppers, residents, and the university population.

3. OFFICE:
   An entire level devoted to office space which would be available in various sizes. All individual spaces would be available in various sizes. All individual spaces would be provided with views.

4. RESIDENTIAL
   One, two, and three bedroom apartment/condominiums located in the upper levels of the project. Occupancy of these units is anticipated to be by the following groups:
   A. Singles (unmarried, living away from parents)
   B. Newly married (no children)
   C. Empty nest (older, children gone, head still working)
   D. Sole survivor (still working)

5. PARKING GARAGE
   A five level structure which will house 71 cars on each level, for a total of 355 cars.
### SPACE SUMMARY

<table>
<thead>
<tr>
<th>SPACE</th>
<th>SQUARE FOOTAGE</th>
<th>SPACE</th>
<th>SQUARE FOOTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Atrium</td>
<td>5,600</td>
<td>H. Circulation (Total)</td>
<td>57,420</td>
</tr>
<tr>
<td>B. General Retail (Total)</td>
<td>66,950</td>
<td>1. Level One</td>
<td>17,100</td>
</tr>
<tr>
<td>1. Level One</td>
<td>22,500</td>
<td>2. Level Two</td>
<td>13,130</td>
</tr>
<tr>
<td>2. Level Two</td>
<td>15,750</td>
<td>3. Level Three</td>
<td>13,050</td>
</tr>
<tr>
<td>3. Service Level</td>
<td>28,700</td>
<td>4. Level Four</td>
<td>7,900</td>
</tr>
<tr>
<td>C. Department Store (Total)</td>
<td>49,000</td>
<td>5. Service Level</td>
<td>6,240</td>
</tr>
<tr>
<td>1. Level One</td>
<td>6,400</td>
<td>I. Mechanical</td>
<td>3,600</td>
</tr>
<tr>
<td>2. Level Two</td>
<td>14,100</td>
<td>J. Theatre</td>
<td>16,455</td>
</tr>
<tr>
<td>3. Level Three</td>
<td>13,300</td>
<td>1. Lobby</td>
<td>1,760</td>
</tr>
<tr>
<td>4. Service Level</td>
<td>15,200</td>
<td>2. Auditorium</td>
<td>4,110</td>
</tr>
<tr>
<td>D. Office</td>
<td>20,450</td>
<td>3. Balcony</td>
<td>2,055</td>
</tr>
<tr>
<td>E. Residential (Total)</td>
<td>70,102</td>
<td>4. Stage</td>
<td>1,024</td>
</tr>
<tr>
<td>1. One Bedroom Unit (2)</td>
<td>960</td>
<td>5. Storage</td>
<td>1,050</td>
</tr>
<tr>
<td>2. One Bedroom Unit with Loft (10)</td>
<td>1,365</td>
<td>6. Dressing Room</td>
<td>700</td>
</tr>
<tr>
<td>3. Two Bedroom Unit (8)</td>
<td>1,755</td>
<td>7. Green Room</td>
<td>1,380</td>
</tr>
<tr>
<td>4. Corner Two Bedroom Unit (2)</td>
<td>2,218</td>
<td>8. Rehearsal Room</td>
<td>400</td>
</tr>
<tr>
<td>5. Corner Three Bedroom Unit (2)</td>
<td>2,348</td>
<td>9. Private Restrooms</td>
<td>200</td>
</tr>
<tr>
<td>7. Storage</td>
<td>4,200</td>
<td>11. Kitchen</td>
<td>1,125</td>
</tr>
<tr>
<td>8. Green Space</td>
<td>18,720</td>
<td>12. Manager's Office</td>
<td>150</td>
</tr>
<tr>
<td>F. Seating Areas, Level Two</td>
<td>3,020</td>
<td>13. Ticket Office</td>
<td>390</td>
</tr>
<tr>
<td>G. Restrooms (Total)</td>
<td>2,800</td>
<td>14. Circulation</td>
<td>1,379</td>
</tr>
<tr>
<td>1. Level One</td>
<td>800</td>
<td>15. Mechanical</td>
<td>300</td>
</tr>
<tr>
<td>2. Level Two</td>
<td>800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Level Three</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Service Level</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. Parking Structure</td>
<td>127,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL FOR PROJECT</td>
<td>419,377</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Second Level Plan
Fourth Level Plan
Residential Unit Plans

Level One

1-Bed

2-Bed

Level Two
Elevations
In conclusion, I feel that my thesis project was a continual challenge. It was the first time that I had attempted a design of such scope over such a long period of time. I was not able to reach the level of detail I had hoped, but I think I achieved a thorough understanding of the project. Although I realize that there are still weaknesses in my design, I believe I have successfully resolved many of the design problems associated with a multi-use urban building.
Upon completion of my academic career in the College of Architecture and Planning at Ball State University, it would have been nice to be able to take time to reflect upon the five grueling years I have spent here. The final quarter of one's thesis year, however, proves to be as intensely draining as any other quarter, hardly allowing one time to be a normal human being, let alone look back upon the past five years.

Five things I do know. The first is that I have learned a great deal. The second is that I still have a great deal to learn. The third is that I will never be able to learn everything. The fourth is that I must strive to learn as much as I can. The fifth, and most important, is that I must use what I have learned to the best of my ability.
Appendix A

MACRO-CLIMATE

A. SOIL: type Elston sandy loam, 0-2% slope, building debris depth of 20'-0".
B. ENVIRONMENT:
   1. Physical: urban, low scale, absence of urban framework, absence of vegetation
   2. Social: no central gathering points, lacks strong CBD, small amount of housing
   3. Psychological: desolation, isolation, loneliness, inconsistency, frustration, disappointment, discouragement
C. ECONOMIC BREAKDOWN:
   22.6% Manufacturing
   18.9% Retail trade
   17.3% Services
   13.2% State and local government
   5.1% Transportation/public utility
   4.5% Construction
   4.4% Wholesale trade
   3.1% Finance/insurance/real estate
   2.1% Federal government, civilian
   1.0% Federal government, military
   0.1% Agriculture
   0.0% Mining
D. INDIANA STATE UNIVERSITY ENROLLMENT:
   3,152 Freshmen
   2,239 Sophomores
   1,999 Juniors
   2,555 Seniors
   9,945 Undergraduates
   1,636 Graduates
   6 Special Students
   11,587 Total (4,300 on campus)
E. SENIOR CITIZENS:
   166 in Deming Hotel
   221 anticipated in Terre Haute House
F. MAJOR REGIONAL ACTIVITY NODES
   1. Located near city center
   2. Located near university
G. CLIMATE
   1. Precipitation: 40" rain, 18" snow
   2. Temperature:

<table>
<thead>
<tr>
<th></th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp.</td>
<td>40</td>
<td>45</td>
<td>50</td>
<td>65</td>
<td>75</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Above 90</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 32</td>
<td>27</td>
<td>23</td>
<td>20</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DD</td>
<td>1113</td>
<td>949</td>
<td>800</td>
<td>430</td>
<td>150</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>%Sun</td>
<td>41</td>
<td>47</td>
<td>49</td>
<td>55</td>
<td>62</td>
<td>68</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp.</td>
<td>88</td>
<td>85</td>
<td>80</td>
<td>70</td>
<td>55</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Above 90</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 32</td>
<td>0</td>
<td>0</td>
<td>90</td>
<td>300</td>
<td>650</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>DD</td>
<td>0</td>
<td>0</td>
<td>90</td>
<td>300</td>
<td>650</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>%Sun</td>
<td>74</td>
<td>70</td>
<td>68</td>
<td>64</td>
<td>48</td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>

Freeze free period: 180 days
Mean wind speed: 10.9 mi./hr.
H. LAND USE:

1. CBD (34 acres):
   35% street right-of-way
   31% parking and vacant lots
   33% ground level building space
   16% retail
   15% business offices
   14% wholesale
   13% institutional
   25% vacant or residential

2. PARKING:
   3,547 spaces
   2,851 off street (80%)
   723 on street (20%)
   No parking garages

3. BUILDINGS:
   Demolitions: 43 since 1970
   Construction: 9 since 1970
   Total buildings: 190 since 1981;
   140 safe, 38 (20%) unsafe, and four
   in need of major repair
   50 buildings eligible for Historic
   Register

4. INTENDED USE OF AREA:
   Major center for government, fi-
   nance, offices, retail, services,
   and high density residential.
Appendix B

MICRO-CLIMATE

A. TOPOGRAPHY: the site is virtually flat.
B. EXISTING VEGETATION: sparse trees around church; trees at intersection of Sixth and Wabash where street improvements have been implemented
C. UTILITIES: sewers, water, natural gas, telephone, cable TV, fire hydrants, electricity, street lights, traffic lights and building fire alarms.
D. VIEWS:
   1. Into site: enclosed
   2. From site: enclosed
      a. Framed view of courthouse: good
      b. View of Terre Haute House: good
      c. View of beautification project at Sixth Street and Wabash Avenue: good
      d. View east and west on Ohio: poor
      e. View of I. S. U. north on Sixth Street: good
      f. View South on Sixth Street: poor
E. EDGE CONDITIONS: hard, enclosed, insensitive
F. INGRESS/EGRESS: vehicular from north, south and west; pedestrian from all sides
Appendix C

ASSETS

A. CITY
1. 500,000 persons within 60 miles of downtown, 11% increase anticipated 1980-1995.
2. Four closest metropolitan areas 68-200 miles away.
3. Indiana State University.
4. Convergence point of four major highways.
5. Vacant land available for building.
6. Broad mix of land use opportunities.

B. SITE
1. Centralized, prominent location within CBD.
2. Zoned for wide variety of uses.
3. High volume of pedestrian and vehicular traffic.
4. Indiana State University located two blocks to the north.
5. City/county government center located three blocks to the west.
6. Proximity to historical district.
7. Proximity to Wabash river.
8. Potential for establishment of strong image, and enhancement of downtown.
Appendix D

PHYSICAL CONSTRAINTS OF SITE

A. SETBACKS
1. Alley: 11'-0" from center line.
2. Rear lot line: 11'-0" from center line.
3. Corner lot: nothing may impede vision 3'-10" above center line grades of intersecting streets and a line joining points along street lines 15'-0" from point of intersection.

B. PARKING
1. Distance: 350' or less from building.
2. Exit: at least 100' from intersection.
3. Entrance: at least 40' from intersection, (no vehicular entrance or exit within 50' on same side of street as church).
4. Spaces: greater than or equal to 180 square feet each for public; 152 square feet each for privacy.
5. Access drive: at least 20' wide, (no parking or loading closer than 10' to church).
6. Off street requirements:
   a. Shopping: 3 spaces for each 200 square feet of floor area.
   b. Commercial: 3 spaces for each 200 square feet of floor area.
   c. Office: 1 space for each 200 square feet.
   d. Theatre: 1 space for every 6 seats.
   e. Church: 1 space for every 3 seats.
   f. Residential: 1.2 spaces for each unit.
   g. Restaurant: 1 space for every 2 seats.
SITE
Originally owned by Curtis Gilbert.
Pond was located at intersection of 6th and Wabash.
Wabash Avenue originally called Main Street
and National Road.

Corner of Sixth Street and Wabash Avenue
(1851-1871):
Terre Haute Commercial College and Telegraph
Institute
W. H. Paige Music House
W. S. Ryce and Company Dry Goods
Prairie City Bank

Ohio Street between Sixth and Sixth and One-
Half Streets (Beech Block 1894):
Dr. Benjamin F. Tomlin Medical Surgery and
Hypodermic Institute
Terre Haute Commercial College
D. H. Baldwin & Company
A. C. Austin & Company
Central States Dispatch Freight Line
Postal Telegraph Cable Company
Vigo County National Bank
Star Printing Company
Western Union Telegraph Office

Wabash Avenue (1875):
E. W. Johnson Wholesale
Alexander & Company
Poultry and Game Department

Wabash Avenue (1915):
Roots Department Store

HISTORY

CITY
1816 - Town platted.
1818 - Terre Haute becomes seat of Vigo
County.
1838 - U. S. 40 built.
1849 - Erie Canal built.
1853 - Terre Haute incorporated.
1865 - Terre Haute Normal School established.
1920's - Industries closed; reduced employ-
ment.
1979 Area Planning Report prepared by the Area Planning Department for Vigo County.


AIA Journal,
V. 65, No. 4, April 1976, pp. 42-43.
V. 70, No. 7, June 1981, pp. 32-42.
V. 175, No. 23, June 1982, pp. 56-58.
V. 175, No. 14, April 1982, pp. 44-45.

Architectural Record,
V. 158, No. 8, December 1975, pp. 76-79.
V. 168, No. 5, October 1980, pp. 100-105.

Building,
V. 233, No. 7000, August 26, 1977, pp. 43-51.
V. 238, No. 7121, January 11, 1980, pp. 52-55.

Building Design,
V. 567, October 23, 1981, p. 36.

Canadian Architect,
V. 21, No. 4, April 1976, pp. 26-38.

GA Houses, No. 6, 1979, pp. 202-205.

Historic Preservation, V. 32, No. 1, pp. 46-49.

Home and Building,


Interiors, V. 135, No. 4, November 1975, pp. 76-79.


RIBA Journal, V. 87, No. 7, July 1980, p. 34.