



Lubbock Community Shopping Center

LUBBOCK COMMUNITY SHOPPING CENTER

BY
ANIZAH ABUBAKAR

ARCHITECTURE

AS A

SOCIAL DESIGN

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P R E F A C E

Although the design professions work with different materials and employ different techniques to solve their problems, they share their only client--the human race--in common. Architects, and other professionals in the expanding field of environmental design accept without question the fundamental assumption that their work is designed for, and must be useful to, human beings.

Yet at various point in the history of architecture, there has been a tendency to judge buildings in terms of physical form by itself with little consideration on the occupants, worried that they will interfere with the success of the buildings. Today there is a tendency to use productivity measures as the " bottom line " of success. This is not an unhealthy development, but there is a danger that quality-of-life may be lost in the process. There are many aspects of design that cannot be properly be converted into dollar terms, at least according to accepted standards of scientific proof. However, the social design movement introduces occupant satisfaction as another essential criterion of design success. Social design is a result of collaboration between behavioral scientists and design researches, which believes that knowledge about the physical environment would improve the understanding of human behavior.

Throughout the paper, I stress numerous times the importance of social design for a community. There is no better way to improve the quality of buildings and neighborhood than to create a vital constituency for good design among the public. Therefore, I choose to design a community shopping center in downtown Lubbock, in order to create a place that fulfills the social needs of the community. In addition to being a place to shop and other business activities, the center will also encompass recreational activities under one physical framework. The downtown is chosen for the project site due to the fact that the area is lacking social activities and interesting atmosphere.

Since the center is for the community, a better understanding of the interrelationship between built environment and behavior is very important for the project. Through a good social design concept which incorporates the study of human behavior and the satisfaction of the future occupants, hopefully the community shopping center will successfully create a better social environment for the area.

T H E S I S S T A T E M E N T

A C K N O W L E D G E M E N T S

This paper is dedicated with love to my husband,
Norezuan Ab. Malek
for encouraging and tolerating me through my college
years
and to my parents, Abubakar Mahidin and Marawan Md.
Basir
for encouraging and tolerating me throughout my
living years

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T H E S I S S T A T E M E N T

Architecture is a fascinating and difficult subject about which to explain. This is why most architects rely on drawings and photographs to describe their work. Yet pictures do not show how a building fits the moods and activities of the occupants because this task requires words to interpret it. Social design is the movement that emerged out of this confusion and tell a story of how two groups of people, behavioral scientists and designers, very different in thinking style, temperament and interest, came together to improve the fit between people and buildings. They shared a belief that knowledge of human behavior and physical environment would improve the design process. The knowledge of human behavior is not limited to the outer physical only but as a whole. This include their values, beliefs and norms personally and collectively.

This kind of learning is what most of designers ignored because their formal training in architecture, i.e., Vitruvius architects, drives them to treat anonymous users like any other inanimate determinant of architectural form. As professor-architect Otto Friedman Silenius put it in Evelyn Waugh's Decline and Fall: "The problem of architecture as I see it is the elimination of the human element from the consideration of form." In real life the architect, Peter Eisenman still expresses the same sentiment. As he writes for himself, "Architecture is made by architects, for themselves--I do my work for me; there are no other 'people' for the architect." The sad thing is not all architects acknowledge their mistake denying human consideration in their design.

To aggravate the matter they waxed eloquently in public speaking about the need of users. For example, modernist represented architecture as the vehicle of social welfare and set public housing as the highest priority of architecture.¹ However, there was no evidence of consulting with the users of housing estate during the course of their design. No one bothered to explain why, since the picture was too obvious. Users were not a stable or coherent entity and they did not know what they wanted or, more importantly, what they should have. Their collective needs and social values are interpreted by the architect and the sponsoring agency in the program and as a result, their construed values conflict with existing beliefs and dissatisfaction and frustration occurs in the users' part. According to Walter Gropius in The New Architecture and the

Bauhaus, it was enough to keep your mind centered on function: the design would take care of itself; and the occupant, sooner or later, would see the logic of the architect's way.

In contrast, social design movement incorporates the public values in the design thought and the public satisfaction is an essential criterion in the success of design process. Due to the fact that public values of a community is an essence of social design movement, its inclusion in a design of public space is inevitable. The term " public " connotes the idea that these settings are accessible to everyone-- people of a community, state, or nation, regardless of age, gender, ethnicity, physical handicap, or other characteristics.² Thus, the space is a common ground of community's collective sense and social design will help this spaces transformed into meaningful public places as people use, modify or attribute symbolic value to specific settings in general.

Public life is what the public space must support and in order to achieve a successful public space, a good social design that incorporates the user needs and behavioral science is essential to accomplish the task. This can be done by learning the human nature through the study of human use of space and the environment, user need analysis prior to a project, post-occupancy evaluation subsequent to the project. With the linkage that is made between the design process and the user needs requirement, hopefully a more meaningful built environment to the human being and the practice of architecture as a whole will be created.

Therefore, having learned the importance of different facets of social design, an architect needs to be aware of the complexity of human nature and the environment especially in the public space by being submittal to human needs and wants. Instead of blindly emulating the notions that human considerations are second in design and programming procedure, the architect must identifies that human considerations are number one priority in architectural settings. By incorporating human behavior and built environment in a design process, numerous issues that have been oversimplified by many designers can be solved through a good social design.

P R O J E C T S T A T E M E N T

In effect to the growing need of social design in architecture, I intent to design a community shopping center in the Central Business District (CBD) of downtown Lubbock. It will incorporate the social values of the inhabitants by providing an excellent opportunity for gathering a cross section of information.

In other words, the center will become a school of social learning because it will reflect the community, their larger culture, private beliefs and public values as a whole and it will not merely be just a place to shop. In addition, the development will effect the recreational pattern of the population and when plan properly can enrich their lifestyles. The center will have special attributes to it such as art and craft center that holds cultural events and also recreation and performing center for community activities. The proposed shopping center would become a public space that will hopefully enhance the public life of the Lubbockites and the surrounding population in general.

Through an orchestration of social design in the public space development and by incorporating the community's public life as one of its primary components, this community shopping center will promote a 24-hour vitality to the environment, and thus stimulates other economic activity within the downtown area. The design for this project should be carefully planned for the illusion of grandeur in regional shopping mall should never be emphasized in here because that brings about a self-contained and insular urban environment--the idea of social compartmentalization and segregation. The center should proffer an environment of social integrity by unfolding its ostensibly urban fortification, and thus integrating with existing urban fabric. This insures greater market potentials for differentiated product offered by attracting a whole diverse community from a different social demographic to come, simultaneously to help catalyze spin-off activities within the downtown.

In addition to offsetting the ongoing patterns of blight and decay in the downtown area with the development of the community shopping center, the project also help to offset the imbalance of urban growth; i.e. the rampant urban development that favor the southwestern areas, and thus providing answer to the stagnate growth in the eastern areas of the City of Lubbock by confiscating the role now upheld by the South Plains Mall. The new community shopping center will act as a social and recreational focal point of

downtown significance through the introduction of community, recreational, cultural and shopping activities within one physical framework in addition to adding density back to the decaying downtown area.

In general, an understanding of the complex and symbiotic interrelationship of the surrounding population within the city fabric is vital before any measure can be taken to resuscitate the ailing inner city. This understanding requires a careful and profound investigation of the complex human nature within the social design. In this respect, the human-oriented planning which synergized social behavior and architectural implications could be of great asset to the designer of the center.

The community shopping Center will be located at the east end of Lubbock downtown on Broadway. Presently the site is occupied by desolate warehouses and deteriorating stores. 30,000 square footage of land area or more will be needed to accommodate the center and parking facilities. The center will encompass three major activities that are dependent to each other. They are retailing and shopping, recreational activities and administering. Being located in the area, the Community Shopping Center is going to have a convenient accessibility for users from different sectors of Lubbock, provided by the Interstate 27. In addition, the center would create a concentration effect of population in the CBD simultaneously enhance the quality of the community public life. Furthermore, the center would also provide a visual quality that symbolize a progressive aura that is lacking in the downtown area.

T H E S I S R E S E A R C H

A R C H I T E C T U R E

A S A

S O C I A L D E S I G N

T H E S I S R E S E A R C H

" With knowledge of the soil and subsoil of human nature and its potentials, we shall raise our heads over the turmoil of daily production and command a view over an earth we shall have to keep green with life if we mean to survive.....Tangible observation rather than abstract speculation will have to be the proper guide "

(Richard Neutra in Survival Through Design)

Architecture and Behavioral Science
The Emergence of Social Design
Effect and Importance of Architecture on Human
Behavior
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Architecture and Behavioral Science

There is at the present time an enormous interest in relating the behavioral sciences to the architectural disciplines. For a number of years, sociologists and other behavioral scientists in many European countries have collaborated with architects and planners in the design work undertaken by governmental ministries, and more recently have been participating in the work of private design firms. Similar developments are now occurring in the United States. They were first brought into the design process to shed light on the subject of human nature. As years passed, their involvement increased to the study of social organization in neighborhoods and the needs of future occupants in a building.

The demand for collaboration was initiated by the design professions. The behavioral science disciplines have not always responded helpfully, but reciprocity is now beginning to occur. A few graduate departments in the behavioral sciences have begun to offer specialized doctoral training programs in what is coming to be called "environmental psychology" or "environmental sociology", and papers and monographs dealing with this subject have begun to appear in increasing number.³

The interest in joining the resources of the social and design disciplines arises from several sources. Probably the major factor in this process is the realization by the design professions that the intellectual traditions of architecture and planning are simply not adequate for grasping the complexity of the building needs of urbanized and industrialized societies.⁴ The architect and planner have traditionally concerned themselves with supplying physical convenience and satisfying physical needs. They have acquired a great deal of knowledge concerning arrangement of rooms for maximum convenience, arrangement of streets for easy accessibility and the like.

In contrast, they have little knowledge of social convenience and satisfying social needs. Architects find themselves facing tasks and clients for which their training did not prepare them. Instead, of designing villas and palaces for the rich, architects must now design projects to house the black and disadvantaged populations. Where once they were hired by a college to prepare a scheme for one or two dormitories, a library, or an administrative building, very often now they are expected to take charge of the design of a complete

campus. In these setting, architects encounter questions and problems and are unable to find answers through informal programming techniques and as a result, they turn to behavioral science in hope to find the solutions.

The Emergence of Social Design

The liaison that happens between design and behavioral sciences creates a term which is called social design.⁵ It is part of a larger movement to humanize the process by which buildings, neighborhoods, and cities are planned. Its roots could be traced to Lewis Mumford, Richard Neutra, Jane Jacobs, and Paul and Percival Goodman in architecture and urban planning and Roger Barker, James Gibson and Kurt Lewin in psychology.⁶ The movement is not associated with particular style or aesthetics. The emphasis was more on the process of identifying user values and bringing them into the planning process rather than on a specific form or architectural product. "Architecture is building environments well."⁷ Richard Neutra considered the design of structures to be labor for and with occupants. "Human beings must be served and they are reached by design not only as ultimate consumers," Neutra wrote, "they must be won over as co-performers and working crew so that the final design is appealing, both rationally and emotionally."⁸ The approach is guided by recognition of the designers' responsibility to the people affected by their work because the satisfaction of the people is critical not only for the economic standpoint but also for the moral justification of architectural profession.

It is interesting to approach the liaison between architecture and behavior science from the standpoint of personality types.⁹ Designers tend to be highly visual people, concerned with practical problem-solving and aesthetics. Behavioral scientists, on the other hand, tend to be highly verbal and abstract, involve more with words than things, and are interested in theory and experimentation. The overlap in interest between the two professions is minimal at the outset. Perhaps it is the difference approach that lay behind their liaison.¹⁰ Neither group is competing with the other for resources or status, as architecture is with engineering or clinical psychology is with psychiatry. For the most part, it is a nonexplosive

relationship, but there are risks in the association on each side. For designers to bring in another group of experts could have undermined each group's autonomy and the special claims to expertise professions work so hard to protect, and for behavioral scientists, their scientific standing could have been jeopardized if they had become involved in quick low budget studies. Fortunately, each side needs something from the other. Designers want knowledge of human behavior and behavioral scientists want access to the built environment to enhance their theories and research. A few courageous souls are eager to develop a new profession midway between the two fields and as a result, social design is born.

Effect and Importance of Architecture on Human Behavior

The ways in which the design of the human environment affects human behavior are not trivial. The nature of the buildings and streets of the cities where we live affects our behavior, the way we feel about ourselves, and most important, the way we interact with others.¹¹ Many different aspects of architecture and a variety of human needs and group processes are interconnected. The visual qualities architecture, its geometrical forms, the environmental control systems of buildings, the sheer provision of two-dimensional surfaces and three-dimensional spaces--all these aspects of architecture are meaningful to people and influence their behavior.¹² Many of these needs can be satisfied through social mechanism and social forms that architecture can help to organize and regulate.

These needs are related to specific characteristics of the human organism, including men's anatomical structure and physiology, his personality and unconscious mental life, his perceptual apparatus, his use of symbol systems for communication, and his dependence upon group interaction for civilized survival.¹³ "The architect who builds a house or designs a site plan, who decides where the roads will and will not go, who decides which directions the houses will face and how close together they will be, also is, to a large extent, deciding the pattern of social life among the people who will live in these houses."¹⁴ This theory asserts that the architectural design has a

direct and determine effect on the way people behave. It suggests that human beings for whom architects and planners create the designs are somewhat moulded by the environment which is provided for them.

Furthermore, architect's decision has a profound effect not only on human behavior alone but to the society as a whole. The effect is much clearer and prevalent if the architect entails in massive scale of projects for the public. For instance, in 1910, several million Americans lived permanently in hotels. Twenty years later, planners and architects had erased those hotels residents from professional view and had planted one of the roots of the present homeless crisis. Again, when an architect's view of humankind influences a small private building, the effects are not widespread; however, when it influences hundreds or thousands of projects, the issue rises above academic or psychological curiosity to political and social importance.

Thus, with the endowed responsibility on the architects, the architects are most likely to adopt the study of behavioral science, in a hope that full knowledge of the user, his needs and social activities will enable the architect to deduce the design of a building.

Definition of Behavioral Science and Social Design

By definition, behavioral science is the scientific study of human behavior and the importance of environmental factors in determining this behavior.¹⁵ It refers to those academic disciplines which consists of anthropology, psychology, and sociology plus social geography, some psychiatry, and the behavioral parts of economics, political science, and law.¹⁶ In addition, it also include human geography that study human attitudes and activities.

Meanwhile, the following is the definition for social design. The definition is not tight in order to set it apart from conventional design practices. Social design is a design that involves people in a making of a building. It involves working with people rather than for them; including people in the planning and management of the spaces around them; educating them to use the environment wisely and creatively to achieve a harmonious balance between the social, physical and natural environment.¹⁷ It also develops an awareness of beauty, a sense of

responsibility to the environment and other living creatures.

In other word, the role of a social designer is to established a relationship between people and built environment that is respectful of their ongoing situation, that heightens experience, that creates from what already exists. Hence, with the availability of information on human behavior from the behavioral science study as a mean, social design is a possible end to achieve in today's architectural realm.

Historical Context

Social design was part of a worldwide concern with human rights, based on the assumption that noxious conditions such as poverty, malnutrition, disease, and substandard housing were not inevitable and could be eradicated if sufficient attention and resources were devoted to solutions.¹⁸ This recognition that the good life was possible for all humankind and not just the privileged few, was not a new philosophical doctrine, since it could be traced back to the utopian thinkers of past ages, but in 1960s it became a practicable reality for many segments of society previously excluded from the halls of power. In developing nations the struggle centered on economic justice, and in the more affluent developed nations, the issues were minority rights and general issues of environmental quality and consumer rights, both broadly defined.

Major Areas of Social Design

There are 5 major areas of concern in the study of social design:

the human use of space ¹⁹

This study is a study of how human create their own spacing pattern in their built environment. The spaces can be divided to public space, personal space and territorial space.

environmental awareness and cognition ²⁰

This study involves people's conception of their own environment and significant places and objects.

environmental preferences 21

This analysis classifies people by the degree to which they like to be in places that are ordered and predictable or exciting and novel.

user need analysis 22

This analysis can be done under a needs assessment survey. The survey is done based on assumption that occupant know what they want and can communicate this to an interviewer.

post-occupancy evaluation 23

Involves looking closely at completed buildings to see they work in practice. This can be done by handling the users' complaints, survey questions and publishing the evaluation studies.

In short, social design movement arose to correct misfits between people and the built environment. It was necessitated both by changes in the larger society and in the processes by which buildings, neighborhood, and cities were planned. The tools and techniques include analysis of user need prior to starting projects, evaluation of completed buildings, consultation with behavioral scientists and direct participation by prospective occupants.

With the incorporation of social design in architecture, designers need to keep in mind that architectural phenomena involve a range of properties--from the subtle and elusive features of symbolism and sensual qualities at one end to the utilitarian qualities of measurable space and ambient conditions at the other--and therefore, all of these properties must be kept in view if one to achieve a comprehensive understanding of the balance effect of the built environment on man and society.²⁴ In addition, architecture is also the expression of social values and the reinforcement of cultural patterns. It is a legitimate topic of inquiry for social design because it is an element in human culture and social organization to which all people are responding even they are unaware of it.

The interest of the architect in social design arises from the simple but important fact that a building cannot be conceived apart from the human activities it serves to facilitate and encourage.²⁵ This is what architecture critics and aestheticians have had in mind when they have called architecture the most social of the fine arts. Buildings are

objects of use in addition to being objects of pleasure, which offer delight to their beholder. Architecture is so essentially a social art that no architect can talk about one's medium or about or about one's schemes without reference to how they will be used by people; and a good deal of the conscious intention behind any design, as well as various decisions about its elements, are expressed in terms of its consequences for human behavior.²⁶

The Nature of Human Behavior

Human behavior is a complex subject. It is the focus of a whole family of scientific disciplines. It has drawn the attention of outstanding scholars and researchers in the field of psychology, sociology and anthropology. While information deals with the relationships between behavior and environment is limited, behavioral studies shows that the human behavior is rooted in a certain number of motivating needs. Different authorities offer different factors but they do not vary in a serious ways. Abraham Maslow has condensed his hierarchy into five elements of needs:

- The need for self-actualization
- The need for self-esteem
- The need for affection/love
- The need for security and safety
- The need for food and drink 27

Regardless of the length of the lists, there are certain aspects that are constant. Not all of these motivating factors are of equal importance, nor do they have the same priority at all stages of life. If the imperative needs for food and drink become difficult to satisfy, there will be little concern for such abstract matters as self-actualization. In societies where food and security are more or less assured, the needs for affection and self-actualization become much more important. However, this is not necessarily true in every society or every person. Some people in different culture, find self-actualization or self-esteem are more important than food and drink. In addition to the above major list, there are other subset of motivating factors that are in some ways affected by the built environment.

Other motivation factors:

friendship formation 28
friendships are formed on the basis of shared
interests and background.
ex: studies done in offices, apartment complexes
and
housing for the elderly
importance of proximity

group membership 29
human tendency for affiliation affect how we
design
intersections and seating arrangement

personal space 30
differ within society, not a universal emotion
series of distance (Edward T. Hall):
intimate distance, personal distance, social
distance, and public distance

personal status 31
to define oneself to others by the use of
physical
artifacts. Image and symbol.

territorially 32
not limited to defense of boundaries. It
relates to
individual belongings, group belongings, or to
assume rights and privileges

communications 33
human need to communicate to exchange
information,
to express thoughts and feelings
3 provisions for appropriate communication:
ambient condition, signs, accurate information
based external design characteristics

cue searching 34
explanatory or habitual mode

personal safety 35
critical because people do not possess sensory
mechanism like animals.

Public Life and Public Space

"a public space.....is at once both stage and theater, for in public the spectators may at any moment choose to become actors themselves. Successful public places accentuate the dramatic qualities of personal and family life. They make visible certain tragic, comic and tender aspects of relationships among friends, neighbor, relatives or lovers" ³⁶

Public spaces are participatory landscapes. Through human action, visual involvement, and the attachment of values, people directly involved in public space. Public space is the common ground where civility and our collective sense of what may be called "publicness" are developed and expressed.³⁷ The public environment serves as a reflection or mirror of individual behaviors, social processes, and often conflicting public values. The environment profoundly affect public life because it is used for the common good and it is accessible to and shared by a diversity of people and open to general observation.

Public life is evolving as part of a growing reaction to the privatization of human life.³⁸ The public life is distinct from private life and performs important functions because it is a school of social learning, where the range of permissible behaviors gets explored.³⁹ Hence, in order for public life to become a school of social learning, we have to create a public spaces that reflect ourselves, our larger culture, our private beliefs and public values.

The Diminishing Public Life in Downtown Area (CBD)

The isolation of suburban living, impersonal work environment, and the increased stress of modern life all contribute to an increased appetite on the part of many people for public space.⁴⁰ The park or mall becomes a retreat, a form of refuge from the hectic daily schedule. One of the most predominant forms of current public-space behavior can be characterized as recreational shopping, now a popular family activity.⁴¹ The evening or weekend spent shopping in the mall or downtown marketplace is part of public life.

However, shopping in the downtown marketplace has a lesser effect in this day of age because downtown is no longer a place for recreation activities especially in small cities, such as Lubbock. This is a fact because small cities is not as compressed and the lack of density makes it tougher to create lively spaces than it is for a big city.⁴² Big cities have lots of people in their downtowns. This density poses problems, but it provides a strong supply of potential users for open spaces in most parts of the central business district.

Even though it is true that some small cities are blessed with a tight, well defined center, with some old buildings to anchor it, many others have loosened up: they have torn down old buildings and not replaced them, leaving much of the space open. Parking lots and garages become the dominant land use, often accounting for more than 50% of downtown.⁴³ This is also true in some big cities--Houston, for one. Houston has some fine elements in its downtown, but they are so interspersed with parking lots that they do not connect very well with one another.

As was mentioned earlier, isolation of suburban living is an important factor that deteriorates the quality of public life in smaller cities downtown area. Many cities have diffused their downtown by locating new "downtown" developments (suburban) outside of downtown, or just far enough away that one elements does not support the other.⁴⁴ Suburban living robs away the population from the downtown with the emergence of suburban shopping centers that are more urban in their use of space because the suburban centers are highly concentrated, one-stop places that offer most of public's needs which include social and recreational activities under one roof.

Hence, this is what most of the downtown area of most smaller cities are lacking off: compression and concentration of people. Some cities have sought to revitalize their downtown by banning cars from the main street and turning it into a pedestrian mall. Some of these malls have worked well but some have not. The problem is diffusion; since the malls may be too big and too spread over many downtown blocks for the number of the population. Therefore, to attract the population back to the downtown and to beat the suburbia at its own game, there should be a facility that offers a variety of needs and activities under one physical framework that attract

people from every sector of the city to come in huge mass. The facility should intensify the city best strength and adapt to the community social values and beliefs through a good social design in order to create the concentration effect of public space and simultaneously revitalize the quality of public life and the dilapidated downtown area.

T H E S I S R E S E A R C H

A N N O T A T E D

B I B L I O G R A P H Y

Altman, Irwin. Environment and Social Behavior (California: Brooks/Cole Publisher, 1986)

A collection of essays on various aspects of social behavior and environment: theory, research methods, individual needs, and environmental planning applications.

Berelson, B., and Steiner, G. Human Behavior: An Inventory of Scientific Finding (New York: Brace & Inc., 1974)

An encyclopedic compedium of information about human behavior, covering such topics as perceiving, learning, motivation, communications, and attitudes.

Brill, Michael. Transformation, Nostalgia, and Illusion in Public Life and Public Place (N.J.: Prentice Hall, 1989)

A broad-ranging essay on historical and contemporary issues of urban public places and spaces where the author views public space as a setting for public life.

Broadly, Maurice. Social Theory in Architectural Design. (New York: Basic Books, Inc., 1972)

Concerns with the work that anthropologists, functional sociologists, and psychologists have done in demonstrating the significance of architecture as the expression of social values and the reinforcement of cultural patterns.

Conyne, Robert. Environmental Assessment and Design (New York: Praeger Publisher, 1985)

Deals with the study of the environment and human factors in solving architectural design problems. Describes research methods such as observation, questionnaires, interviews, and activity analysis.

Deasy, C.M. Designing Places For People (New York: Watson-Guptill, 1985)

Demonstrates the importance of using information and procedures from the human sciences in the design process with actual examples from the author's own architectural practice.

Ellis, Russel. Architect's People (New York: Oxford University Press, 1990)

A remarkable study of an elaboration of mental portrait of people that emerges from architects' unawareness of their environmental surroundings.

Festinger L., and Schachter, S. Social Organization and Social Interaction (New York: Seminar Press, 1984)

Deals with the impact of spatial organization on social interaction and group relationships, as revealed through studies of friendship patterns, communication and privacy.

Fitch, James. Behavioral Constraints on Building Design (New York: Basic Books, Inc, 1980)

Deals with current research and theory on human anatomy and physiology, on human's sensory apparatus and his/her behavior in space, and on the requirements that these characteristics generate for the design of buildings.

Francis, Mark. Control as a Dimension of Public-Space Quality (New York: Plenum Press, 1983)

Deals with how Francis, a landscape architect, treats a variety of urban settings, such as malls, plazas, squares, streets, etc., in terms of access and control by specific users

Germaine, Carel. Human Behavior in the Social Environment (New York: Columbia University Press, 1991)

A discussion that illustrates various social environmental influences on human behavior, with particular attention on physical and psychological needs and wants.

Gutman, Robert. The Application of Behavioral Science to Design (New York: Seminar Press, 1990)

A series of readings that illustrate the ways in which architects and behavioral scientists are applying a variety of ideas and approaches to the practical problems of the design process.

Lennard, S.H. Public Life in Urban Places (Southampton: Gondolier Press, 1984)

A work on an interesting array of environment-behavior concepts, relating to the public life of specific users of public places and spaces.

Nasar, Jack. Perception, Cognition, and Evaluation of Urban Places (Cambridge: MIT Press, 1985)

A discussion by a psychologist on perception and esthetics considerations of urban streets and their associated buildings and homes.

Sommer, Robert. Design Awareness (San Fransisco: Rinehart Press, 1980)

An early work by one of the pioneers in the field of environment and behavior. Discusses the need people feel to participate in the decisions that affect their lives and their environment. Proposes an evaluation system for buildings and parks and the development of a data bank for future use.

Sommer, Robert. Social Design: Creating Building with People in Mind (N.J.: Prentice Hall, 1986)

A discussion of the process by which behavioral information can be obtained and used in the architectural design process by a psychologist who serve as a consultant to both architectural firms and public agencies.

Whyte, William. The Social Life of Small Urban Spaces (Michigan: Edward Bother Inc., 1990)

A by-product of first-hand observation about city spaces, why some work for people, and some do not, and what the practical lessons may be. Also discusses how a city's abundant small spaces have a major impact on the quality of life of a community.

S I T E A N A L Y S I S

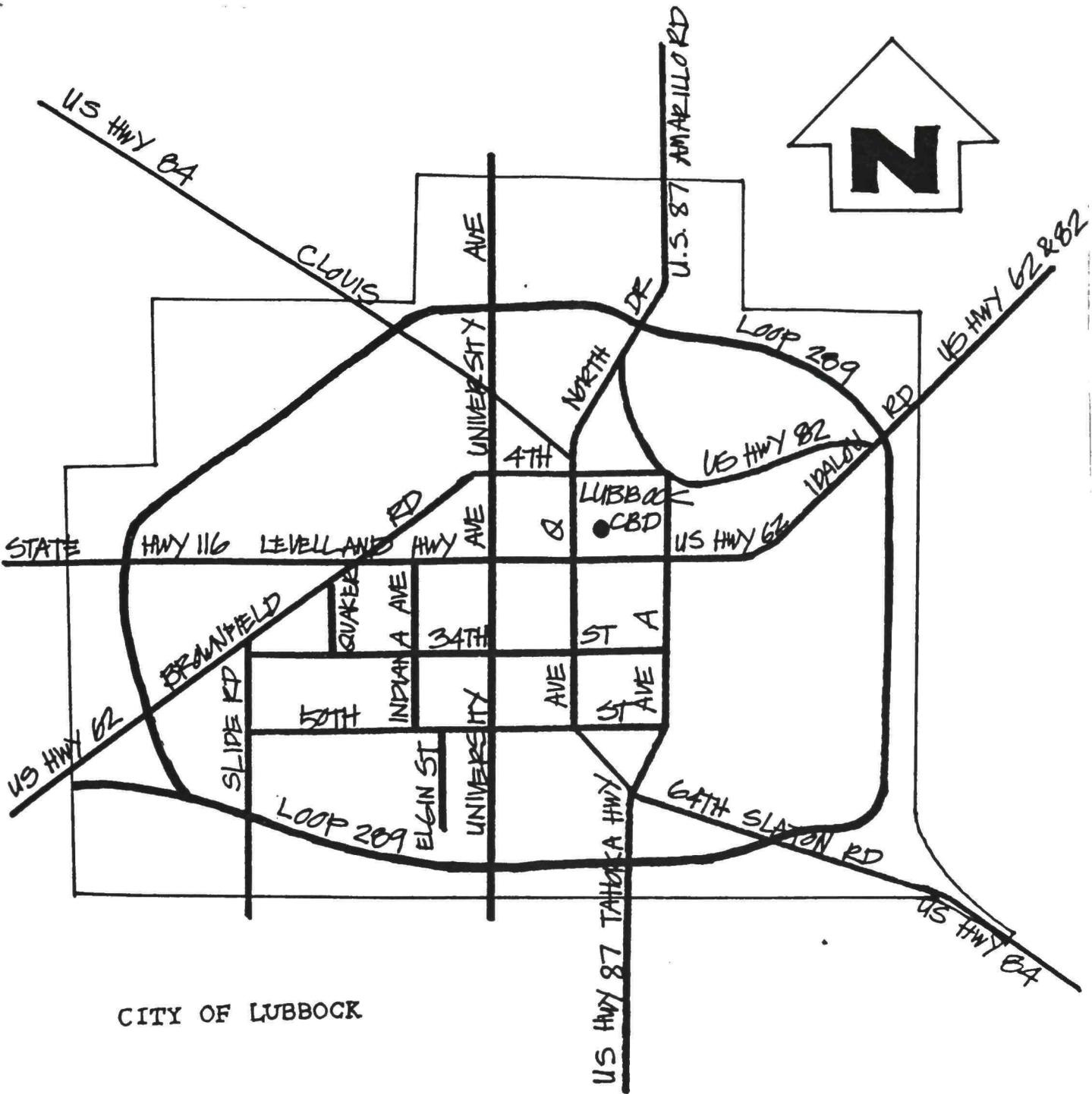
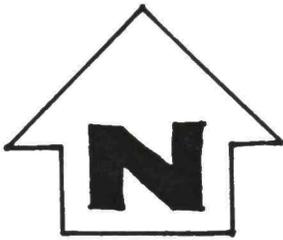
S I T E A N A L Y S I S

" Organism and environment are in constant interaction, and each has influences on the other. Environment is both social and physical. One cannot predict the character of a man from the jungle he lives in, but neither can one foretell what he will do or feel without knowing something of the jungle. The man and his habitat must be known together." ⁴⁵

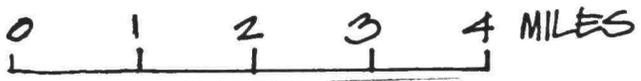
The appearance of a community is made up of natural, physical and social characteristics. Every community is built on a piece of land where the form and features are the foremost determinants of the city's form. Local climatological conditions determine the character and appearance of the landscape and buildings. A city is viewed in terms of its physical extent. It can also be described in terms of the number of inhabitants, labor force statistics, and cultural facilities.

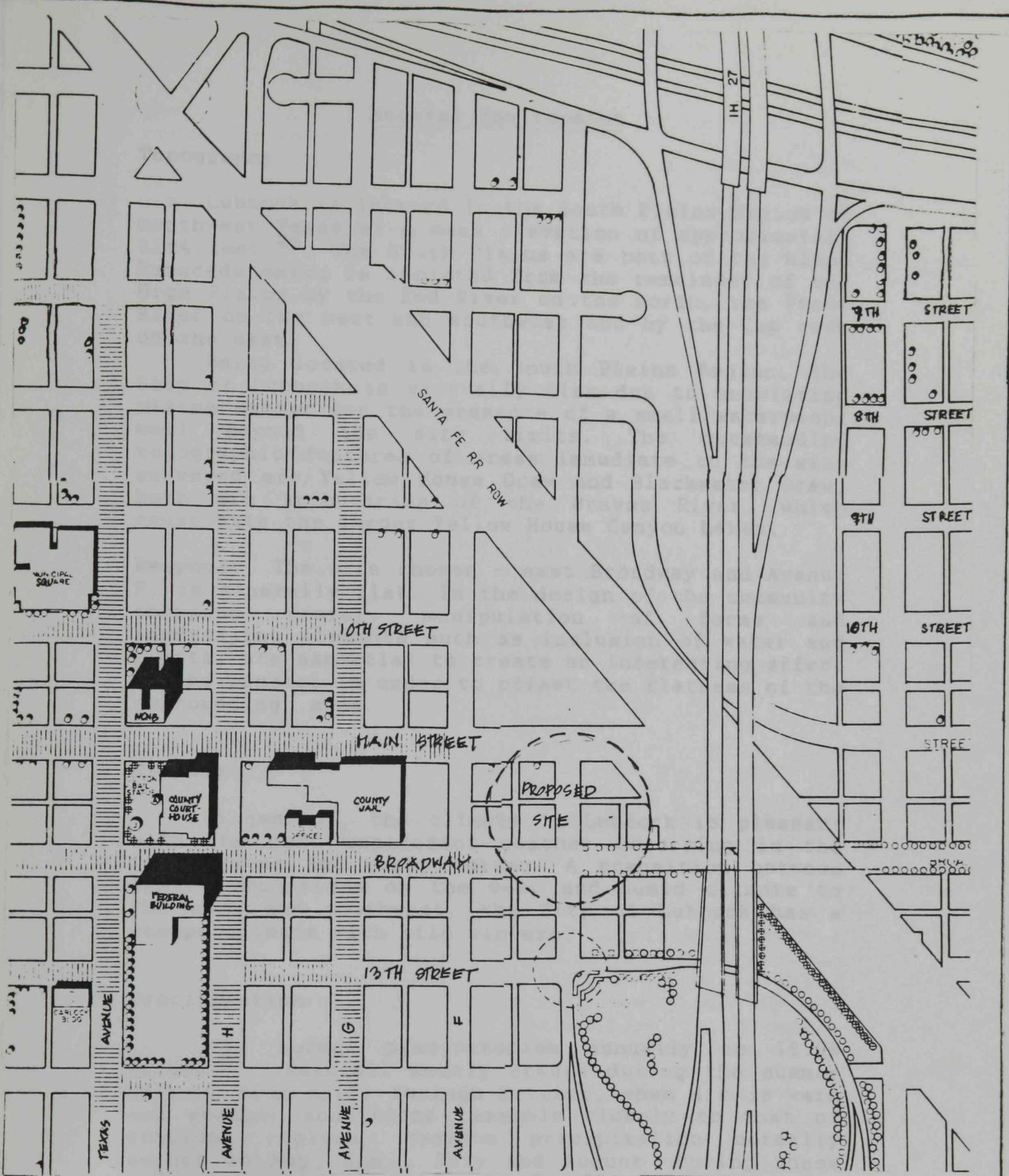
The followings are the information concerning the:

Natural Environment
Physical and Built Environment
and
Social Environment
for Lubbock.



CITY OF LUBBOCK





Downtown Lubbock Base Map.

Source: The City of Lubbock Planning Department

Natural Environment

Topography

Lubbock is located in the South Plains Region of northwest Texas at a mean elevation of approximately 3254 feet.⁴⁶ The South Plains are part of the Llano Estacado which is isolated from the remainder of the High Plains by the Red River on the north, the Pecos River on the west and southwest and by the Cap rock on the east.

Being located in the South Plains Region, the City of Lubbock is virtually flat due to undulating plains except for the presence of a small escarpment well beyond the city limits. The outstanding topographic features of areas immediate to the site surveyed are Yellow House Draw and Blackwater Draw, both are tributaries of the Bravos River, which constitute the larger Yellow House Canyon Lakes.

Response: The site chosen - east Broadway and Avenue F, is generally flat. In the design of the community shopping center, manipulation of forms and landscaping elements such as inclusion of water and plants, are essential to create an interesting effect to the project in order to offset the flatness of the surrounding area.

Climate

In general, the climate in Lubbock is pleasant with the most unpleasant weather occurring in the late winter and early spring. A transition between desert conditions on the west and humid climate to the east and southwest, the City of Lubbock has a steppe climate with mild winters.

Precipitation

The normal precipitation annually is 18.08 inches.⁴⁷ Rainfall mostly occurs during the summer season, from April through October, when air is warm and weather conditions resemble closely to that of tropical regions. Maximum precipitation normally occurs in May, Jun , July and August. During these rather humid months, moist tropical air is carried inland from the gulf of Mexico. This air mass brings about moderate to heavy afternoon and evening convective thunderstorms, oftentimes with hail. Thus,

warm season rainfall occurs most frequently as the result of these thunderstorms.

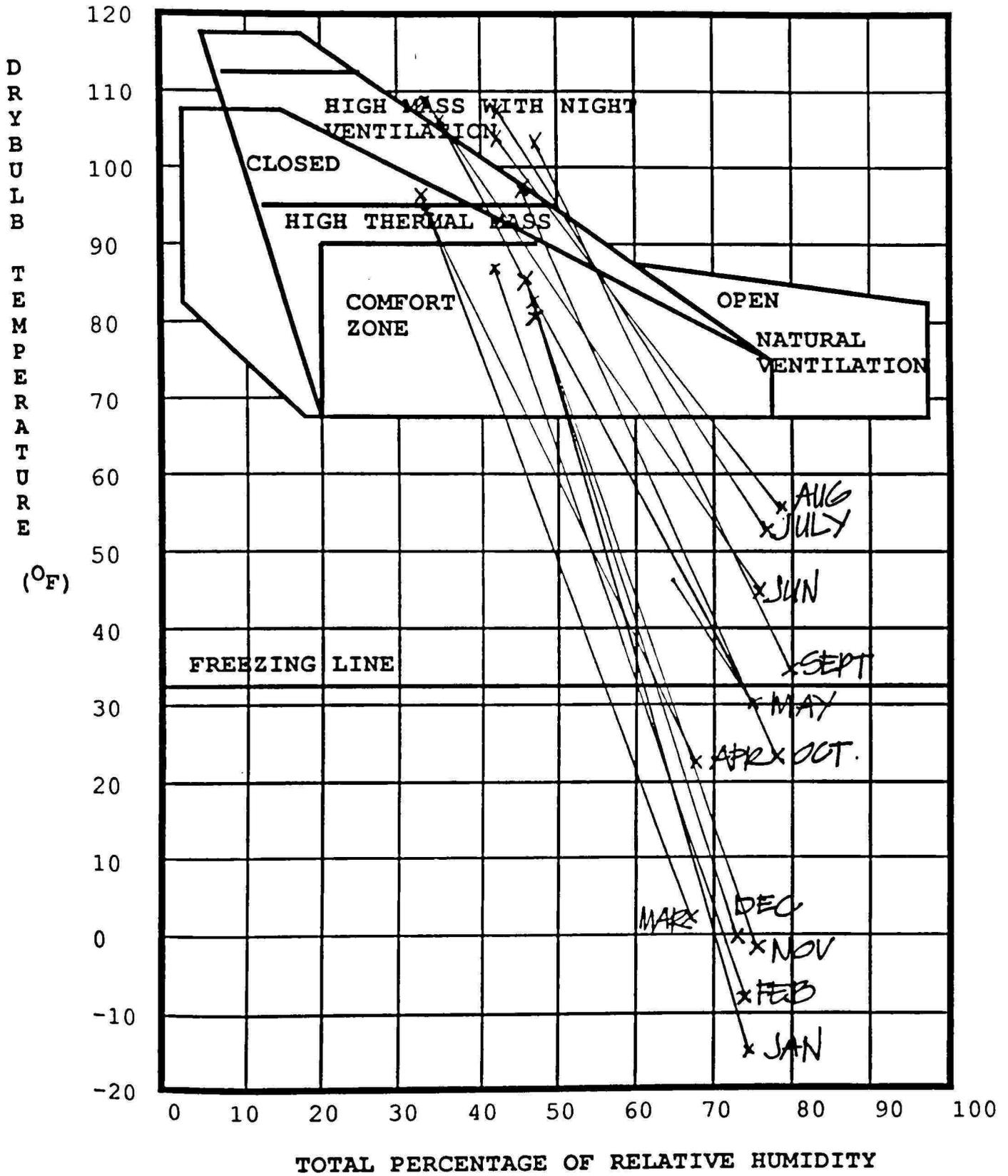
In exceptionally wet years, a significant precipitation may result from excessive downpour that runs off rapidly and erodes the soil. A record of maximum precipitation in a month of 10.80 inches occurred in October 1983.⁴⁸ In general, precipitation in this area varies widely in agreement with its erratic nature. Precipitation can be as much as 40.55 inches to only 8.73 inches annually and can vary from 17.76 inches to none in a month.⁴⁹ Snow occasionally occurs during winter months, though it is generally light and remains on the ground only a short time. Mean total snow in a year is 8.5 inches.⁵⁰ The most snow accumulation ever recorded is 25.3 inches in January 1983.⁵¹ Snowmelt is not uniformly distributed as light snow that falls in winter piles up in drifts.

Response: In response to the precipitation, the center should avoid the usage of absorptive materials or those which are affected by rain and moisture penetration, mostly on northwestern exposure. In addition, gutters should be able to carry 1" of rain off total roof area in 15 minutes.⁵² Snow and rain pockets must be avoided.

Temperature

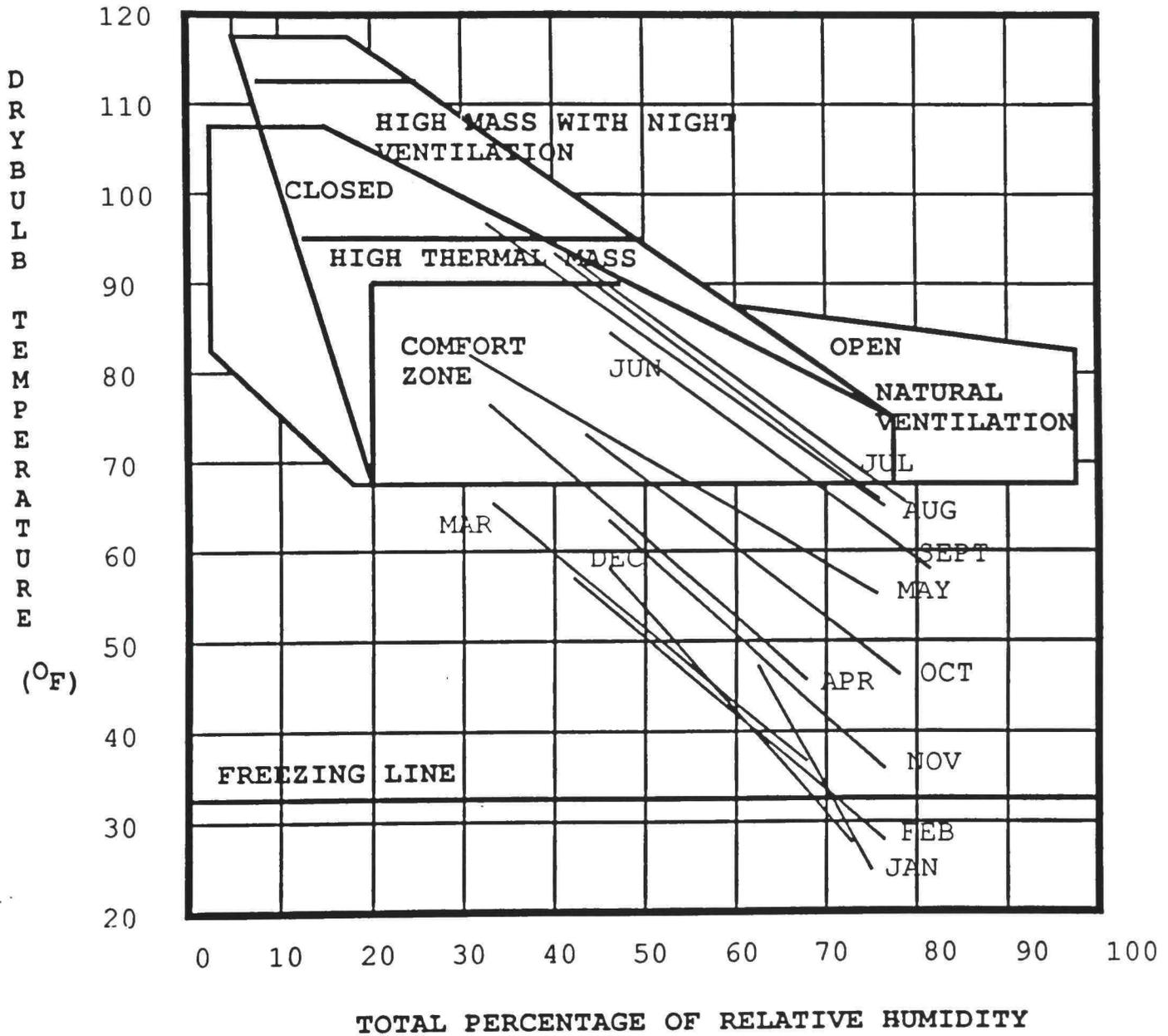
The normal annual temperature is 73.5 F.⁵³ The warmest are June through September, with normal daily maximum in June of 90.8 F.⁵⁴ A record maximum temperature of 110 F occurred in June 1990.⁵⁵ During summer months, daily temperature is usually high and reach its peak in late afternoon. Unpleasant weather conditions are sometimes experienced during these months, with very low humidity. At noon, Central Standard Time, the mean relative humidity is estimated at 46% in July. Nonetheless, in general, summer is perhaps one of the most pleasant seasons in Lubbock. In summer, Lubbock receives about 78% of the total possible sunshine. Through afternoon temperature is hot, the high elevation of the city (3254 feet above sea level) and a clear sky cover for rapid radiation and produce a fast drop in temperature after nightfall. Thus, most nights in summer have pleasantly cool to moderate temperature with minima in the sixties. Precipitation during the

**BIOCLIMATIC CHART FOR LUBBOCK, TEXAS
EXTREME TEMPERATURES**



**REFERENCE: DESIGN WITH CLIMATE: BIOCLIMATIC
APPROACH TO ARCHITECTURAL REGIONALISM.
NEW JERSEY; PRINCETON UNIVERSITY PRESS, 1990**

**BIOCLIMATIC CHART FOR LUBBOCK, TEXAS
NORMAL TEMPERATURES**



REFERENCE: DESIGN WITH CLIMATE: BIOCLIMATIC
 APPROACH TO ARCHITECTURAL REGIONALISM.
 NEW JERSEY; PRINCETON UNIVERSITY PRESS, 1990

day also helps bring about a significant drop in temperature.

In general, most days in winter are sunny and mild. Cold Polar Canadian air masses sweep across the Great Plains bringing about sharp drops in temperature. Oftentimes these air masses are accompanied by strong northerly winds.⁵⁶ The record minimum temperature of -16 F occurred in January 1963.⁵⁷ The mean relative humidity at noon, Central Standard time, during the cold season is estimated 46-50%. Therefore, in winter months, daily temperature is normally cold after nightfall and in early morning, while occasionally reaching the fifties in late afternoon. Sky cover is usually clear at nights to allow for rapid radiation, and thus freezing temperature occurs almost every night. Though weather conditions are mostly unpleasant during winter months, the cold weather rarely lasts longer than 48 hours before sunshine, as southwesterly winds bring about an instant warming. Fall is also pleasant in Lubbock. Though there is greater fluctuation in temperatures during the days than those in summer, temperatures are relatively moderate. Mild sunny days and clear cool night characterized the fall season.

Response: This kind of temperature permits the most flexible arrangement. A close relationship between the center and nature is desirable and possible. Unilateral buildings can be developed with relatively free formation. Freedom in plan design is characterized by spatial connection of outdoor and indoor area. The center should be open to south-southeastern and be closed on westerly sides. Elongation in east axis is preferable, with optimum shape being 1:1.6.⁵⁸ Insulation materials also need to be considered.

Sun

The distribution of clear and cloudy days is fairly uniform throughout the year. Maximum amount of possible occurs in August about 68% and minimum in January, 53%.

Response: Shading and protection are needed for summer radiation. Deciduous trees are preferred for shading purpose, should be located on east and west sides, and 68 degrees overhang on south exposure in order to protect low structures of the center.⁵⁹

Meanwhile, eggcrate type of sunshade on east and west; vertical fins on north side protects higher parts of the center. In addition, arrangement of window areas are of utmost importance for internal heat balance. South exposed glass areas work well on seasonal bases. Openings should be screened, and location of opening should allow cross ventilation. Reduced openings on westerly side is desirable. During winter time, solar heat can be valuable and to achieve maximum result careful balance should be established.

Wind

Spring often brings about disagreeable conditions in Lubbock. Warm and cold weather follow each other in rapid succession throughout March and April. Furthermore, March and April are the windiest months of the year, both having winds in a southwesterly direction with a mean speed of 14.9 miles per hour.⁶⁰ Winds are strongest during intense thunderstorms but of short duration; however, occasionally tornadoes can erupt following these thunderstorms. In 1970, tornadoes inflicted a severe damage on some parts of the Central Business District (CBD).⁶¹ The incidence was recorded as the worst disaster ever instigated by natural forces in this city. Thunderstorms occur more frequently in Spring than in Winter and reach a peak as summer months approach.

The prevailing winds are southwesterly from January through April, southerly from May through October and southwesterly from November through December. Mean wind speed is between 25 to 45 miles per hour and is rather high and certainly produce unpleasant conditions due to the fact that the ground surface is not offering as much resistance to wind movement as in location with taller plant cover or more uneven topography.⁶² To make the matter worst, the persistently strong southwesterly wind sometimes blows severe dust storms to bring about an even more unpleasant atmosphere to those areas with sparse vegetation cover.

Response: In responding to the wind, the design of the center should incorporate some barriers that can help minimize the impact of the wind. Several rows of vegetative barriers such as windbreakers are desirable against winter northwestern wind, dust storms, and snow. Evergreen trees are best for wind

protection. Structural barriers are also be valuable for the center. Using the right material and texture can also minimize the impact. Increasing the "roughness" to the surface of the building will cause air film to form around it, protecting the surface from wind and reducing heating needs.

Pedology

The site surveyed is categorized under Urban Land classification in Soil Survey of Lubbock County Texas. The classification indicates that the original soil conditions have been altered or obscured so as to render classification by usual soil properties impractical. In fact, most areas of uncovered soil in this location are severely altered. In many areas, the soil has been hauled in so that ornamental vegetation can be established and maintained.

Nevertheless, for the purpose of this site analysis, the site has been classified under its original conditions, i.e., before any development have ever taken place. It has been therefore identified that the areas has two dominant soils--Amarillo and Acuff.

The surface layer of Amarillo soils is friable, mildly alkaline, reddish brown fine sandy loam about 14 inches thick.⁶³ From 14 to 46 inches is friable, reddish brown sandy clay loam that is mildly alkaline in the upper 10 inches and moderately alkaline in the lower 22 inches.⁶⁴ From 46 to 60 inches is friable, moderately alkaline, pink sandy clay loam that is about 30% soft masses and weakly cemented concretions of calcium carbonate.⁶⁵ From 60 to 80 inches is friable, moderately alkaline, pink sandy clay loam that has soft masses and weakly cemented concretions of calcium carbonate.⁶⁶

Acuff soils have a surface layer that is friable, neutral, brown loam about 12 inches thick.⁶⁷ From 38 to 58 inches is friable, moderately alkaline, pink sandy clay loam that is about 40% soft masses and concretions of calcium carbonate.⁶⁸ From 58 to 80 inches is friable, moderately alkaline, sandy clay loam that is reddish yellow and has common films threads of calcium carbonate.⁶⁹

Response: There are some parts of the proposed site where areas of soils tend to shrink and swell with moisture changes. This in turn brings about such pressure that wall and foundations crack unless they are specifically reinforced. This change in volume in

a soil material as moisture content changes is called shrink-swell potential and is greatest in those soil properties of high plasticity index and high liquid limit. In this matter, careful reinforcement in regard of concrete foundations of the center is critical. Other considerations that should be equally emphasized for foundation design are flooding, ponding, low strength and high corrosion potential.

Hydrology

Both Acuff and Amarillo soils in the proposed site are well-drained. Surface runoff is high because a large percentage of the soils are covered by works and structures, which shed most of the precipitation. Water permeability is moderate and available water capacity is high. The hazard of water erosion is slight and the seepage is rapid.

Response: Even though water erosion is slight in the proposed site, certain precaution should be taken to overcome the problem. It is normal during an urban construction project near the surrounding area to remove the natural vegetation and cover with pavement, concrete and buildings. As vegetation is removed, the amount of runoff water from the area generally increases changing the pattern of surface water movement. Therefore, it is important to add more vegetation close to the center to dampen the effect of water erosion.

Vegetation

Before vegetation is to be established, topsoil is often necessary. The proposed area is fairly suitable for topsoil and this suitability is affected for the most part by the ease of working and spreading the soil material in preparing a seedbed and by the ability of the soil material to support plant life. This area can be used for vegetation such as lawn grasses, ornamental trees and shrubs, and flower and vegetable garden. Nonetheless, in some areas with sandy or too firmly clayey soils, topsoil covering is quite limited.

Response: Aside using vegetation as windbreakers, vegetation can also help beautify the center by providing a natural background to the build environment. Furthermore, the vegetation can also

help abating unpleasant noise from neighboring busy streets and surrounding uses. A healthy planting stack of suitable species planted according to the site engineering properties and properly on a well-prepared site incorporates with good maintenance, can insure the plants greater survivability. Species that grow well in the center's site area are identified as Siberian elm, Honey-locust, Russian-olive, Eastern redcedar, Oriental arborvitae, Arizona cypress, Green ash, and Osage-orange.

Physical and Built Environment

Existing Land Use

Existing land uses neighboring the proposed site are primarily commercial non-retail and retail, with a cluster of low density housing and scattered industrial developments to the east bounded by the Santa Fe Railroad tracks. Lubbock County Courthouse and County Jails are few public land uses that are present immediate to this location.

Response: The site surveyed is currently classified under commercial zoning district. The center will not have to apply special planning and zoning policies due to the fact that the involved activities do not incorporate any residential uses. Since low-density is a major problem for the area, it is important for the center to attract high density of people by providing recreational and entertainment facilities under one roof in order to add a concentration effect to the existing areas.

Recreation

The site has a moderate to slight limitations for paths and trails for walking, bicycling, etc, and thus indicates that the soil properties are generally favorable and any minor limitations can easily alleviating by planning, design or special maintenance. Nevertheless, the suitability of the site for recreation should not be solely dictated by such restrictive soil features as flooding, wetness, slope, and texture of the surface layer.

Response: Location, accessibility of the area, size and shape of the area and its scenic quality, access to water, and either access to public sewer lines or capacity to absorb septic tank effluent should also be considered important in evaluating the site for recreational uses.

Aesthetics

The most severe deterioration of commercial non-retail and retail structures is found within the proposed area. Most of these buildings are vacant and rated as warranting clearance. As this area is no

longer desirable as a location for commercial activities, any gesture of redevelopment in other forms of activities is largely absent. Thus, for the most part, the area can be considered as the worst section in the Central Business District (CBD) in respect of physical conditions and visual characteristics. Disrepair vacant buildings, disharmonious architectural and natural elements, sparse vegetation cover, and occasional weeds and litters of various kinds, to name a few, typify the unpleasant features in this section of the CBD.

Response: In respond to the aesthetic value of the site, it is important for the center to be aesthetically pleasing to the eye in order to offset the view of its surrounding area. A lot of improvement can be applied to beautify the surrounding area. The usage of vegetation, water elements, color, texture, high quality of material, are some of suggestion for improvement. Through good planning and design, hopefully the center will create a beautifying effect and improve retailing and recreational to the surrounding neighborhood.

Historical Significance

No buildings, structures, or object immediate to the site under investigation are found to have historical, architectural, archaeological or cultural significance. Perhaps, the most significant building within the area that has certain cultural values would probably have some impact on the future community shopping center is the Lubbock County Courthouse.

Response: Even though there is no historical significance in the site surveyed, the center does not have to be oblivious to its surrounding area. Several steps can be taken such as incorporating, where appropriate, brick street paving, veneer surfaces and building orientation. In contrast, the center can also create its own significance elements such as providing special treatment to access routes, plazas, gateways and perimeter of the area in order to set the center apart from the neighboring buildings in order to create its' own unique "place image" within the community.

Social Environment

Demography

Since Lubbock's incorporation seventy-nine years ago with only 1900 residents, this city has progressed into a place of technology, tradition and unusual economic prosperity. Along with the rapid economic growth after Second World War, Lubbock County's population has grown to a metropolitan count exceeding 225,000 people.⁷⁰ Lubbock is recognized as one of the fastest growing cities in the nation from a census of 149,101 in 1970 to 174,172 in 1980 with a growth rate of 16.82%.⁷¹ In 1990, the metropolitan population exceeds 220,000 with a growth rate of 18.16% and the population is expected to approach 240,000 by the year 2000.⁷² Lubbock is now the largest metropolitan area between Dallas-Fort Worth and Albuquerque, San Antonio and Denver, Oklahoma City and El Paso, and Wichita Falls and El Paso. Lubbock is surrounded by twenty three-counties.

The growth of population in Lubbock County has, in the past, been consistent and, at certain times, vigorous. The most recent census, however indicates that populace growth in the region has fluctuated since there was virtually little change in comparison to a growth of about 15% in the three-state area of Texas, Oklahoma and New Mexico and a growth of about 17% in Texas.⁷³ This diminishing population growth is mostly attributable to the decrease in immigration of individuals and families.

Population composition is a description of the age, sex and racial distribution of persons in the total population. Between the decade of 1980 and 1990 the median age of the population in the City of Lubbock remained unchanged at approximately 23.5 years since 1960's.⁷⁴ Nevertheless, the distribution of the population by age categories showed some changes. The relative size of the categories of population from zero to nine years of age declined during the decade of the nineties from 25.2% to 19.2%.⁷⁵ During this period, the age categories from 10 to 24 years of age showed an increased in relative size. For the individuals categories from 25 to 54, the size declined during the decade. The age categories from 55 and up, which include the 75 and over, increased in size between 1980 and 1990.

The decline in the number and relative size of the population in the under ten age categories will have short-run effect on the public school system and in the long-run, reduce the pressure on the economy

in term of reduced demand for jobs. In the other hand, increased number of people in the categories between 10 and 24 will affect the economy in that additional job opportunities should be provided in the near future or otherwise, a continuation of some outward migration would likely result. The declining relative size of the categories from 25 to 54 is mostly attributable to the large increase in both young and older age groups. Significant absolute increases in the age categories over 55 indicate better health and prolonged lives of senior citizens.

In the 1992 Census, the female population, is about 50.7% of the total population, a slight increase from male population.⁷⁶ This sexual composition is attributable to the increase in the elderly category in the elderly category in which female population is dominant.

With reference to racial composition, the city is dominated by white race while black population amounting to less than 8%, which is virtually unchanged since 1960.⁷⁷ Amounting to about 22.91% of the total population in the 1990 census, Hispanic population makes up the second largest ethnic group in Lubbock and the population is expected to encroach dramatically to 25.4% in the year 2000.⁷⁸

In respect to labor force, which is an important ingredient in any community, the overall civilian labor force in Lubbock shows an increase of 75.25% during the past twenty years.⁷⁹ Hereby, Lubbock has proven that it possesses hard-working and skilled individuals. Above all, by having industrious labor force who has proven itself capable of keeping pace with technological advances, Lubbock is ensured of a promising future in its continued economic growth.

Response: Due to various ethnic background in Lubbock, it is essential for the center to give a sense of belonging to the users, regardless of their ethnicity. In addition, all of the activities offered by the center do not promote discrimination to any races. With respect to the labor force, the center also creates employment opportunities for the population through its' retailing and administering activities.

Economy

Lubbock's region of 23 counties is situated on the Southern High Plains of Texas, one of the most productive agricultural areas in the United States.

The area surrounding Lubbock produces approximately 30% of the nation's cotton and 50% of the state's cotton.⁸⁰ In addition, about 85% of the world's sorghum is produced in the Lubbock area and the Lubbock trade area is the center of the world's largest feedlot concentrations. In many aspects, agriculture is the most dominant economic sector in Lubbock.⁸¹ Aside from agriculture, a number of factors contributing to Lubbock's economic viability is covered briefly as below:

Education Center

Lubbock is deeply involved in education, being the location of Texas Tech University and the Health Sciences Center, and other colleges and branch facilities of more distant schools. Texas Tech has attracted enrollment from all areas of Texas, the nation and many foreign countries. In addition, Lubbock is also associated with the military training through Reese's Air Force Base.

Retail Trade Center

With the presence of South Plains Mall and an increase in retail sales, Lubbock continues to grow as a retail center. This continued growth is also assured by continued population growth, both in the city and regionally.

Regional Center

Since Lubbock has a relatively large regional service area with new major facilities, it continues as a center for such regional services as health care, retailing, culture, banking and entertainment.

Industrial Center

Due to the new growth in industrial and warehousing facilities, Lubbock has begun to be more industrial and trade oriented over the last few years. The addition of such manufacturing plants as Litton, Texas Instrument and Michelin Tire plant, indicates a diversification of the economy towards a more non-agricultural industry, and thus this diversity will be an asset to Lubbock's future growth economically and socially.

It has been projected that the Southwest states or the so-called Sunbelt states which consist of Texas, Arizona, New Mexico and Oklahoma would

continue their rapid growth in population within the next few years. Texas has received over 62% of the overall increase of the Southwest states population and grown at the rate of 3.02% annually according to the 1980-1990 period.⁸² Texas and Southwest growth is projected to continue to be over twice the US rate through the year 2000 and Lubbock economic growth potential should benefit greatly from this growth.⁸³

Response: The existence of the community shopping center is going to add to economy viability because the center promotes new business and employment opportunities to Lubbock. In other words, with the stable market and population, the center will help spin-off the economy of Lubbock as a whole.

Business Growth In Lubbock

Texas Tech University with the cooperation of other colleges and universities in the South Plains region and the Lubbock Board of City Development has become the leading institution for a multi-center Small Business Development Center (SBDC) covering the entire north Texas area. This generates a favorable climate for business establishments since Lubbock is provided substantial United States Small Business Association (SBA) funds to finance small business consulting.

Response: Looking at the business growth in Lubbock, there is a healthy encouragement for new businesses activities to develop. Therefore, the retailing part of the center is highly marketable to local merchants and overall population. This positive response is needed for the center to grow.

MAJOR ISSUES
TO BE ADDRESSED
THROUGH
PLANNING AND DESIGN

There are numerous issues that can be listed for the proposed community shopping center. Since the center is located in the downtown area, it is important to note that the issues of the center intertwine with the downtown issues. The followings are the major issues that need to be addressed through proper planning and design.

Issue: Structural Image

With reference to a survey made by the City Planning Department, out of approximately 440 structures in the CBD, approximately 31% are found to be in standard condition, about 39% are designated as rehabilitable and about 30% are in such conditions that clearance is warranted.⁸⁴

The most severe deterioration is generally located at the perimeter of the CBD, especially at the east end and south sides of the area. In regard of the types of activities utilized by each building, it is found that the most severely deteriorated structures exist in the residential category where about 60% are rated as warranting clearance and only 2% are rated standard.⁸⁵ Public building are in the best condition, 88% standard and the remaining 12% in rehabilitation condition. Standard buildings in the commercial non-retail category amount to about 42%, with 40% rehabilitable and only 18% clearance. Among commercial retail structures, 32% are standard, 48% are rehabilitable and 20% are classified clearance.⁸⁶ Other image problems that have been identified are outlined as follows:

the existence of broken sidewalks and curbs, many of which have been patched in a less than desirable manner

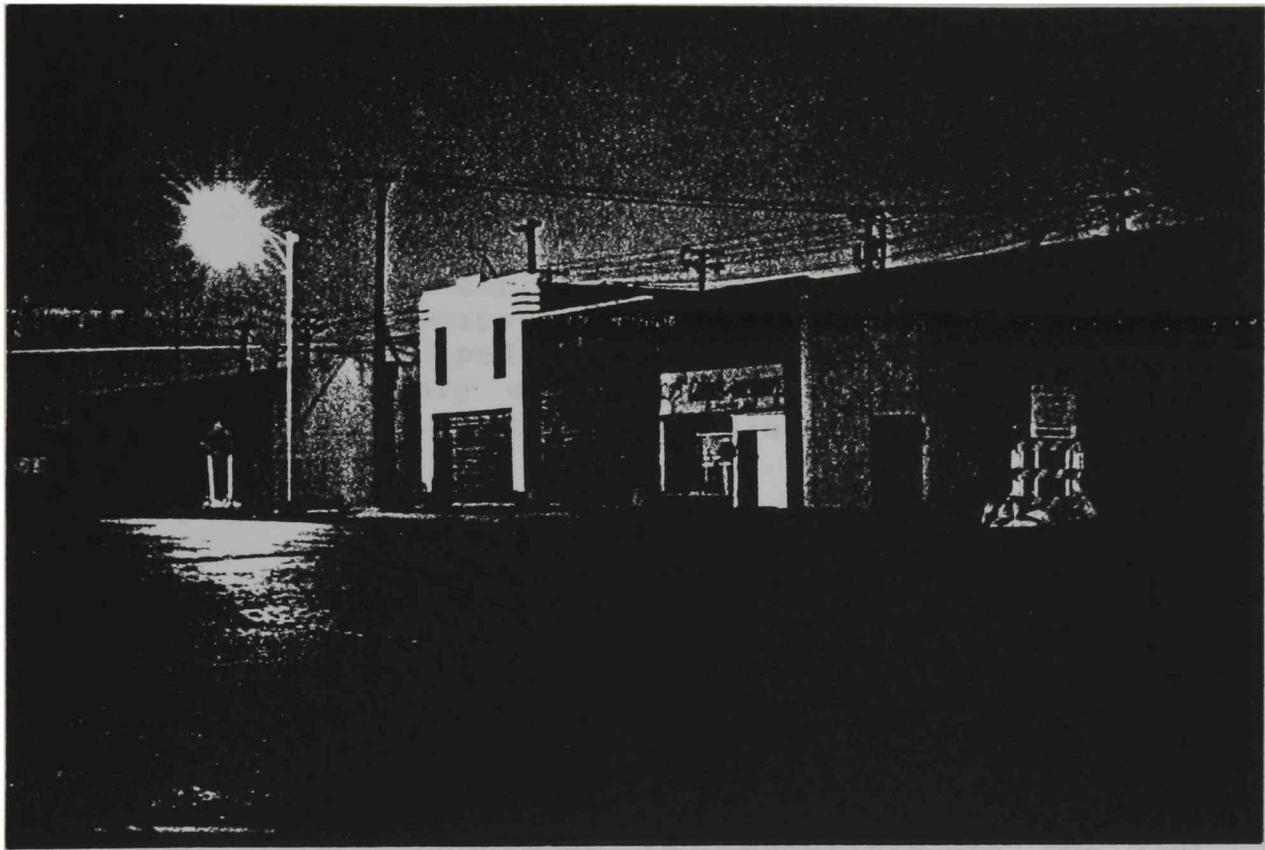
the presence of uncoordinated graphics and signs

the presence of disharmonious materials and colors

the general monotony of downtown vistas

the overall minimum amount of landscaping treatment

Response: Due to the deteriorated conditions upon existing residential and commercial retail buildings, it is important to create a visual enhancement in the monotonous vicinity of the CBD. In order to create this effect, coherent is important for the design of



ONE OF THE MANY DILAPITATED STRUCTURE ON THE SITE
AREA

the center. Each different entity in the center need to be designed as a whole to create the desired effect. Since there is no obvious design characteristic that ties together architectural elements in the downtown area, therefore it is important to have this tying effect in the center itself. In addition, the center also need to project the image of the society as a whole in order to create a welcoming and effect to immediate users. A sense of belonging is also important to attract the users. The usage of vibrant colors and high quality of materials combined with manipulation of landscaping elements such as water and vegetation in the planning of pedestrian sidewalk and open space can create a very exciting effect not only to the center but also the downtown as a whole.

Issue: Spatial distribution

The spatial distribution of existing retail and consumer service-oriented activities is a main issue in the downtown area. It is generally agreed that the success of modern shopping centers is at least partially attributable to the ability of patrons to shop comparatively, i.e., to be able to select from different brands and prices for the same kinds of goods. This convenience is impossible in the CBD providing that the present retail and consumer service activity pattern is dispersed rather than concentrated as in a typical regional shopping complex in the suburbs. Furthermore, the diffusion of the area also defeat the purpose of creating a good quality of public space because a good public space is resulted from a high concentration of people in one place.

Response: A more compact and orderly pattern of spatial distribution would bring density back to the downtown area. In order to provide a convenient comparative shopping apparently desired by most patrons in addition to creating a high quality of public life.

Issue: Parking

Quantification on a block-by-block basis was surveyed by the City of Lubbock Planning Department to determine an excess supply or deficiency in each block. The quantification was accomplished by

estimating the demand for parking in each block followed by comparing this demand with the observed supply of parking available in the block. From an overall point of view which is derived from this survey, there is a total peak-hour demand in the Central Business District of about 8,024 car parking spaces and correspondingly, there is an excess supply of approximately 416 parking.⁸⁷ Nevertheless, the overall view is rather misleading since there are tremendous variations in both demand and supply from block to block. Furthermore, parking should be considered in terms of space availability within walking distance of the ultimate destination of CBD users. When considered in this basis, there is indeed a rather severe parking problem. Therefore, at the scale of the CBD as a whole, the aggregated parking demand and supply is not problematic; the problem is perceived in smaller scale areas where land use activity intensity is high and nearby available parking supply is low, particularly in the very heart of the CBD. In regard of a zone basis, the most severe parking deficiencies occur among those blocks between Main and 14th Street and between Texas Avenue and Avenue L.⁸⁸

Secondly, from an overall point of view only about one-fifth of the total supply of downtown parking occurs at the street curb. The remaining four-fifth is primarily private, off-street parking. Parking space in private lots amount to nearly half of the total supply in the CBD while public off-street parking amount to less than one-third of the total supply. While private lots assure space availability to some downtown business patrons and employees, there are too few and too widely distributed parking lots for the many downtown patrons who need such facilities.

Therefore, another primary problem of the parking space pattern in the downtown area is that the available off-street supply is much too widely distributed for efficient utilization. The available supply is composed of a large number of small parking lots often containing no more than ten or fifteen parking spaces, which are scattered throughout the CBD rather than being in several strategically located places where a large number of spaces could be concentrated.

Response: Since parking is a severe problem to downtown area, a convenient parking system for future users of the community shopping center in order to create a balance between the demand for and

supply of parking within the center. Because the center can not depend on the CBD supply of parking due to tremendous variations of types of parking from block to block, the center's development of a parking facility is essential to the success of the center. The parking facility will be a separate entity in nature but still an extension of the center. Certain users' requirements such as handicapped, staff and visitors are also important to ensure the success of the facility. Accessibility and visibility are another important aspects for all the users of the center. Therefore, the center will provide sufficient and convenient parking facilities in order to avoid frustration and dissatisfaction through good design and planning.

Issue: Existing Traffic, Access and Circulation

The street network is composed of streets that serve various functions, which are classified as follows:

Local streets primarily provide access to abutting properties.

Collector streets in the CBD provide access like local streets and also link local streets with thoroughfares.

Thoroughfares provide local access and may be used to link local streets with other thoroughfares, but primary function is to accommodate large volumes of traffic on intra-city or long inter-city trips.

Most downtown streets are designated as collectors due to their local access and linkage character. Only Broadway and Avenue H, which are the streets that carry traffic that may have origins and destinations quite remote from the CBD, are designated as thoroughfare. Bordering the CBD, Avenue Q also has been designated as a thoroughfare.

From an overall view, the CBD lacks the availability of high-speed, large traffic volume and limited access street facilities which are commonly associated with a freeway designation, and the absence of such facilities constitutes a major limitation upon the center development potential. With the absence of such routes of travel, inter-city trips between the CBD and the outlying remote sectors

of the city require excessive amounts of time for many community residents.

Response: The street network of the CBD is no longer a problem due to the I-27 expressway. A divided, four lane highway serves as an access and egress route from the CBD to the population centers and distribution facilities to the south and north. The presence of the expressway has shifted some of the CBD bound traffic now entering from the west on Avenue Q over to the east side of the CBD. Therefore, the I-27 has opened the CBD to the expanding population centers south and west of the downtown area and help reduces vehicular travel time between the CBD and remote residential areas of the city. Thus, the expressway will improve the center's mean of access and simultaneously adding a concentration effect in the area.

In addition, the center will also help improve the vehicular circulation at the proposed site by reducing the available frequency of turning movements and conflict between vehicles and pedestrians. This can be done by specifically designed separate system of circulation; one of vehicular and the other for pedestrian. Due to the of size and number of people that are involved in the activities of the center, it is important to provide good access and circulation to avoid conflict, accidents, fatigue and other undesirable effect to the main users. Access to and from the parking facility and the street should be convenient and visible to avoid confusion.

Circulation of inside and outside of the center is an important aspect to the center. The design horizontal and vertical circulation needs to be planned to minimize traveling time and fatigue. Handicapped requirement is another critical factor to consider. Pedestrian circulation need to be enhanced with landscaping elements.

Issue: Activities

The issues that are associated with activities are mostly related to the absence of certain land use types, including high-density housing and cultural, recreational, and entertainment land use activities, as well as the locational pattern of certain land use activities that are present in the downtown area. The recreational facilities which are absent in the CBD area includes facilities for art, music, art galleries and museum. Even though the Civic Center fulfills part of present need for those kinds of

activities, the development of other special activities need to be promoted if the vitality of the area was to be considered. For the activities in the community shopping center, they need to be well thought off in order to attract the users of the center. Therefore, the main question that need to be answered is, " What kind of activities that can be promoted to appeal the users of the center ? "

Response: The proposed community shopping center has a lot to offer to the future users overall. Since the center will be the heart of the CBD where public gathers, changes information, engages in businesses and other public activities, it is important to create a compact and concentrated effect to promote density and continuous flow of people. In order to create this effect, a variety of activities need to be offered under one compact physical framework to avoid the feeling of sparseness and grandeur.

The three major activities that are involved in the center are shopping and retailing, recreational and administering. All of the activities involved different type of users. It is important to satisfy their needs by designing good supporting spaces in order to provide a smooth flow of operation. Therefore, it is essential to develop requirements to accommodate these future activities. The followings are some of the requirements that will be considered through proper planning and design.

To support shopping and retailing activities, a well-designed space which encompasses public amenities, eating facilities, enough resting and sitting area, good circulation and lighting are important for well-being of shoppers.

An interesting and spacious space is also essential to support recreational activities in the center. Several separate areas such as art and craft studio, library, mini-auditorium are also recommended to accommodate different set of activities and programs that are offered. Good lighting and ventilation are critical for some activities.

For administration area, an enclosed space is appropriate to facilitate this type of activities. Spacious area for common area with several private room for personnels are required for the operation. Good acoustic and lighting is critical in meeting and conference rooms.

Issue: Creation of a Unified Entity and Image.

Since the center is located in the area where the existing structure does not have a unifying characteristic that bind the design together, it is important to create the unifying effect for the center through exterior and interior design elements. In addition to improving the image of the center, the unifying effect will also help catalyze the dull image of the downtown area.

Response:

Exterior Design--Concept and Material

To alleviate the dull effect, the community shopping center has to be varied with choice of materials, color, and texture. This variation need to be subtle in order to avoid a distracting hodgepodge and simultaneously improve the character and image of the center immensely.

One way to achieve a unified design is by using one or two major materials throughout the center. The use and choice of exterior materials should be carefully weighed. Main factors to consider are the waterproofing qualities, the ease of maintenance, the availability of selected materials, and the speed of assembling and erection. One good example is brick. Brick for exterior wall still remains an attractive material and, in most instances, the least expensive. Furthermore, the variety of ways in which it can be used is limitless.

Exterior Design--Elements

The choice of materials and their proper use plays an important role in the total design concept and in establishing the image of the center. Various approaches to the exterior design can serve to attract the users.

The design of the plazas and main entries to the center is of great importance. It should have an inviting quality and at the same time be imposing enough to draw the users' attention, so they are led in with anticipation. In the daylight hours, this means an architectural concept of an exciting, three-dimensional quality which could take many forms: a colonnaded canopy, a center insignia tower, or a special wall design at the entry and landscaped areas which include not only interesting plantings, but also art and water forms.

One important element worth mentioning is the design of the service courts. These courts should

meet only the actual functional requirements, should be placed in such locations where the number would be as few as possible, and should be designed so as not to detract from the main character of the center.

Interior Design

The design of the interior especially public spaces should create a most inviting environment for the users. The elements of this new environment should provide such exciting interest that the users' first feeling is one of a satisfying emotional uplift. The indoor courts area is one of the critical public spaces that need to be designed and planned carefully.

The indoor courts should become the focal magnet of users--an image they will carry with them and remember. Various exciting features such as glass-space-frame domes, special lighting fixtures, sculptural fountains, landscaped areas, specially designed staircases, escalators, glass-enclosed elevators, and important art work can be incorporated in the court. The design of the graphic-directional signs, banners, central symbols, and the choice of colors--also becomes an important element in the total impact on the users.

The court, in addition to serving as an exciting place for the users to sit, relax, and meet friends, could also be designed for functional and profitable uses. In order to provide for this flexibility, permanent installation (i.e., fountains, plantings, artwork) should be placed so as to allow for large open areas for special events--concerts, displays, art shows, and community programs. The idea of providing amphitheater-type seating in the court adds to the possibilities of arranging festive events for both the young and the older users.

Issue: Lighting

Lighting is one of an important factor for the center especially in the indoor area which include shopping spaces, recreational and administration.

Response: The illumination level for the shopping circulation area should be subdued and yet adequate to stimulate people and to create a restful and inviting atmosphere. In addition, the lighting source can be placed to create interesting ceiling patterns. Lighting effects could also be achieved by using decorative pendants, chandeliers, architectural shapes, and specially designed wall and post lights.

For recreational and administration area, a good source of daylight is important to increase creativity and productivity. A central environmental monitoring system is also helpful in order to indicate the illumination level at one or more critical locations and it is connected to the central control console.⁸⁹

In addition to interior lighting, numerous exterior lighting functions must also be considered. Among these are building floodlighting, fascia lighting, sculptured features, and marquee. Lighting of this sort is often used in lieu of large signs to draw attention to the center and to identify it. In such instances, the lighting must be more than adequate, otherwise it may convey undesirable impressions. Walkways around the perimeters must also be illuminated and the appearance of the lights is important in order to complement the center design.

Good parking area illumination is very important. A minimum illumination level of 1 footcandle should be maintained at darkest location.⁹⁰ It is desirable to have an even illumination level, but this is not essential. However, driveway approaches that enter and leave main thoroughfares should have a higher level of illumination and should have a distinctly different lighting standards or standard location so that the lights may serve as markers for entrance and exits.

Issue: Heating, Ventilating, and Air Conditioning

Human comfort is an important aspect to be considered for the center due to the unagreeable weather of the area.

Respond: The center should be designed pertaining to the comfort of the users as related to temperature control. They should experience the pleasure of contrast and comfort whether coming in from summer heat or winter cold.

The generally accepted indoor conditions are 75 degrees Fahrenheit and 50 percent relative humidity in the summer and 70 degrees Fahrenheit in winter.⁹¹ Winter humidification would be desirable, but is impractical and costly because of the large proportion of outside air usually required for cooling. This outside air has relatively low moisture content and would have to be supplemented with large quantities of water moisture in order to raise the relative humidity. In addition, the large winter

cooling loads call for relatively low air temperatures in supply ducts. Such cool air has a low moisture-carrying capacity, and when humidity is added, condensation and dripping from ductwork may occur.⁹²

Control of odors is very important and is best accomplished by maintaining a lower air pressure in odor-producing area such eating facilities than in the remainder of the center. If odor-producing areas are connected to a common supply-air system, exhaust quantities should exceed supply-air quantities.

Issue: Security

Good security system is important in order to offer fire protection, burglary protection, and emergency protection, to name a few.

Respond: Good lighting is of great importance in the parking areas as a deterrent to purse snatchers, car thieves, and burglars. Panhandlers and other undesirable normally will not frequent the center that is well-lighted.

Fire protection in the form of a sprinkler system is a building code requirement for enclosed centers. Security considerations in sprinkler systems start on their gate valves. Gate valves control the water flow from the riser to an individual system. An alarm system is transmitted if the valve is turned off, thus depriving the sprinkler system of any additional water.⁹³ In other words, if there were a fire, the only water available would be what was already in the small pipe coming off the riser.

S U M M A R Y

O F

S I T E A N A L Y S I S

In spite of all the issues that circumscribe the development of the community center in the downtown area, there exist a virtual consensus that personify an outstanding strength. The fact that banking and finance, government function, and civic and convention activities occur in the area can be regarded as the city's innermost strengths in at least four separate ways.

The first aspect that may be regarded as a strength is that each of the foregoing activities does employ a large number of people; people that are present in the Central Business District virtually every day. Secondly, each of the activities mentioned offers a kind of good or service, each unique unto itself but complementary in many ways, which attract consumers or patrons to the CBD. Thirdly, each activity represents a very dependable permanence of location within the CBD.

These activities have a tremendously stabilizing influence on other activities that depend upon their presence. And, fourthly, each of the basic types of activity have some generative effect, that is, they generate, or hold ancillary activities in the Central Business District.

In summary, the site is chosen for the development of the proposed community shopping center due to several reasons:

The site sector (CBD) is a dying area in Lubbock. With the existence of the community shopping center, hopefully will revitalize the decaying reputation of the downtown area.

The site sector lacks a center that promotes social activities such as recreation and shopping in one place.

The adjacent buildings are deficient of aesthetic value in their overall design. Thus, this is a challenging task to pursue for the future project to be pleasing to the eyes of the community through a good design and landscaping.

The site area is the heart of banking and finance, government functions, and civic and convention activities occurrence. Therefore, this strength of the area will enhance the proposed project.

C A S E S T U D I E S

WEBSTER AVENUE COMMUNITY CENTER

Location

Bronxs, New York City

Architect

Smotrich and Platt Architects

Description

The community center is located closed to a public housing at Webster Avenue for the surrounding public near the area. The center serves every level of the community especially the younger generation. In spite of its attraction to the youngsters, senior citizens also have a place in this center. Art and craft activities is one of their main domain. Other activities that are offered varies from recreational to martial arts.

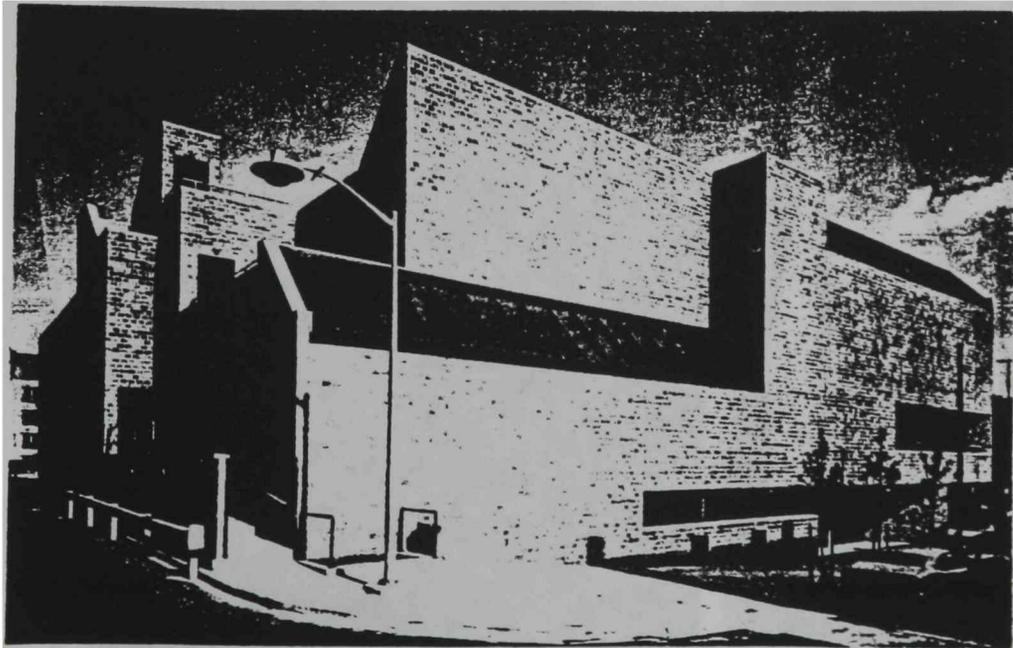
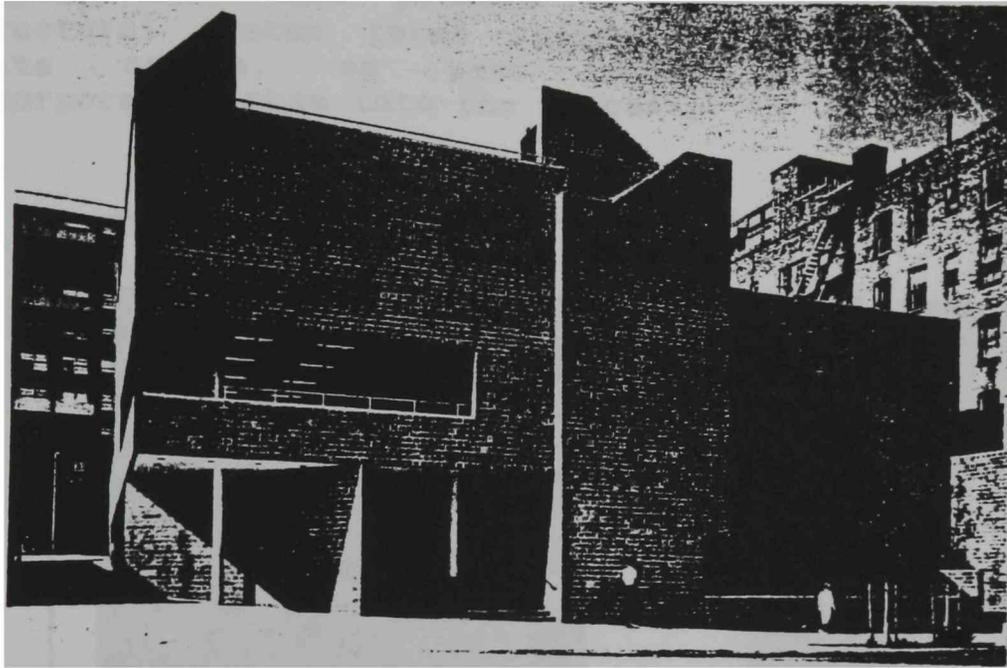
Developmental strategy

In the busy entrance to the Webster Avenue Community Center is a plaque bearing the names of the dozen of people connected with the Center's long history. The architect, David Smotrich and Charles Platt, stress that the plaque names people who helped, as well as hindered, the Center's development during the past decade. Having the city as their client, they faced legal and administrative hardships in completing this innovative project. However, despite all bureaucratic difficulties, the architects created a beautifully functional structure well adapted to its surrounding and clearly enjoyed and respected by the people who use it.

Design approach

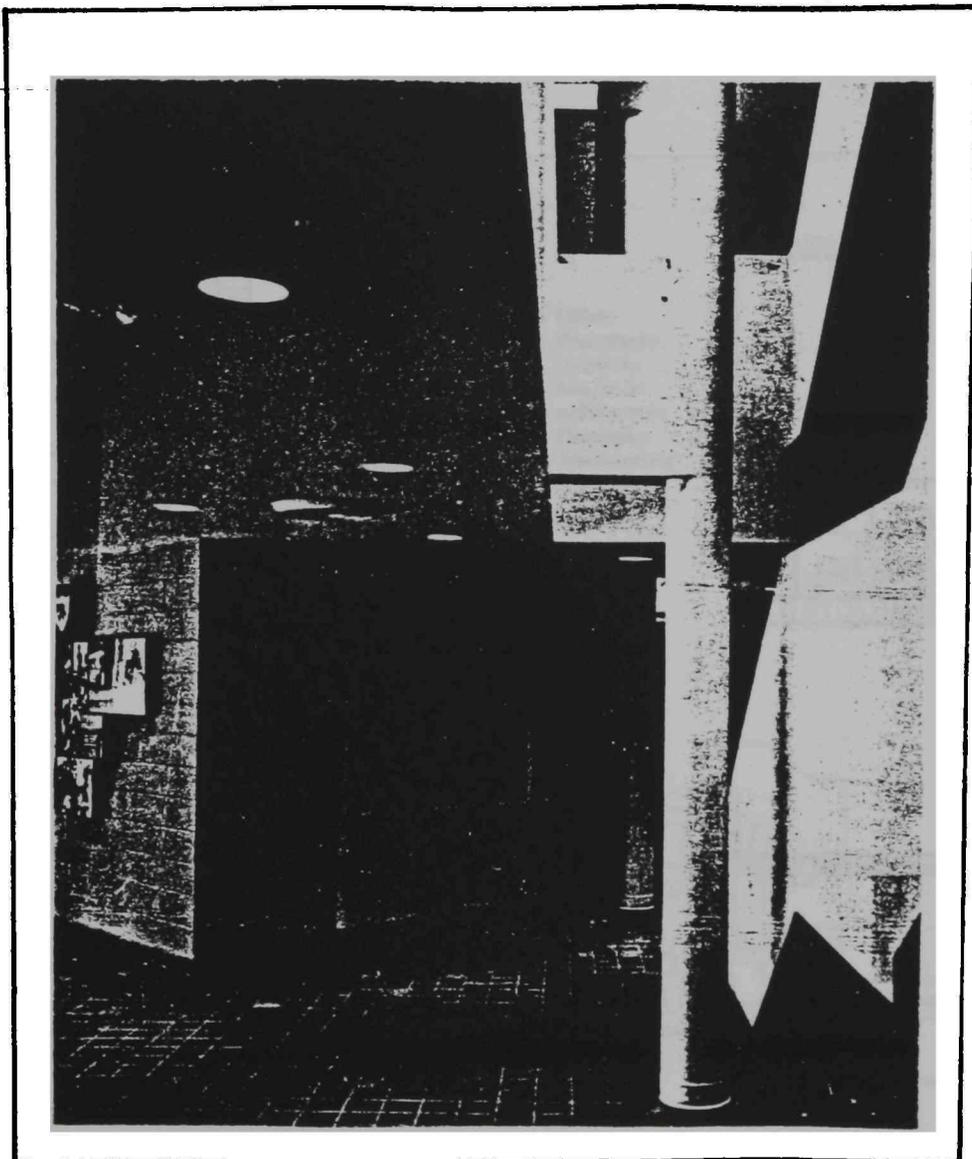
Two of the impressions the architect wished to convey through the Webster Center design were expressed articulation and community space. At the outer part of the center, the facades were defined by its interior spaces and skylights, giving the steel and brick structure heightened visibility when viewed against a backdrop of older, more conventional buildings. The second floor loggia ties the Center to the community and to its site. The Center's largest activity room is the gym which occupies two floors on the building's north side while the smaller activity rooms occupy the south side.

The site for this community recreation center is a cramped corner property at the intersection of two main routes of neighborhood traffic: north-south along Webster Avenue and east-west along dead-ended Ford Street and an important pedestrian easement through the Housing Authority project. The dual main entrance to the Center recognizes this corner and provides interior and exterior gathering and milling places.



The interrelationship between the building's two parts is shown in the section where the floors meet at half level along the main circulation corridors. As the architects claim, something is happening at each level along the staircase.

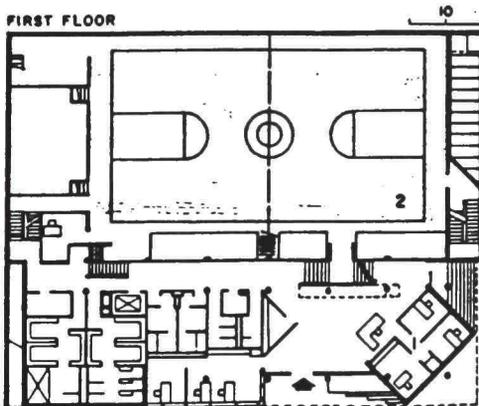
Typifying the Center's concept of community space is the open staircase, this can be seen at the first floor lobby and across the second floor. It is the major space associated with the linear spine of circulation and serves to link the building's two segments. The staircase is itself a vertical column of space extending upward and touching each floor. In keeping with this pattern of open freedom, the structural system forms spaces that surround the white column, as seen below, rather than incorporating them into the spaces.



While the building's program called for it to express a welcome to the community, the City severely restricted the use of windows and other openings onto the street. To overcome this conflict, skylights and a second floor loggia overlooking the street corner were incorporated, creating a feeling of openness, bringing in natural light and connecting the Center to the community. The western side of the building and the roof were given special consideration and painted in some areas to give the users a pleasant and interesting view.

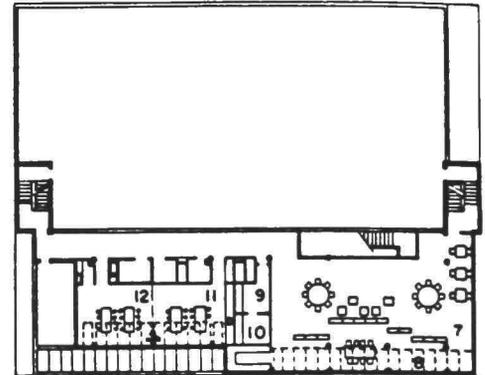
The dual corner entrance (see first floor plan) and a ramp for the handicapped, and the second-story porch and high sloping windows on the second and third stories, provided a sense of welcome despite the almost absence of standard windows. The building's outward form follows the shape of its interior spaces articulated mass of projected "edges" that stand out in sharp contrast to the flat and regular surfaces of old-law tenements and new public housing next door. The Center is obviously a special place.

FIRST FLOOR

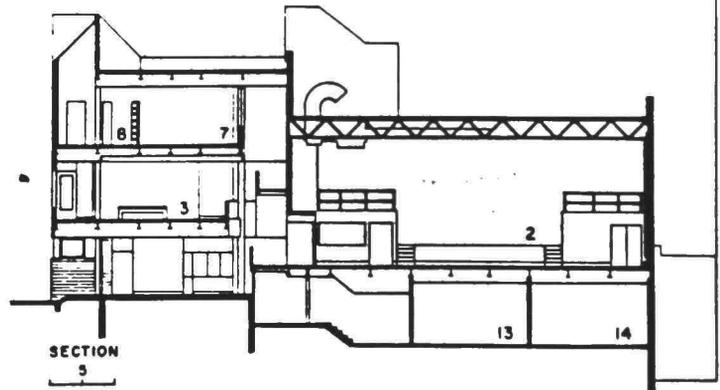
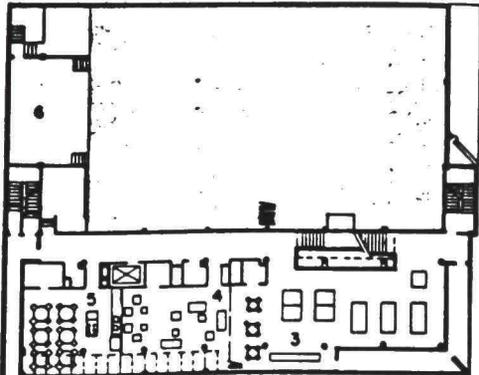


- | | |
|-----------------|-------------------|
| 1. Admin | 8. Library |
| 2. Gym | 9. Photography |
| 3. Active games | 10. Darkroom |
| 4. Lounge | 11. Arts, crafts |
| 5. Homemaking | 12. Activity room |
| 6. Stage | 13. Electronics |
| 7. Quiet games | 14. Woodworking |

THIRD FLOOR



SECOND FLOOR



PETALUMA COMMUNITY CENTER

Location

Petaluma, California

Architect

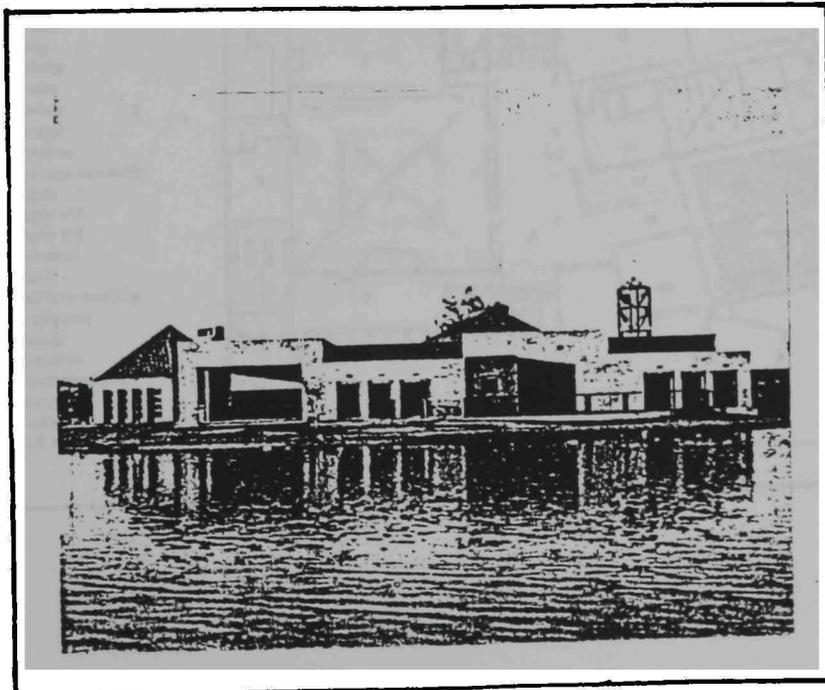
Roland/Miller/Associates

Description

The community center which is located at 50,000 miles north of San Fransisco is a landmark and gathering place for the town's population. The 27,500 square foot center is located alongside a man-made lake in Lucchesi Park and it will include a performing-art center and athletic facilities when funding is available.

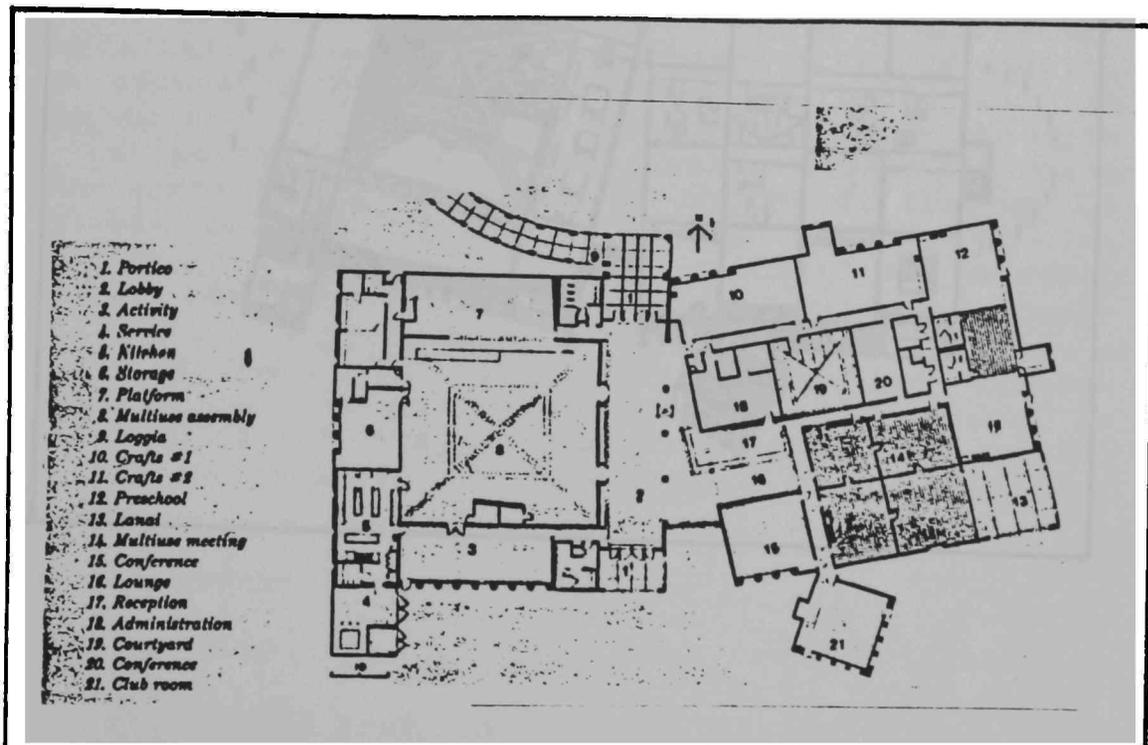
Development strategy

Besides being the recreational facilities for the Petaluma community, the main purpose of the center is to give the town amorphous east side a focal point and progressive aura. The architect thought it is necessary to give this image due to the fact that the east side of the city is endlessly inundated with tract housing which is without character and punctuation compare to the west side of the town which is characterized with charming group of 19th- and early 20th-century buildings.

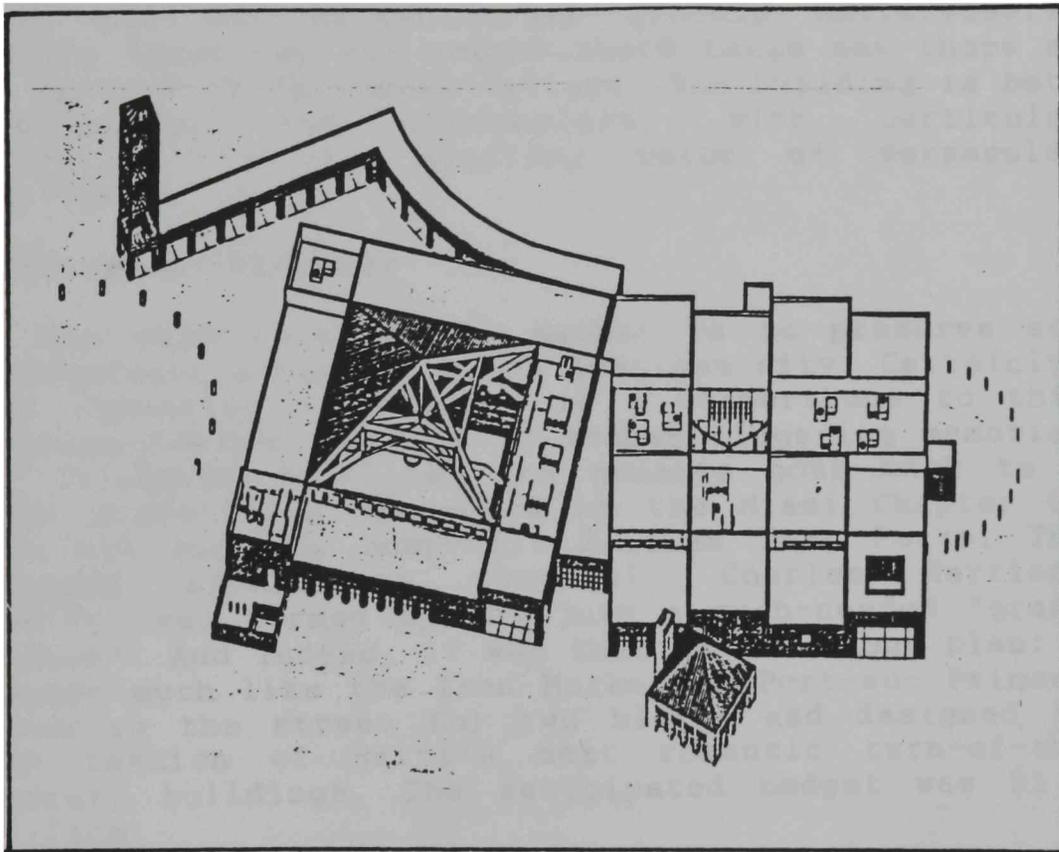


Design approach

The Petaluma Community Center is a simple, yet artful building that performs its intended function admirably. The building makes itself known from afar by means of a tall metal clock tower and is a rambling, inviting presence by the lake. Concrete-block walls are dove gray, accented by dark charcoal. The structure is basically a rectangular box, bent at the center to take full advantage of the lake. Windows and doors are deeply recessed, giving the building something of a character of an early Western fort or trading post. This composition is greatly enriched by two-teal appendages (see floor plan below). The first is a loggia that wraps around the side and rear of the building and will serve as the main entryway to the performing-arts center. The second is a pavilion housing the "club room", a square prefabricated metal structure set at an angle to the main building with a pyramidal roof of its own and tall chimney.



Inside the center is a wonderfully wide variety of community facilities. Under the pyramidal roof is a multipurpose auditorium used for performances, banquets and all manner of other largescale functions. At the nexus where the building bends is a spacious and welcoming entrance area, which, like the multi-use room, is illuminated by clerestories. On the lake at the side of the building are meeting, activity, and craft rooms, some divisible by sliding doors. Facing the lake is a delightful preschool classroom. Interiors on this side are brightened by a light court with a small pyramid echoing the exterior forms.



CARIBBEAN MARKETPLACE

Location

Miami, Florida

Architect

Charles Harrison Pawley

Description

This marketplace sits in a prime location on Northeast Second Avenue of the area's main shopping street, which itself has undergone rapid change. Due to the development of the marketplace, rows of shops which were empty during early 1980s, is now filled with small Haitian businesses--grocers, hairdressers, sundry shops--as the neighborhood takes new shape as an enclave of Caribbean culture. The building is both spectacular and commonplace, with particular attention to the dazzling color of vernacular buildings.

Development Strategy

The main role of the market is to preserve and communicate a culture in an American city. Certainly, the community marketplace is a cornerstone to this ongoing revival because it evokes lingering memories of Caribbean folklore. Its genesis goes back to a 1984 competition sponsored by the Miami Chapter Of the AIA and the nonprofit Haitian Task Force. The winning architect's proposal, Charles Harrison Pawley, was termed by the jury a much-needed "grand vision". And indeed, it was then an ambitious plan: a market much like the Iron Market in Port-au-Prince, covering the street for two blocks and designed in the fashion of Haiti's most romantic turn-of-the-century buildings. The anticipated budget was \$1.5 million

Cost/Financing

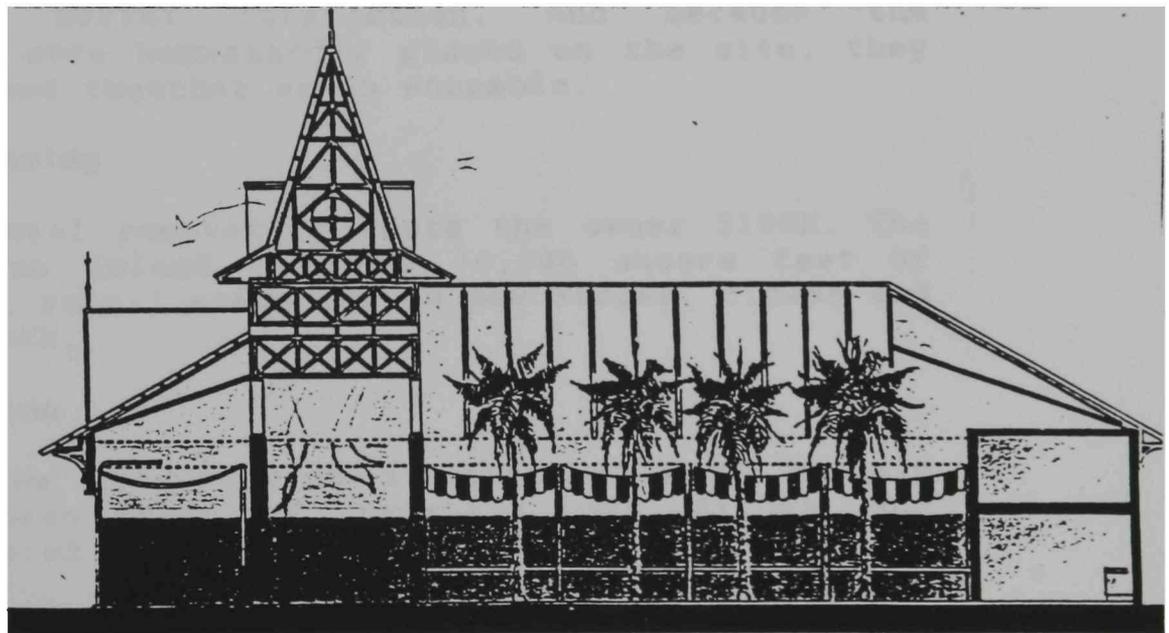
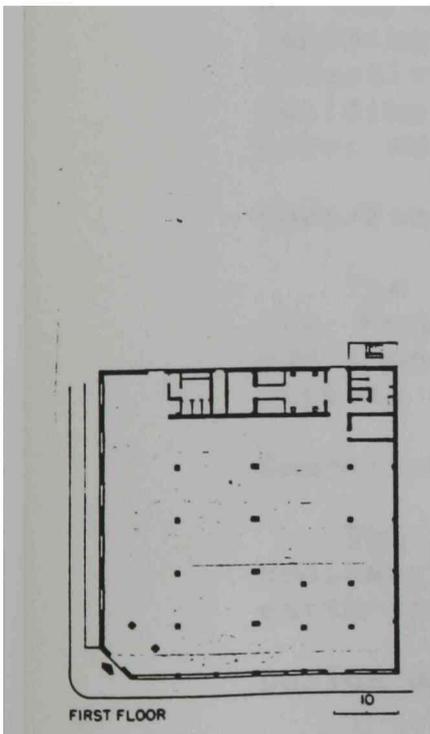
Eventually the project was scaled down to \$600,000. The grants come from the Ford-Foundation-funded Local Initiative Support Corporation and from the city, county, state, and federal governments.

Construction

The architect sought to have an 'exposed', hand made quality', avoiding crispness in favor of an 'almost fuzzy' look with the usage of off-the-shelf material. Meant to look 'unfinished' the market relies on simple material: garden lattice, pretreated lumber, and corrugated metal. As a result, the application of certain features enhance the community lifestyle and spirit.

Design approach

To provide natural ventilation, the building is gutted and equipped with two slow moving exhaust fan and 30 low-slung ceiling fans. The corrugated roof, supported by exposed wood trusses, is of galvanized metal with corrugated fiberglass at the edges to let light filter through (see section below). The interiors (see floor plan), rely on a simple system of booths that open and close with green vinylized canvas awnings--a familiar feature in the Caribbean--hanging from the roof trusses. The entrance is at the corner of the building and roll-up garage doors that lined the west walls open the whole building to the street, in order to increase air flow and also to give the place a character of an outdoor Caribbean bazaar.



FASHION ISLAND

Location

Newport Beach, California

Architect

The Jerde Partnership, Architects

Description

The mall is a remarkable urban experience due to life that is created through density. Modelled after Italian Hill town that the architect admired, the retail complex offers a series of covered street, colonnades, piazzas, and palm-lined courts. All the outdoor spaces are excellent examples of public spaces because they are treated differently from each other with different kind of excitement—a fountain, a plaza or some interesting landscaping.

Developmental Strategy

When the mall was first open in 1967, it was state-of-art: big, bold, and upscale. Taking advantage of the Southern California climate, it featured a series of buildings in a campuslike setting surrounded by a sea of parking. Unfortunately, the outdoor areas never really worked as social spaces. Rather than being too small, the landscaped plazas were actually too large for effective social interaction. And because the buildings were haphazardly placed on the site, they never worked together as an ensemble.

Cost/Financing

The total renovation costs the owner \$100M. The new Fashion Island includes 70,000 square feet of additional retail space for 60 new stores, cinema and parking deck.

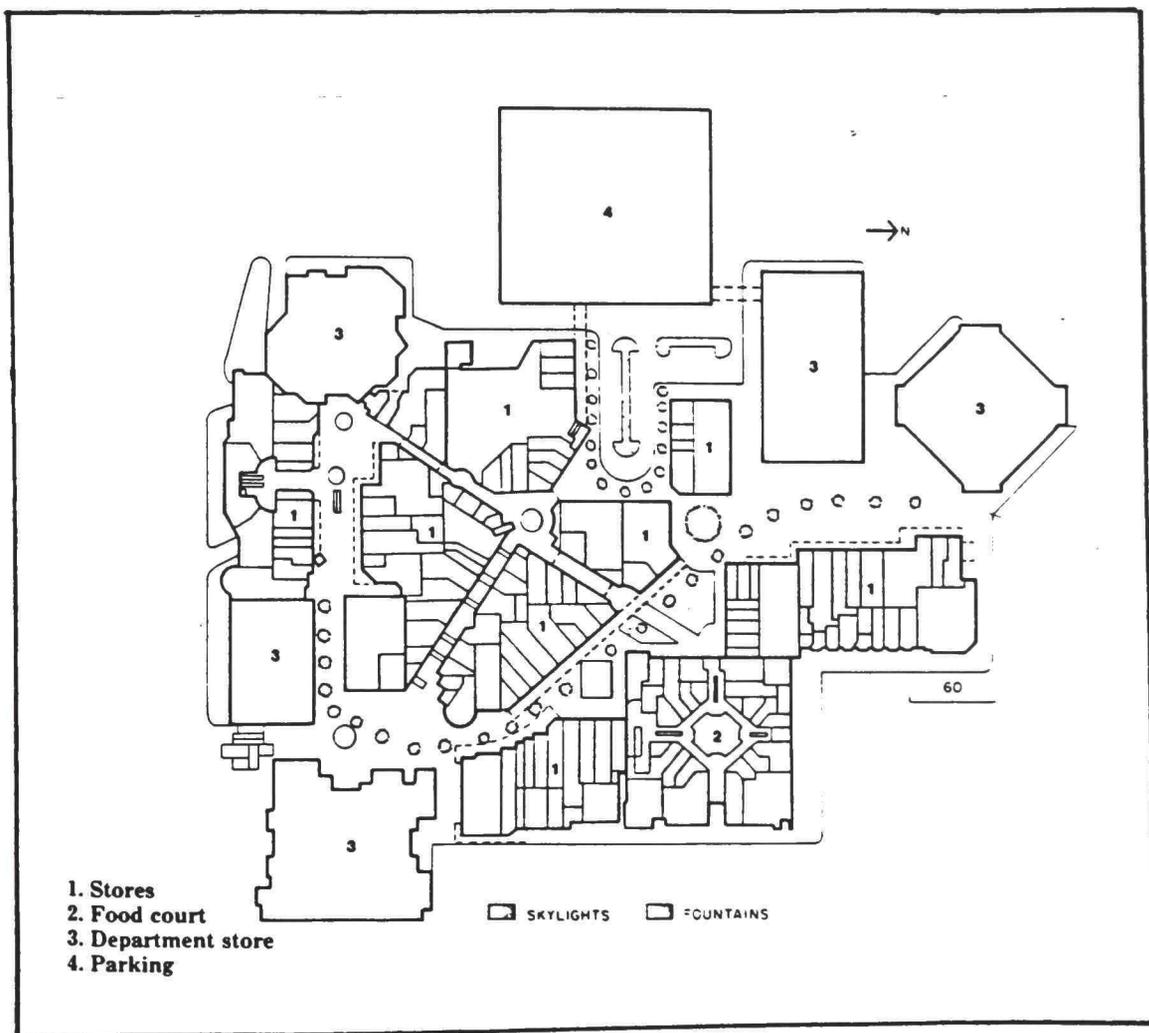
Construction

The new construction is finished with vaguely Mediterranean wrappings: red-tile roof, arches, and earth-colored stucco facades.

Design approach

The architect's, Jon Jerde, key plan is the concentration of outdoor space for public

orientation. He successfully created a public experience of urban cities through this plan. Walking through the mall is now a remarkably urban experience, with sidewalk cafes, tight streets leading to open plazas and arches above pedestrians. As in a city, density brings architecture to life. He carefully arranged the project's elements so every street ends with a view of a fountain (a place to rest), a richly ornamented facade, or something remarkable to create this wonderful effect (see plan below). In addition, to give the various outdoor areas their own character, each is treated as a distinct neighborhood. This is done by changing the material, color and the ratio of pavement to planting. However, all these individual spaces are created within a coherent whole.



KALAMAZOO CENTER

Location

Kalamazoo, Michigan

Architect

The ELS (Elbasani/Logan/Severin) Design Group

Description

Kalamazoo Center is a multi-functional complex located on a prime downtown commercial block adjacent to the successful Kalamazoo Shopping Mall--a four block, landscaped pedestrian mall that dates back to 1958. The center is a part of the long term comprehensive plan of the Kalamazoo Central Business District revitalization program.

Development strategy

There is a growing consensus in the real estate industry that an effective revitalization of downtown areas will not only require new forms of economic development but also more importantly, explicit coordination among three groups: governments; general public and local business interests; and private developers. Development of Kalamazoo Center demonstrates these emerging relationships. The development, which was a part of the greater downtown revitalization focuses upon three-fold goals as set forth in the comprehensive plan:

Separation of cars and people.

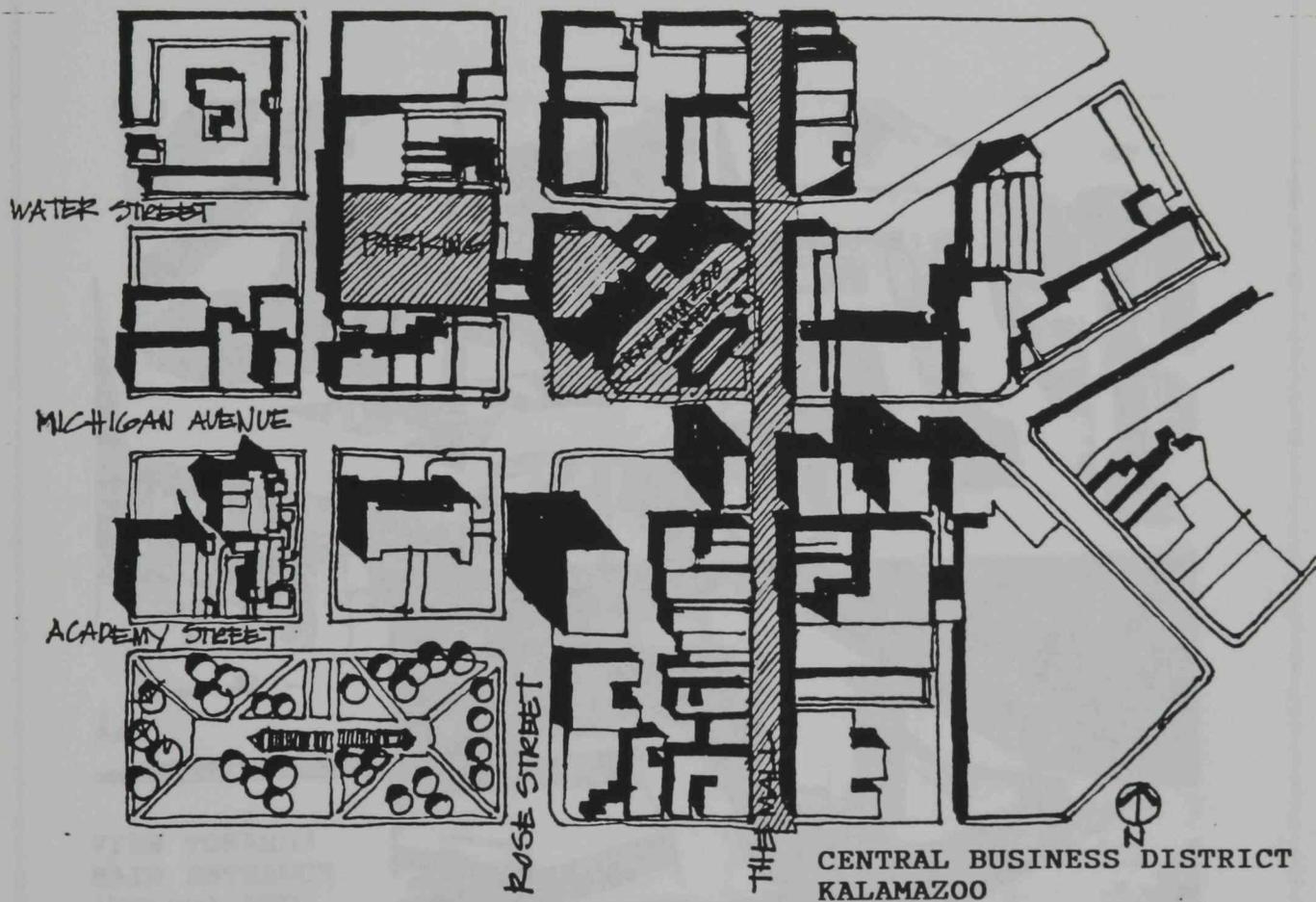
Creation of a pleasant environment for shopping and strolling.

Establishment of a social focus in the CBD; "to capture people downtown".

Design approach

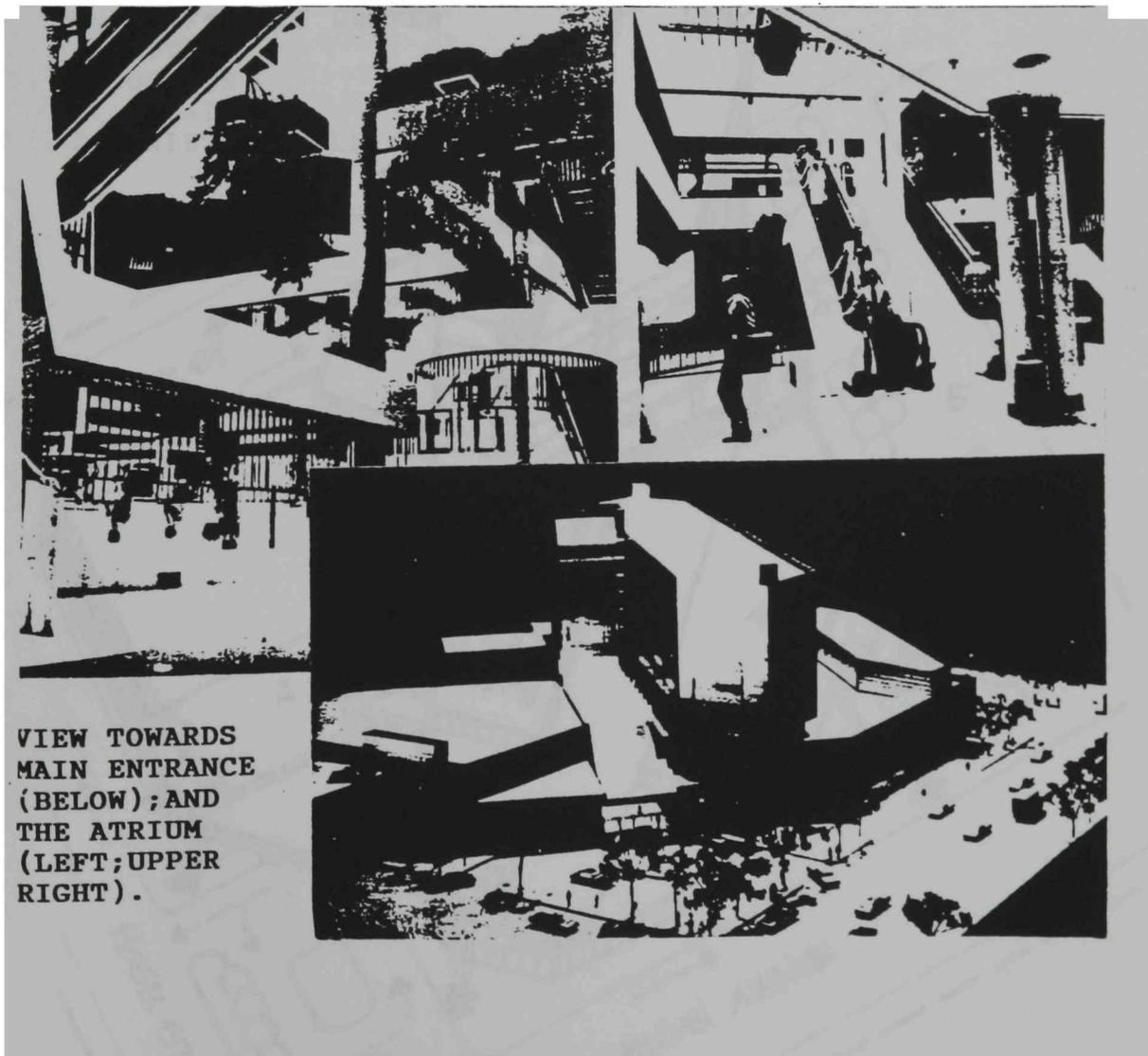
Designed to catalyze further downtown redevelopment, the architects sees the complex as a pedestrian magnet stimulating varied urban activity on its edges. They realized that for such a pedestrian activity to be professed, the designed environment must generate movement which, in turn, requires a sense of place and a sequence of events occurring within that environment. Nonetheless, for such environment to engender the economic and social

impact upon surrounding areas, enriched internal activity per se is not a sufficient criterion. The environment should also acknowledge the existence of neighboring activities and uses. Based upon the realization that an introverted approach is detrimental to the adjacent urban functions, the architects design the pedestrian circulation pattern in such a way that it cuts through the site on several diagnosis and has a pleasing disorientation through the changing focal points. The design is proven to be conducive to both the internal and external movement.



This map graphically depicts the relationship of Kalamazoo Center to the downtown area and the shopping mall. A parking deck is connected with the megastructure by a skyway.

To insure physical and functional integration among potential activities and varied functions, and thus generating complementary market synergy, final design of Kalamazoo Center called for a structure covering almost all the 88,000 square foot site. The physical framework has a three-level base structure from which rise a seven-story tower. The building accommodates retail functions, restaurants, and entertainment components, 10,000 square feet of office space, recreational facilities and a 60,000 square foot conference center. The convention area can accommodate meetings as large as 1,000 people. Situated on three levels around an open central atrium with a skylight roof, retail facilities occupy about 72,000 square feet of area.

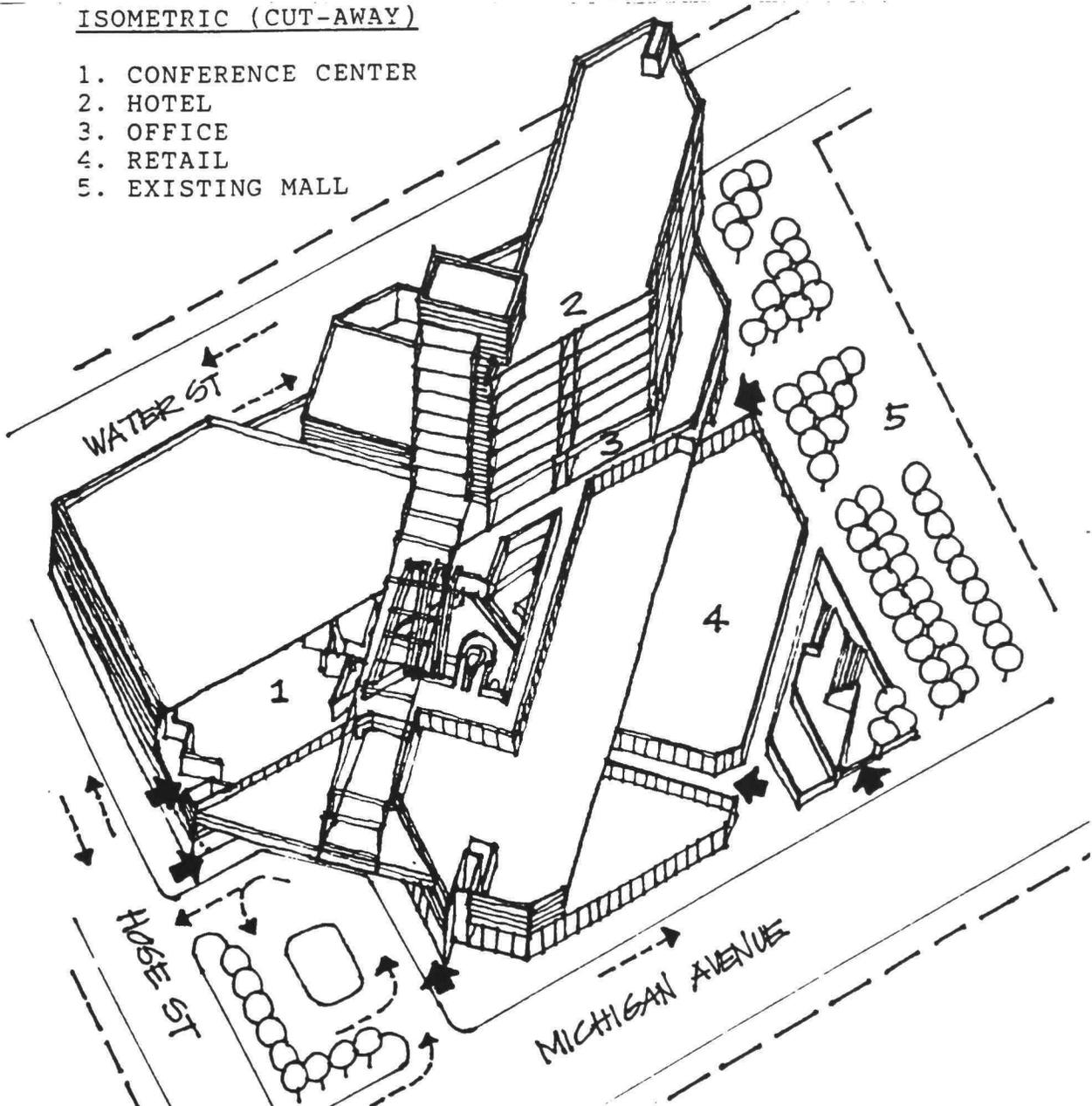


VIEW TOWARDS
MAIN ENTRANCE
(BELOW); AND
THE ATRIUM
(LEFT; UPPER
RIGHT).

The large, multi-tiered central atrium is considered the project's centerpiece and patterned after a bazaar which encourages movement around and between the various levels. Retail, civic activities and hotel lobbies all converge into this central open space creating an implosion of activity which is somewhat evocative. Interior landscaping, storefronts, and color mix are not only used to establish several focal points on various levels of the three-story space, but also to establish a pleasing disorientation and encourage pedestrians to stroll leisurely around and between the structure. This effect of people circulating by the various focal points is what the architect was trying to create.

ISOMETRIC (CUT-AWAY)

1. CONFERENCE CENTER
2. HOTEL
3. OFFICE
4. RETAIL
5. EXISTING MALL



By positioning several visual focal points on alternate levels, channeling pedestrians in different directions as they enter the center, and carefully locating entrances and exits, the architect has encouraged movement within the building especially among the three retail levels. From Kalamazoo Mall via the main entrance, pedestrians can either enter onto the second retail level (at street grade) or descend a graduated, stepped plaza to the below-grade level of retail shops. The terraced plaza is landscaped for viewing from within the building as well as being a new feature on Kalamazoo Mall with the purpose to minimize the image of entry and exit from the basement space. From parking ramps, pedestrians can enter the atrium's upper-floor of retail by using a skyway over the street. To further facilitate movement inside the building and between levels, the structure employs five main entries, five elevators, and two staircases. In addition, the building's diagonal alignment and pedestrian circulation plan draw people from the various entry points towards the central atrium passing the retail frontage, and thus encouraging the agglomeration of people in the central space to create a sociable environment within the center.

CAMBRIDGE SIDE GALLERIA

Location

Cambridge, Massachusetts

Architect

Arrowstreet Inc., Architect

Description

Located on the historic Lechmere Canal, the galleria is a new development which attempt to combine the virtues of a suburban shopping mall with those of an urban "festival marketplace". Like a standard mall, CambridgeSide Galleria has three big anchor stores at its ends. Between them there's the usual skylight arcade, three stories high and lined with numerous stores. But unlike a mall, CambridgeSide fronts the streets around it welcoming doors and windows and handsome material, not with asphalt deserts and blank stucco walls. And it opens itself to a lovely water park, a place for picnic or public gatherings and for boat excursions out onto the Charles River.

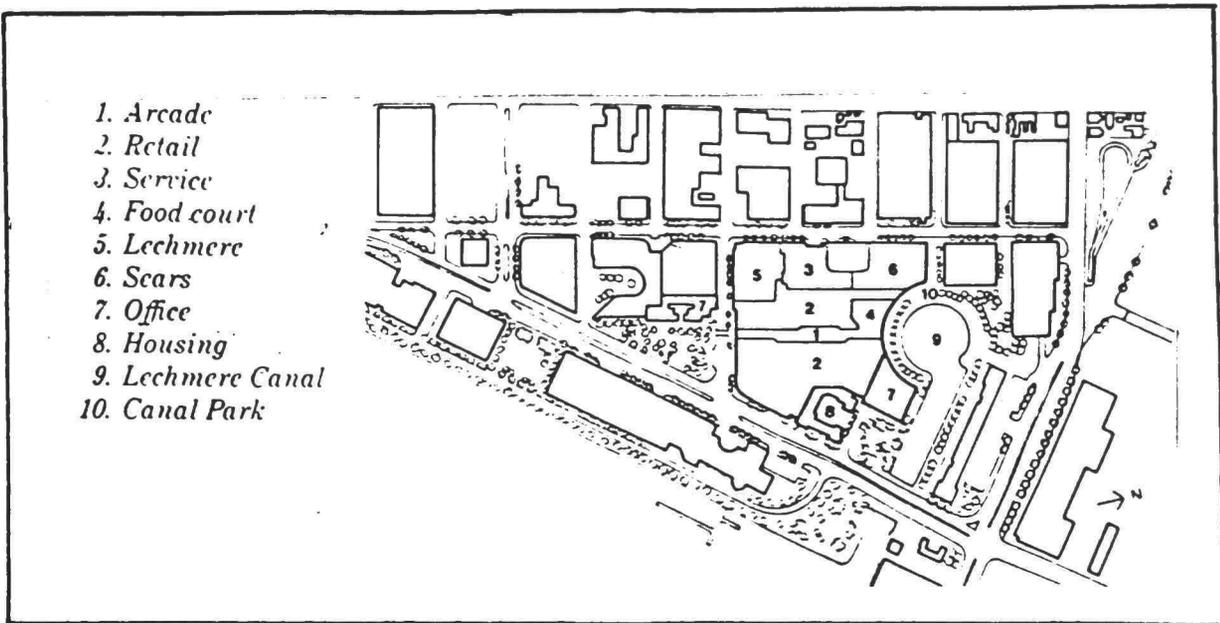
Development strategy

Across the Charles River from Boston is part of Cambridge that was, until recently, little known and less visited. Once a center for light manufacturing, the East Cambridge riverfront had become, by the 1970s, a non men's land of vacant lots and empty warehouses. In 1978, the Cambridge Planning Board adopted the East Cambridge Riverfront Plan. A master plan for the redevelopment of 60 acres, it proposed a mix of apartment houses, office buildings, and stores, all connected by a network of parks. This plan, which combines Beaux Arts and Olmstedian principles, is now 90% complete, and its heart is the 10-acre CambridgeSide Galleria, a 770,000-square-foot, three-story shopping mall that has become, a success.

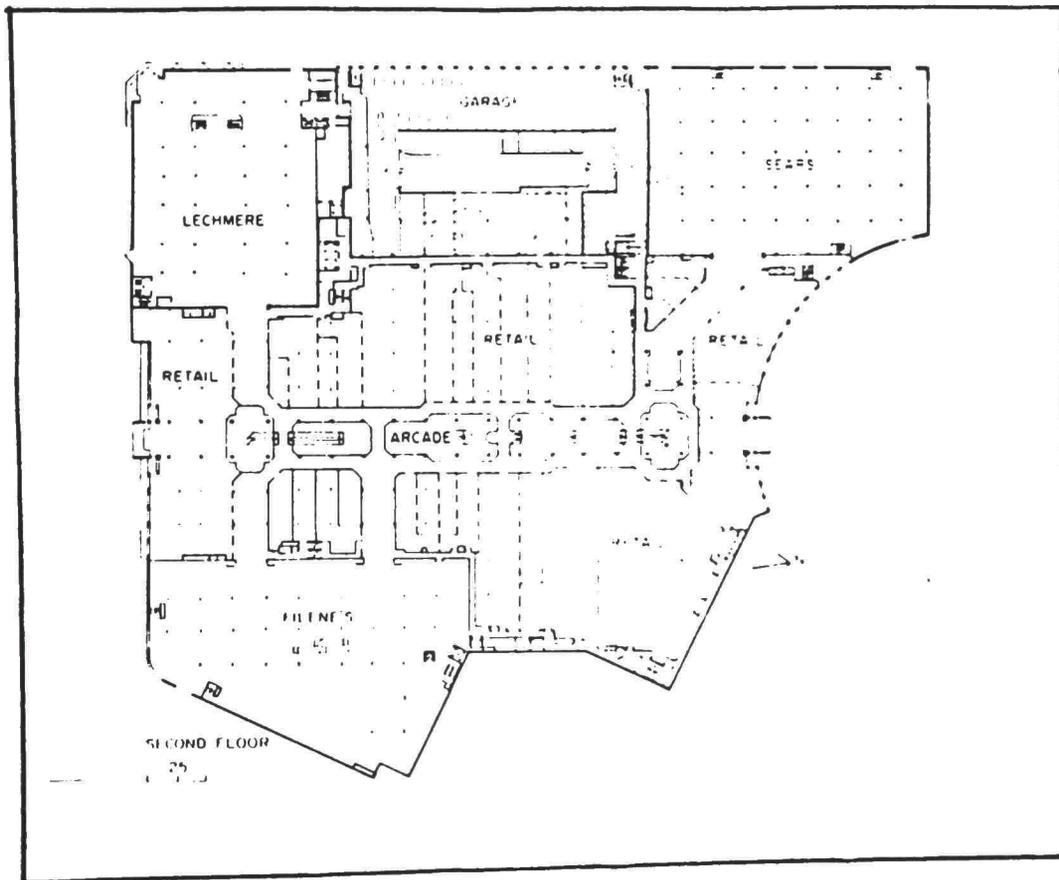
Design approach

The architects, Arrowstreet Inc., were hired by a private developer in 1984, spent three years developing dozens of schematic designs. The architects' challenge was to reconcile the developer's preference for a secure, introverted

mall, with the city's vision of a pedestrian mecca, a lively marketplace with fenestrated facades, multiple entrances, and unobtrusive underground parking. Due to unorthodox planning, Cambridge Side manages to be both city market and regional mall. The heart of the complex is located on a strong axis with two new municipal parks that is also parallel to the city's major streets (see site plan below).



Also unconventional is the vertical disposition of spaces. The street level is reserved for small stores and food shops, while anchor stores are accessible from the upper levels (see second floor plan) even though the galleria itself can be approach from every side of the building. To reduce the 10-acre building's scale, the architect gave each anchor department store a distinct identity through colorful banners and signage. To enhance the sense of the arcade as interior street, the architects choose hard-edged, durable materials: polished and flame-finished granite for street-level floors, metal channels and angles for railing and elevator-tower details and exposed steel trusses. One of interesting features in the galleria is the gabled skylights, which admit 30% of the project's total illumination, are made of insulated glass panels coated with reflective metal on the exterior.



COMMERCE CITY RECREATION CENTER

Location

Commerce City, Colorado

Architect

Barker Rinker Seacat and Partners

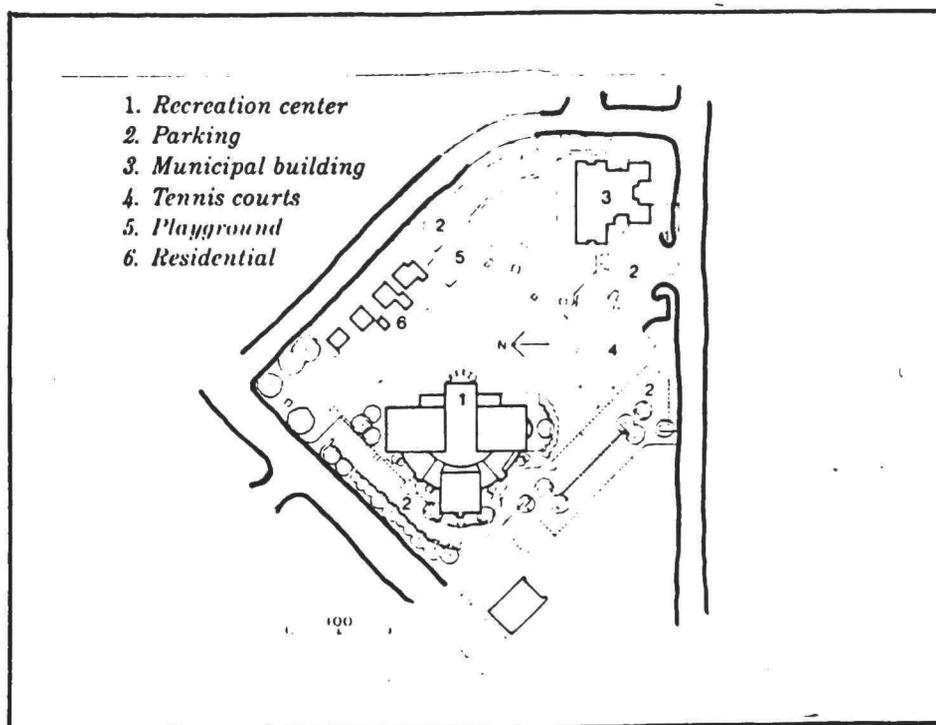
Description

The recreation facility which is located near Denver's industrial fringe, serves two groups of community in this area. The first group is the resident population and the second is the blue collar worker from the industry.

For both groups the recreation center lately added to the town's 8.5-acre City Park has introduced a new-found ground, fittingly joining the nearby city hall to form the nucleus of an emergent municipal core bounded on one hand by neighborhood streets.

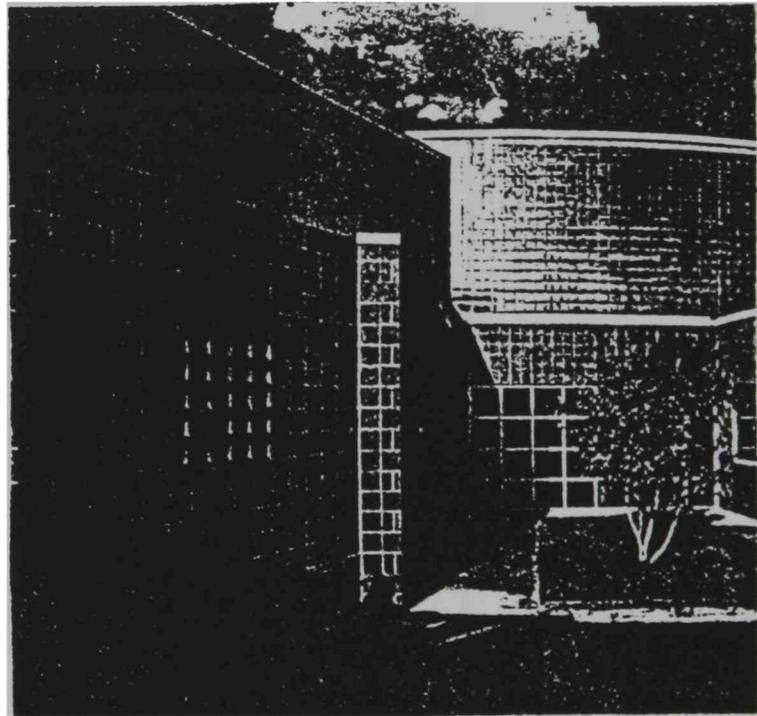
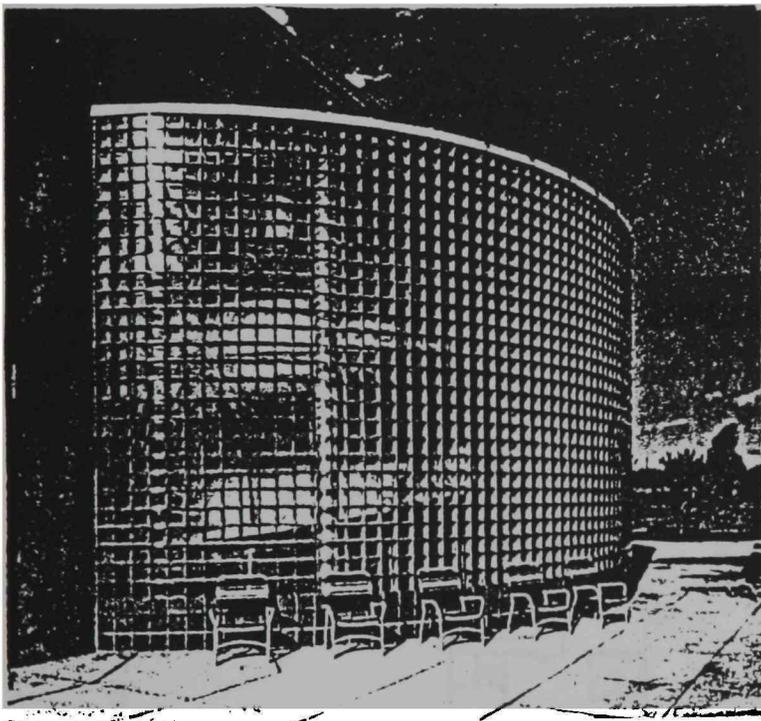
Development strategy

The purpose of this recreation facility is to become a community center where everybody; government and industry, resident and commuters, young and old; can find a common ground to relax and exercise the tense away. The building's outlook view contributes a lot in the goal of the center because it moves public attention from the hustle bustle of the city life to the westward mountain scenery.

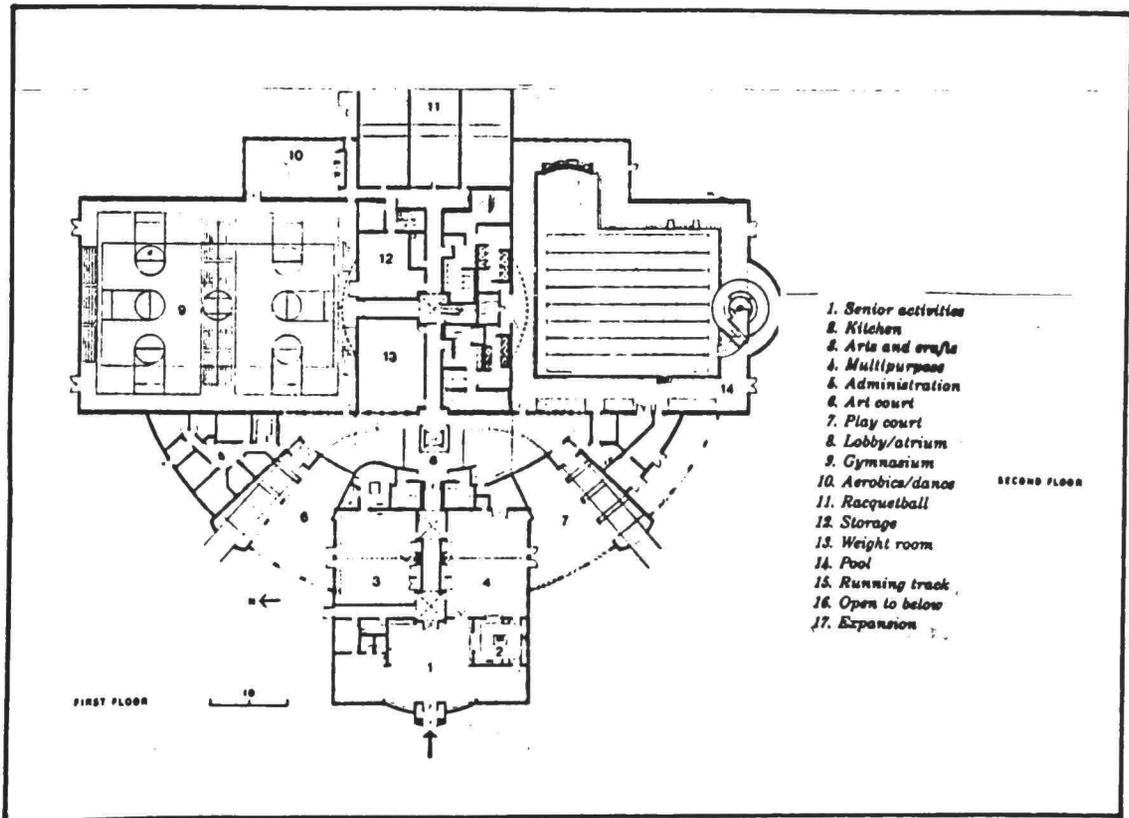


Design approach

The architects, Barker Seacat and Partners, were enjoined to "match" this new building to the brick-infilled concrete of the typically '60s city hall, with a formally symmetric load-bearing masonry structure of buff brick with darker brick insets enlivened by sweeps of glass masonry. In addition to welcome but tempering the region's abundant sunlight, the glass block also tempers the building's outlook to a view that takes in the westward mountains by way of foreground strip shopping and fast-food establishments and mid-ground panorama including oil refinery, grain elevator, assorted warehousing and a dog track. But any hint of construction is rebutted by the openness of an interior at once straightforward and dynamic.

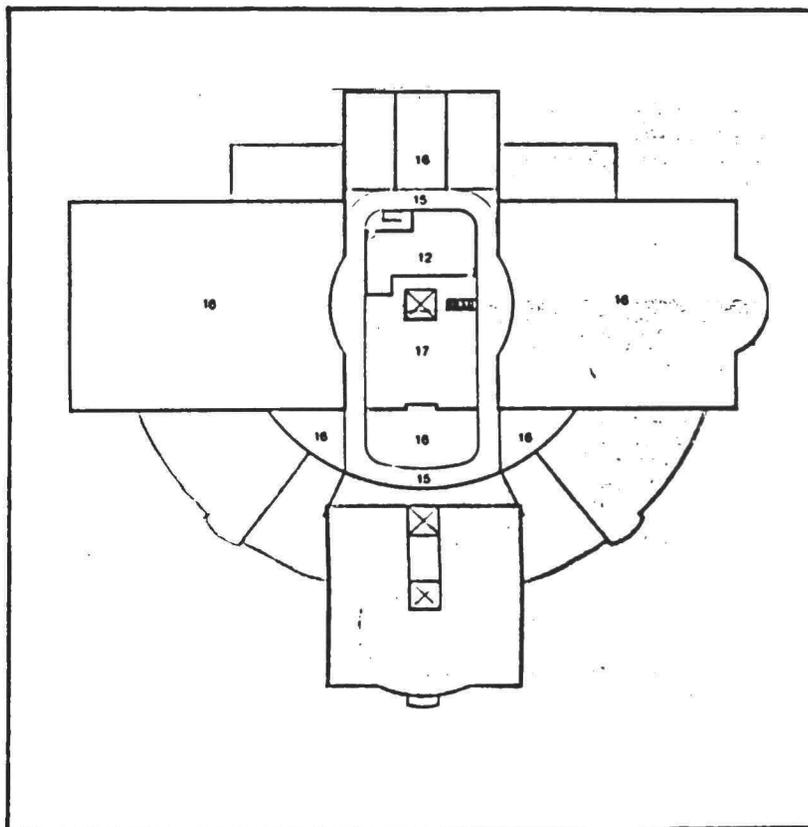


The architects' design for the facility is driven by the community need for recreation. The center's recreational activities includes aerobic and dance, jogging, tennis, racquetball and a whole other range of activities. The center's full menu of activities is complemented by offices for the city's parks and recreation department, daycare facilities including and outdoor tot-lot. In addition, there are a lot of activities that pertains to senior citizens. In response to them, pool and gym are paired, with lockers and related facilities between them; a senior center, with its own prominent entrance through a garden terrace, is set on the cross axis to form a T filled in by large multipurpose and craft rooms. The entrance is buffered from the rest of the building by shared spaces, allowing them what the design group calls 'selective involvement'. Two other entrances in a west-facing fan converge on the atrium/lobby at the center's hub, which in turn gives access to the block housing pool, gym, and related amenities.



The two entries on either side lead by way of arcades on open courts to a two-story lobby that draws natural light from an arced glass-block clerestory. A central control point allowing unobtrusive oversight of the entire complex, the atrium/lobby is more importantly a vital hub animated by its visual links to surrounding areas and activities. Interior window walls, for example, offer views of gym and pool, which are also overlooked by a second-level jogging track whose circuit traces and overhead loop through the lobby to other major spaces.

The bulky mass of the gym is twinned with a 25-meter pool that features a 25-foot high spiral slide, a curved glass-block wall to admit natural light, and an open sundeck reached by sliding glass doors. Clear-spans across both pool and gym are bridged by inverted steel trusses that allow translucent sloping skylights along their full length. Reinforcing the visual continuity among the building's spaces, an elevated running track encircles its core through the lobby and continuing past overlooks that skirt gym, pool, and racquetball courts beyond.



UNDERGROUND ATLANTA

Location

Atlanta, Georgia

Architect

Cooper Carry/Turner, Joint-venture Architects

Description

The Atlanta complex, which is developed by the city, is a form of a newly fashionable festival market, which offers for sale domestic ornament and personal adornment rather than household and personal staples. Meant to appeal to townspeople, conventioners and other visitors, the center offers assorted varieties of food and beverages service, evening entertainment in clubs and a theater and offices.

Developmental strategy

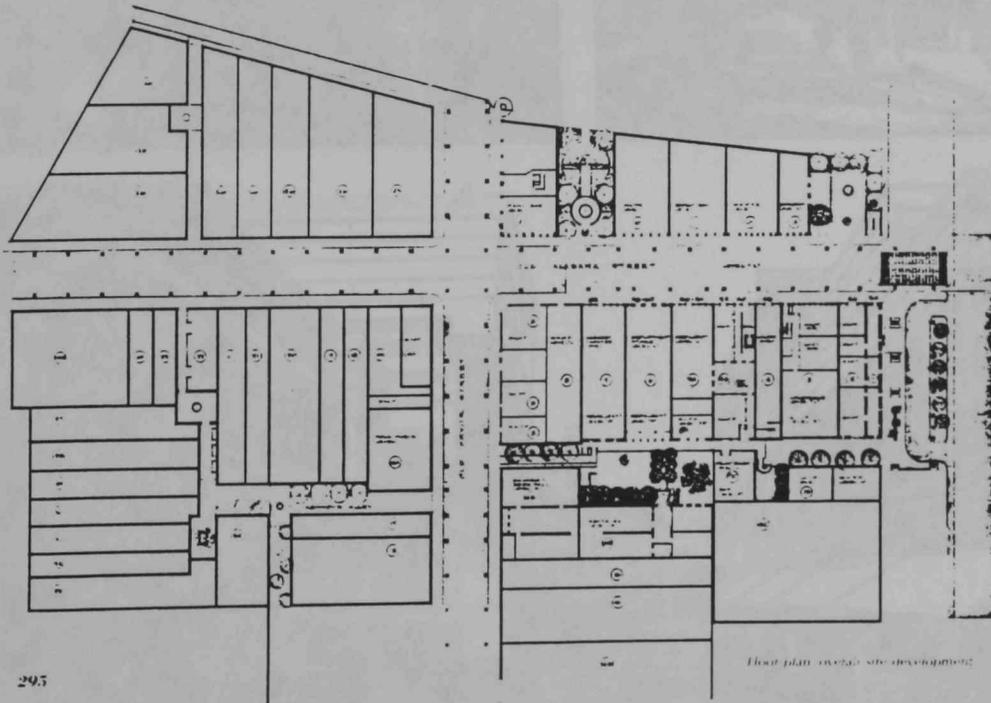
Though most people have grown used to--in some cases, dependent upon--the enclosed shopping mall, the suburban building type has been a source of complaint and dissatisfaction almost from its inception back in the '50s. Despite their recognition of its convenience, shoppers have since learned about its less attractive qualities. It is too hermetic. Too much of a sameness. And once you get there--nothing to do but shop, which is nice for the retailer but not unalloyed joy for the rest of us. In the '80s, when shopping has become a fashionable form of entertainment and recreational retreat, the retail mall seems limiting. City governments and planners, furthermore, have from the beginning deplored the way malls bleed activity from downtowns, to their social as well as economic impoverishment.

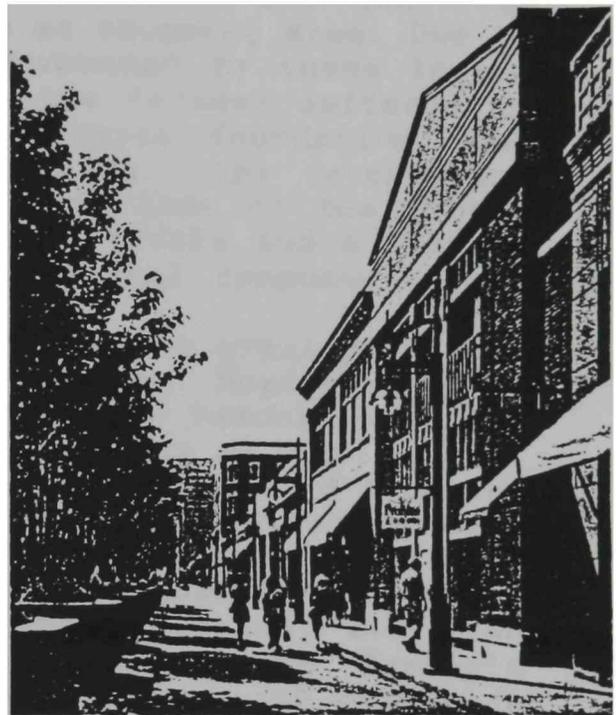
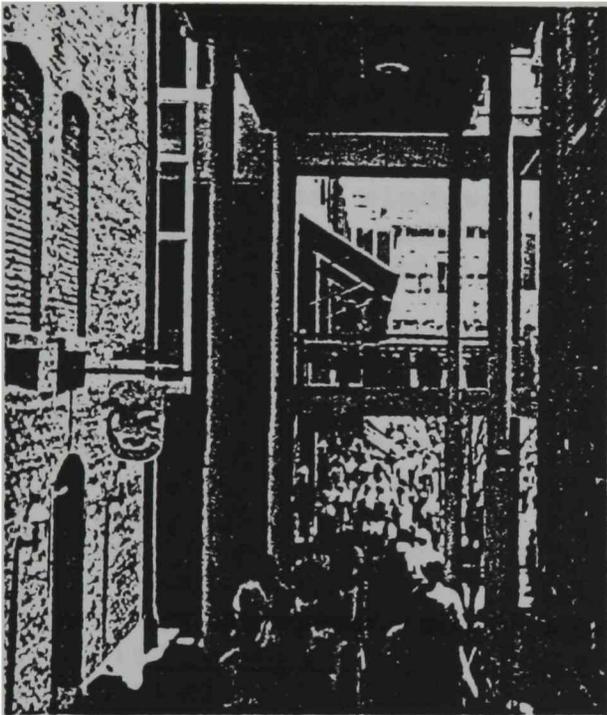
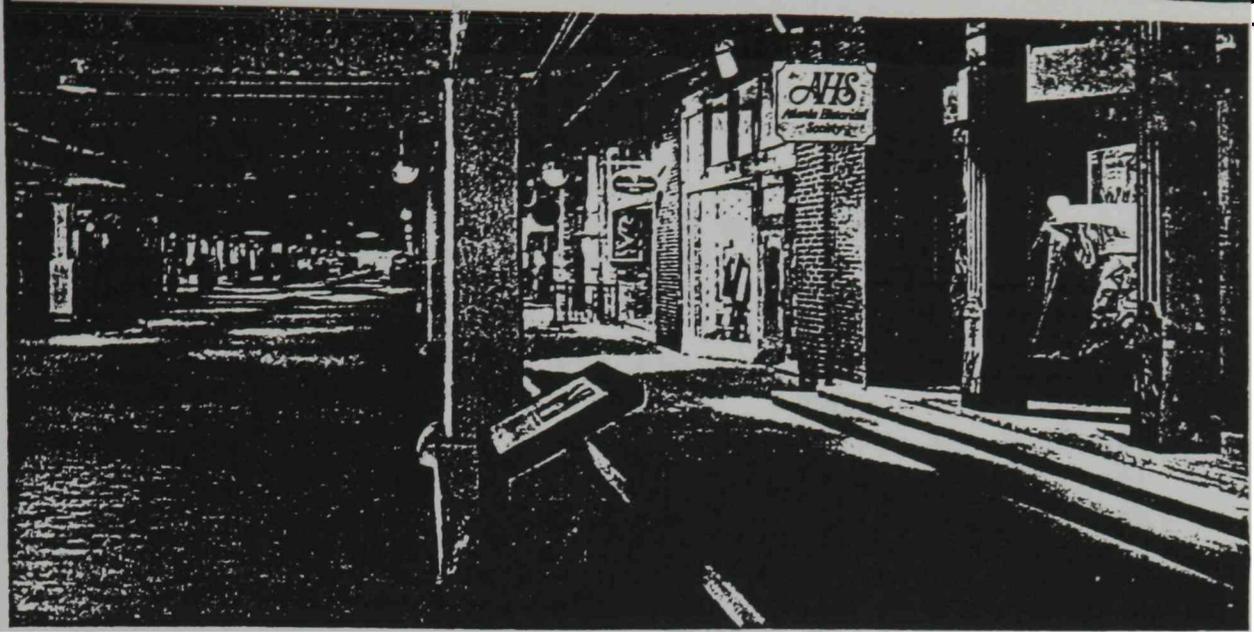
The architect and developers of the complex had a vision of comfortable, even old-fashioned, town centers. Although Underground Atlanta lies within sight of the city's downtown skyscrapers and Georgia's State Capitol, architect Sanford Nelson of Cooper Carry and Associates thinks of it as "urban village." The center is a revival of a lost town center--an improvement of an old.

Design approach

Underground Atlanta, a mixed-use complex, could scarcely be more precise at the center of city

activity: Atlanta's main thoroughfare, Peachtree Street, along the western edge; the downtown business and financial district to the north; government buildings, including the State Capitol, to the South; and at the northwest corner, FivePoints, a major stop for MARTA, the city's rapid transit system.





The entire six-block site of Underground Atlanta has been a commercial district since before 1900. In 1929, however, the city built a system of viaduct serving the second floor of the five-story on this very steep site, thus entombing the sidewalk store fronts below for decades. This underground neighborhood was revived in the 1970s as a short-lived gas-lit early version of Underground Atlanta. Now, at the very lowest level of the present Underground Atlanta, architects Cooper Carry/Turner have restored, reconstructed, and been inspired by the 19th-century fronts as the main ingredient of an enclosed shopping mall. The architect and the city consider this as much museum as shopping area. Due to lower-level rent that are commanded by these lower-level shops over the years, the facades suffered no "improvement," leaving the granite foundation, the cast-iron columns and fixtures, the etched-and stained-glass windows untouched. Some of the fronts were destroyed when MARTA built tracks and a station here, but most of the architectural components were still extant.

Underground Atlanta encompasses a great deal more than a sopping center/museum, however. Most evident is the grand stairway, which connects Peachtree Street at the top with a performance plaza at the bottom. The wide pedestrian malls spreading eastward from the stairs emphasize public ease and conviviality with trees, chairs, and flower stands.

Finally, the complex not only appeals attraction during the day with shops and promenade, but also during the evening with development at Kenney's Alley, which includes an inner enclave of balconies and arcades that offers restaurant, outdoor cafes, and entertainment.

OCEANSIDE CIVIC CENTER

Location

Oceanside, California

Architect

Charles W. Moore/Urban Innovations Group

Description

Design by Charles Moore with the Urban Innovations Group as the result of a national competition, the 100,000 square-foot complex is a simple and rectilinear in form, gleaming white in color--in Oceanside's dowdy central business district (CBD). The civic center is for an aging but still zestful Pacific coast community located between Los Angeles and San Diego.

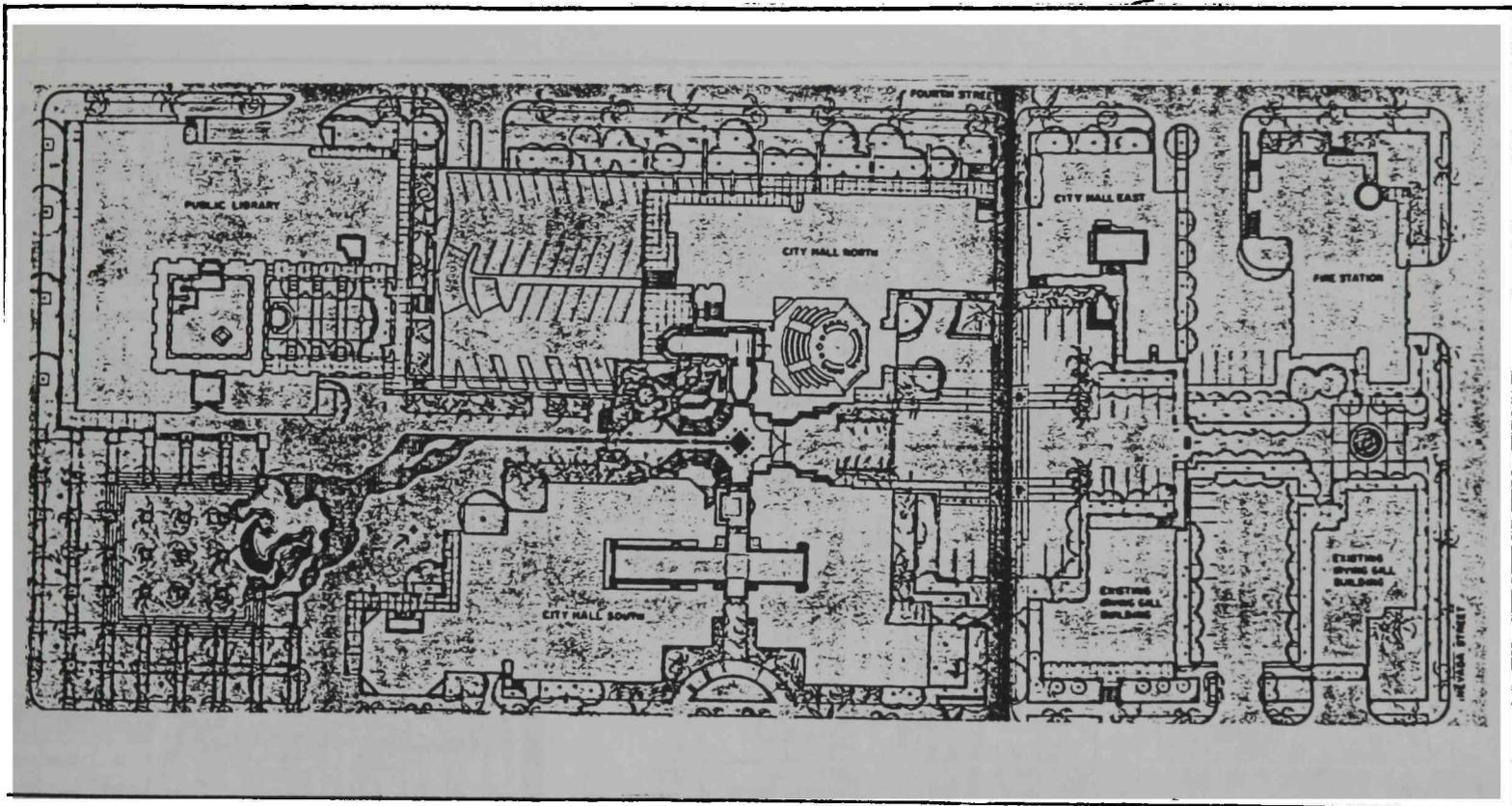
Developmental strategy

The Civic Center shares its four-block site with two buildings by the early 20th-century regionalist Irving Gill. Moore, the architect, readily acknowledge that the design started from the legacy of Gill and his search for a clear, simple, and honest architecture that luxuriates in the temperate climate and lush landscape of coastal Southern California. In addition, Moore used Gill's concepts of plain white wall, unadorned arcades, disciplined fenestration, and flat roof as architectural vocabulary and then he added exuberance of bright colors with the tiles and niches at the entrance, in the jambs and soffits of deep-set openings, and the contrast of palm trees and broad-leafed plants surrounding the structure.

Design approach

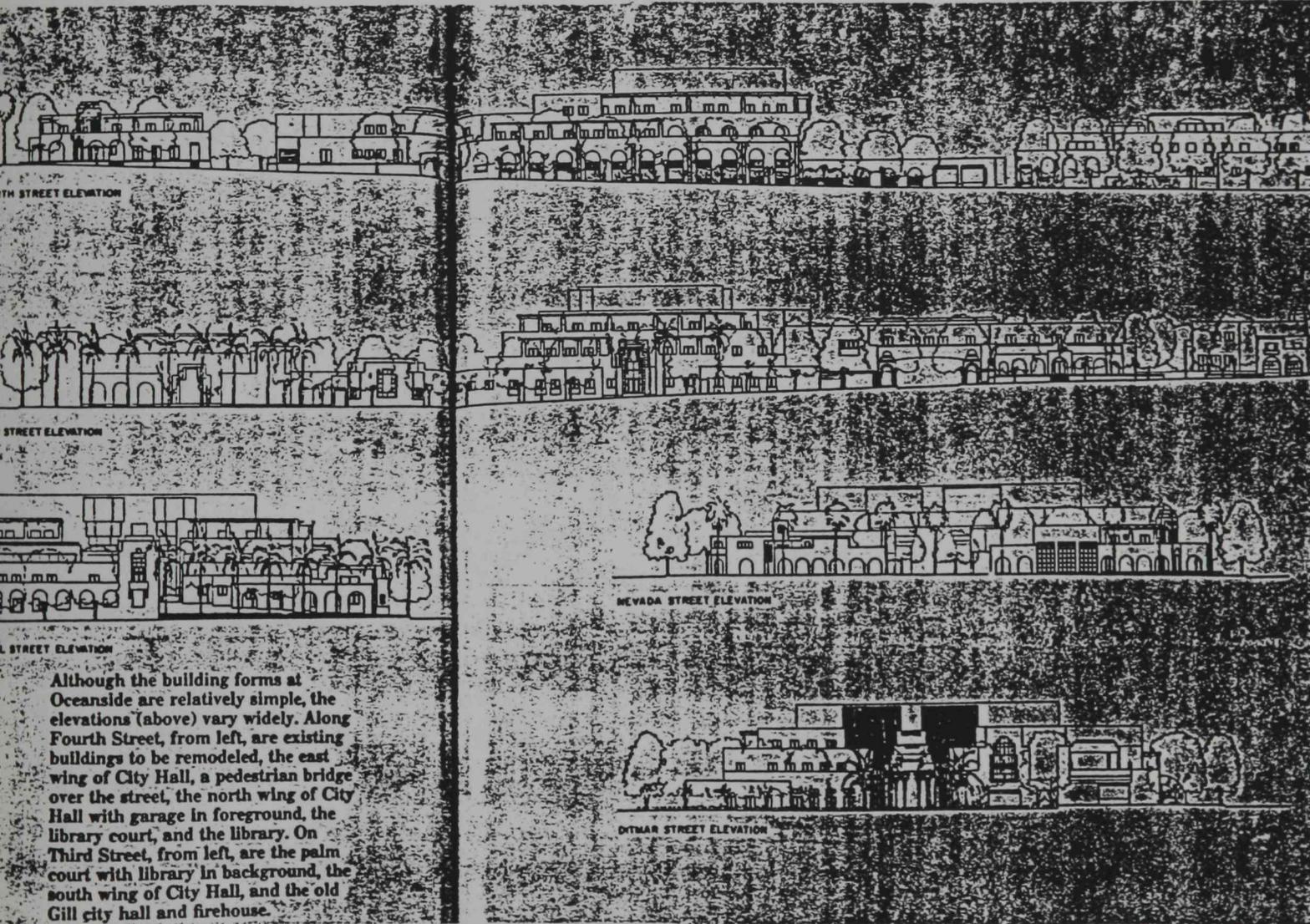
The center consists of two major parts. The first part is City Hall and the architects divided the hall into three separate-but-interconnected elements to minimize the building's mass and create more interesting open spaces. The other major facility in the complex is a new main public library, located at the site's northwest corner. A low tower symbolizes the library's importance to the community, and a street-facing arcade introduces Irving Gill's trademark arches, a consistent element throughout the civic center.

A "palm court" marks the complex's southwest corner; above, on an east-facing slope, a large freeform water feature comprises fountains and pools lined in multicolored tiles. From this point, an "alluvial fan" of tiles embedded in the paving to give the civic center's visual climax. Up to this area, the center is a composition of open spaces and building forms and surfaces. However, the eastern portion is more loosely knit. The east wing is smaller-scaled than the other wings and is linked to the rest of the complex by a bridge that houses office space. This half of the civic center's design is approach through landscaping and there is a hope of creating a formal plaza here.



The grand hall of the library is the complex's largest single interior space--an airy volume with arcades high overhead. The architects punctuated the hall with custom-designed lighting fixtures and beside the library is a very pleasant courtyard with a beautiful fountain. It is intended to be an outdoor reading room as well as a lounge for the library and adjacent to community meeting rooms.

Most of the parking for the complex is housed in a garage on the north edge of the site, with bristling buttresses facing the street. Since most users of the civic center will arrive by car, special efforts were made to assure that the garage would offer a pleasant introduction. A landscaped court brings natural light and ventilation to all levels of parking.



Although the building forms at Oceanside are relatively simple, the elevations (above) vary widely. Along Fourth Street, from left, are existing buildings to be remodeled, the east wing of City Hall, a pedestrian bridge over the street, the north wing of City Hall with garage in foreground, the library court, and the library. On Third Street, from left, are the palm court with library in background, the south wing of City Hall, and the old Gill city hall and firehouse.

C A S E S T U D I E S

B I B L I O G R A P H Y

Webster Avenue Community Center

Architect: Smotrich and Platt Architects

Author: Charles King Hoyt. Public, Municipal
Community Buildings. McGraw Hill Book Company, 1988

Petaluma Community Center in California

Architect: Roland/Miller And Associates

Architectural Records, October 1991

Carribbean Marketplace in Miami, Florida

Architect: Charles Harrison Pawley

Architectural Records, Nov 1990

Fashion Island Mall in Newport Beach, California

Architect: The Jerde Partnership

Architectural Record, April 1990

Kalamazoo Center in Kalamazoo, Michigan

Architect: The ELS Design Group

Progressive Architecture, May 1982

Architectural Forum, Nov 1980

American Institute of Architectural Journal, Aug 1983

CambridgeSide Galleria in Cambridge, Massachusetts

Architect: Arrowstreet Inc.

Architectural Record, May 1991

**Commerce City Recreation Center in Commerce City,
Colorado**

Architect: Barker Rinker Seacat and Partners

Architectural Record, Nov 1989

Underground Atlanta in Atlanta.

Architect: Cooper Carry/Turner, joint-venture
architects

Progressive Architecture, July 1990

Oceanside Civic Center in California

Architect: Charles W. Moore/Urban Innovations Group

Architectural Records, Dec 1990

A C T I V I T Y A N A L Y S I S

A C T I V I T Y A N A L Y S I S

In Social Design approach, architecture encompasses behavioral setting which called for relationship between human behavior and built environment. Human effectiveness in any activity is greatly influenced by social and psychological factors.

Therefore, in order to grasp the fundamental processes of human behavior in analyzing activities it is important to use the knowledge of human behavior to create places that help people accomplish their purposes with a maximum of satisfaction and a minimum of friction and frustration.

The followings are the activity analysis that have to be accomplished in order to provide an appropriate human environment in the center.

Below are the questions that need to be answered pertaining to the analysis:

- What is the activity?
- Who are the participants ?
- What is the potential issue?
- How are their needs furnished by the environment?
- What are other related activities?

Activity Type: PARKING

Place:

Outdoor area

Participants:

The complex primary users which include:

Shoppers/buyers

The whole community

The complex's secondary users which include:

Retail areas' personnels

Administration personnels

Performers

Maintenance staffs

Issue

Patrons of this complex will arrive either in group or individually by public or private transportation. The administration personnel and performers need their own parking space reserved for them. The maintenance staff will have their own service area which will include their own parking space.

Architectural Response

Enough parking space that stand up for a long time without needing excessive maintenance should be provided for all kind of vehicle accommodation, with some reserved parking areas for the personnels and performers. The facility have to be situated in the proximity of the building to avoid excessive walking and the layout should be designed for easy traffic flow to and from the parking lot.

Other related activities

Observing, standing, walking and talking

Activity Type: ARRIVING

Place:

Outdoor plaza, major entrance and lobby

Participants:

All the users of the complex

Issue

This is the place where the patrons experience the first impression of the facility. They may feel overwhelmed and strange upon their arrival.

Architectural Response

Every opportunity must be taken to built up a social effect with special qualities of decor to create a feeling of acceptance to the participants that are exposed to it. Starting from the outdoor areas every single consideration should be taken to create this welcoming effect. Features such as sculptures, artwork, directory signs, fountain, landscaping, seating areas are all elements constituting the special qualities of the decor.

All this features can also be repeated to enhance the effect at the major entrance and the lobby. Indoor decor will consists of many and varied element: shapes, colors, textures of floors, walls, ceiling, signbands and sign, lighting, to name a few are necessary to create this continuous welcoming effect to the community that are using the space. In addition, the lobby must have direct access to other public facilities and retail areas in the building. Good circulation pattern should be provided to avoid fatigue and monotonous effect.

Other related activities

Walking, talking, siting, socializing, reading, observing, and relaxing.

Activity type: INFORMING

Place:

Lobby areas near major entrances

Participants:

The primary users of the complex
Administrative personnels

Issue

Since the complex is large and incorporated variety of retail outlet and recreational facilities, the participants of the complex especially a first-time users might feel lost or unguided upon their arrival.

Architectural Response

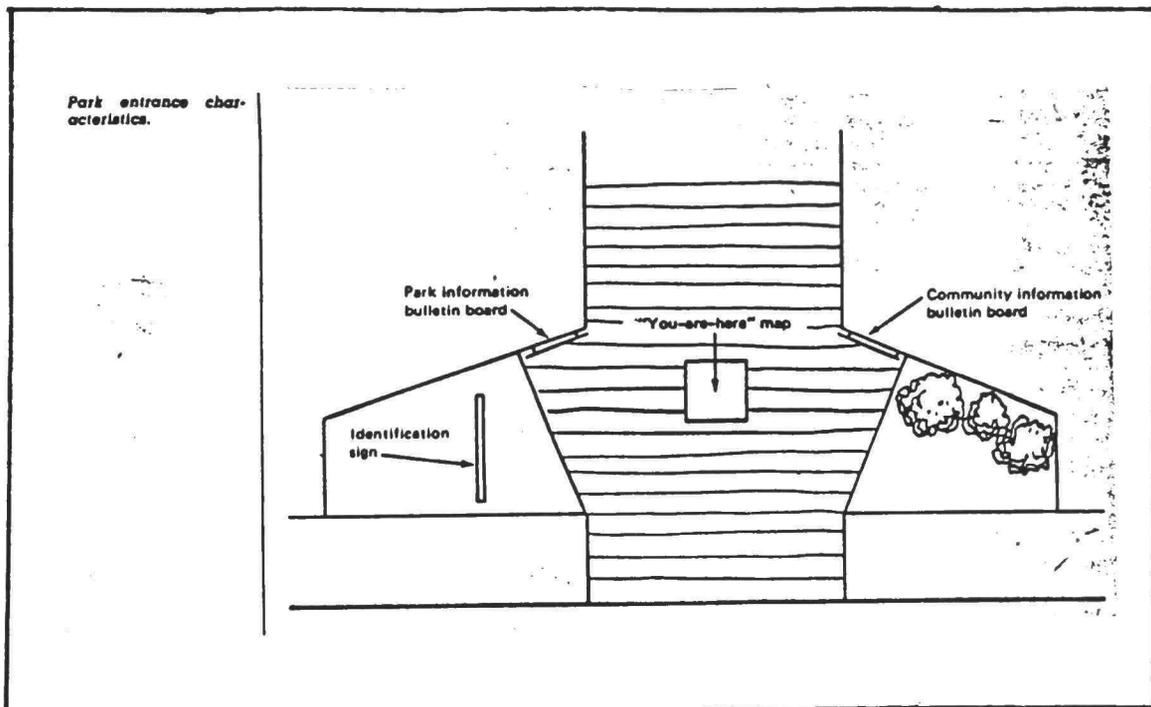
The first need for anyone entering a building is specific information: " Where do I go? " and " How do I get there? ". The first attempt to deal with these questions is at the entrance area because they are the first place that the users been in the complex. If something is not done at this area, there are likely to be people wandering through the building, asking for directions from staffs who have more important things to do than act as a building guides--who may not have accurate information themselves. The nature of this initial contact is critical because it will effect the overall user's perception of the organization. If the users perceives that its interests and concerns have been carefully considered, they are likely to have a positive reaction throughout their usage in the complex. However, if they perceive that their interests or questions have been ignored or they are treated with indifference, they are likely to develop a negative or hostile attitude. Therefore, a building entrance should provide specific information aids to avoid the unwanted situation. The followings are some alternative on type of informative cues.

Provide a receptionist. 94

Nothing is quite as effective in helping and explaining as another human being. With another human being the users are able to look as well as listen, to raise question and ask for clarifications.

Provide an information center. 95

This type of alternative can also serve the same purpose but not with the similar contact. Even though, this type is not as personal, it is also useful if some considerations are taken. First, the location of the center should be highly visible. It should contain a well lighted directory with letters of appropriate size and contrast to be easily read. A provision with a "you-are-here" map that is properly oriented and well illuminated is good to have. Adding to these, sufficient space in front of the map and directory is also necessary for people to study the information without blocking traffic.



In addition to this, other kinds of signing systems can also be manipulated but as a rule of thumb they should be legible, sufficient in size, contrast and illumination, and located within a normal cone of vision.

Other related activities
Talking and listening.

Activity type: RECREATIONAL

Places:

Community and recreation areas, and playground.

Participants:

All the users

Issue

This activity requires a major area or a separate entity since it introduces varied activities which involve a large number of people. The area have to be functional, accessible and aesthetically pleasing to the users.

Architectural Response

It is very important for the facility to provide the above spaces for the participants to convene socially. The spaces have to be comfortable and agreeable in order to eliminate frustration and dissatisfaction. Social activities is a recreational activities for all ages and group that include shopping, exercising, playing card games, handcrafting, meeting for lectures, reading etc. Therefore, it is important to provide a good recreational area to house this special activities. Some possibilities might be health studios, amusement centers, library, art and craft center, community rooms for card games, lectures, meetings, and, special drop-in centers for youth groups, and playground for younger children.⁹⁶ Other considerations might include a fairly large rooms, with or without ancillary services, such as separate washrooms, cloakrooms, kitchen facilities, a serving pantry, and separate entrance.⁹⁷

Other related activities

Talking, exercising, reading, playing, meeting and lecturing.

Activity type: SOCIALIZING

Place:

Outdoor plazas, indoor spaces, and retail areas

Participants:

All the users of the complex

Issue

Almost all the areas in the complex draw the participants to socialize with others. In other words, most of all the spaces are social spaces. However, in general the above spaces are the most popular spots in this type of facility. Therefore, it is important to provide an environment that enhance this idea.

One of the social spaces that is popular is indoor spaces. They are many variants in the indoor plazas: atriums, galleries, courtyards, through-block arcades, indoor parks, covered pedestrian areas of one shape or another. At any rate, all these spaces need to have certain principal needs to be successful.

Sitting. 98

Movable chairs are best for this type of space. Most of the popular places have had excellent experience with them. In all cases the total amount of sitting space has met or exceeded the minimum recommended for outdoor spaces-one linear foot for every 30 square feet of open space. There is a tendency, however to overlook the potentials of ledges and planters. Too many are by inadvertence lower or higher than need to be.

Food. 99

Every successful indoor space provides food. The basic combination is snack bars and chairs and tables. Sidewalk cafe operation is one of the options.

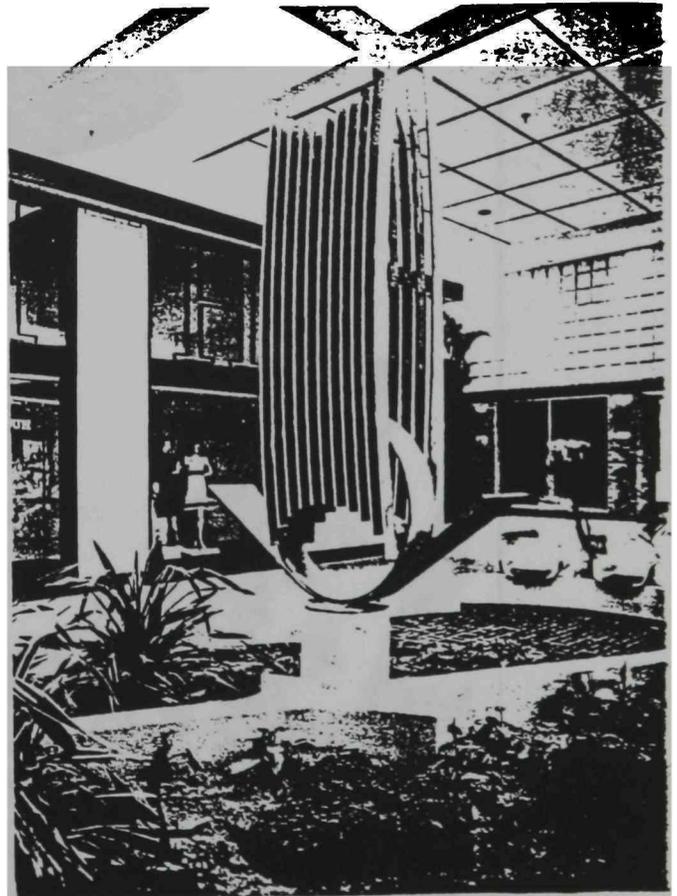
Retailing. 100

Shops are important for liveliness and additional pedestrian flows they attract. Both shops and indoor spaces are independent of one another. Indoor spaces with good seating arrangement can provide a resting and waiting place for people who are not shopping.

Toilets. 101

Adjacency of this facility to the indoor spaces have a considerable effect on the activity patterns of many people, older ones especially.

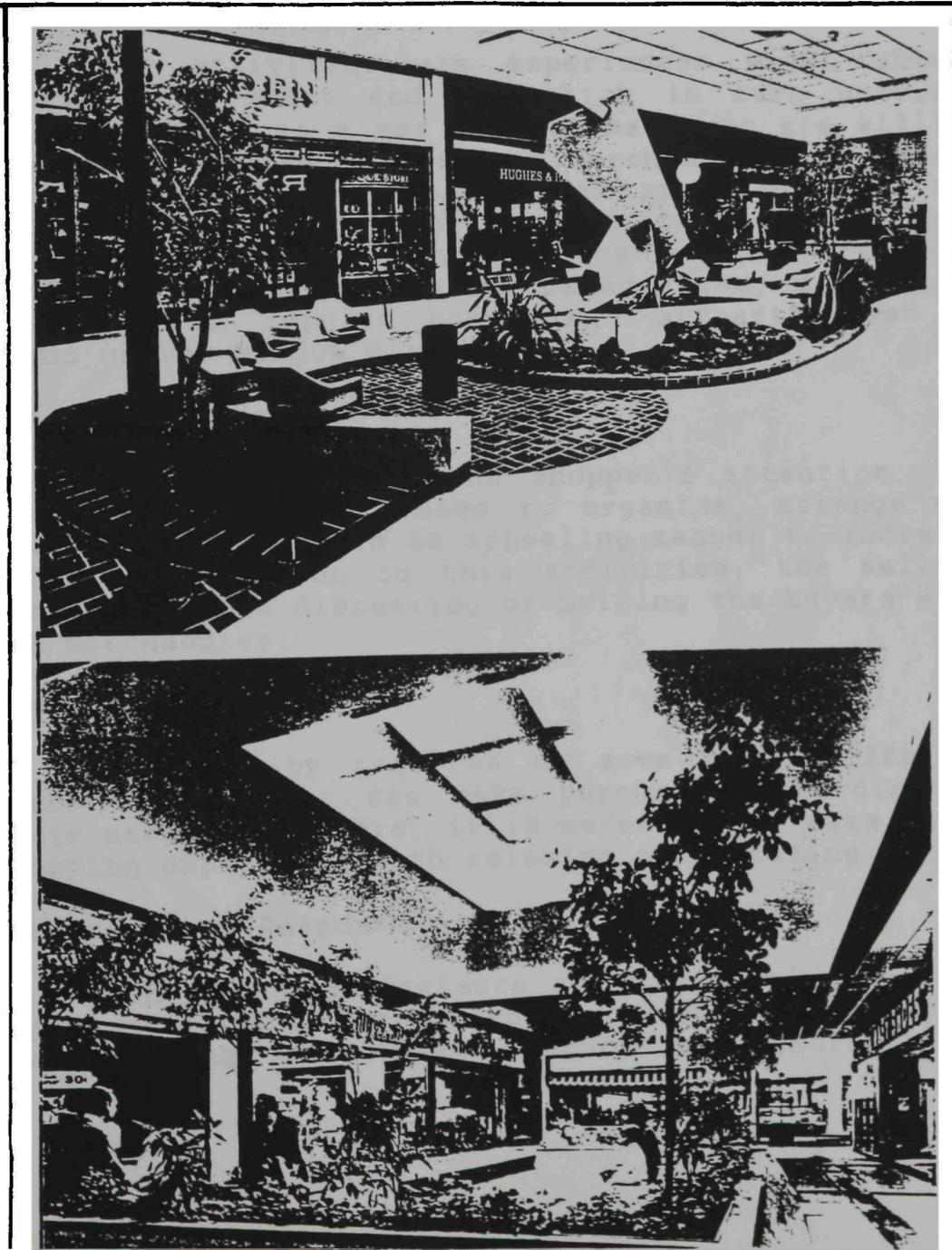
Similar to indoor spaces, outdoor plazas in a community shopping complex are among the spaces that attract a masses of people. They serve as the first place users come to contact with and their location is usually near major entrances where the traffic is the heaviest. Since this is a large open space that sometimes holds cultural or public performances, therefore it is important to create a comfortable atmosphere for the users. Aside from holding public events, the plazas simultaneously play a major role in social contact and communication. Friendship formation is among the social contact that most people encounter with. It is necessary to provide a place for people to stand outside the ongoing stream of traffic into the mall and, a seating arrangement for people who want to read, rest and chat with others. This seating area can be very stimulating if fountain or other water elements, sculptures, and plants are incorporated in the design. In addition, having a place for children to play in the plaza is also a very thoughtful idea.



To continue the idea of having a plaza as a place of social gathering where people can share their thoughts, other social and behavioral aspects have to be looked into to enhance this idea. Personal safety is a prime aspects that need to be emphasized to provide a safe environment. Since the whether is sometimes harsh, care should be taken to avoid slipping injury that is caused by sliding on icy pavement and stairs, especially children and the elderly. Put an appropriate warning signs during the occurrence to eschew unwanted mishaps. Other safety feature is providing barriers between active pedestrians and passive pedestrians to avoid collisions during peak hours.

Other related activities

Walking, talking, reading, playing and siting.



Activity type: SHOPPING

Place:

Retail areas

Participants:

The complex's primary users are the shoppers and they can be categorized into two sets.

Shoppers who are actual making the purchases which include, immediate purchases, routine purchases and infrequent purchases. ¹⁰²

Shoppers who regard the act of shopping as a shared recreational or social event. ¹⁰³

Primary Activities

Buying, selling and socializing

These activities are experiences which should provide excitement and fun which in turn provides profits. There is a set of customers who are willing to spend money to buy desired merchandises no matter they are decided or non-decided purchases. Another set of shoppers is passive participants; who regard shopping as a social event; however, their purchasing power can not be undermined because they might make purchases on impulse based on attractiveness of items on the window display.

Secondary Activities

In order to attract the shopper's attention, the employees of a store need to organize, arrange and decorate the store in an appealing manner to increase sales. In addition to this activities, the sellers also entails in discussing or helping the buyers with the merchandise.

Issue

This activity requires an area where different types of shoppers can make purchases according to their needs. Therefore, it is necessary to make their shopping experience both relaxing and exciting.

Architectural Response

Even though convenience and time saving are the important factors for the shoppers, unique quality of the shopping environment cannot be ignored. The

layout and design of the area have an important role in motivating them. This area should provide good circulation and enough seating arrangement for people who must wait at the front door. Having a place to sit while waiting is an attractive idea especially to older shoppers. Since shopping is done in concentrated forays where a number of establishment are visited in order to procure a number of different item, providing space or even keyed lockers where parcels and purse can be deposited while making other purchases is also another thoughtful provisions.¹⁰⁴ In addition to this, parents with small children find it easier and more enjoyable to shop where the children will not be regarded as a nuisance, therefore having a place to keep the children occupied is necessary to keep them out of their parent's hair. This place can be a playground area indoor or outdoor where they can play safely.

Other related activities

Waiting, playing, talking and observing



Activity type: PERFORMING

Place:

Mini-auditorium, indoor or outdoor plazas.

Participants:

Audiences and performers.

Primary Activity

Performing

Public performances differ from the other type of assembly because they presume facilities for an audience. They range in size from popular music extravaganzas with an audience measured in tens of thousands to amateur band concerts with more performers than listeners.

Secondary Activities

Maintaining the facilities

Issue

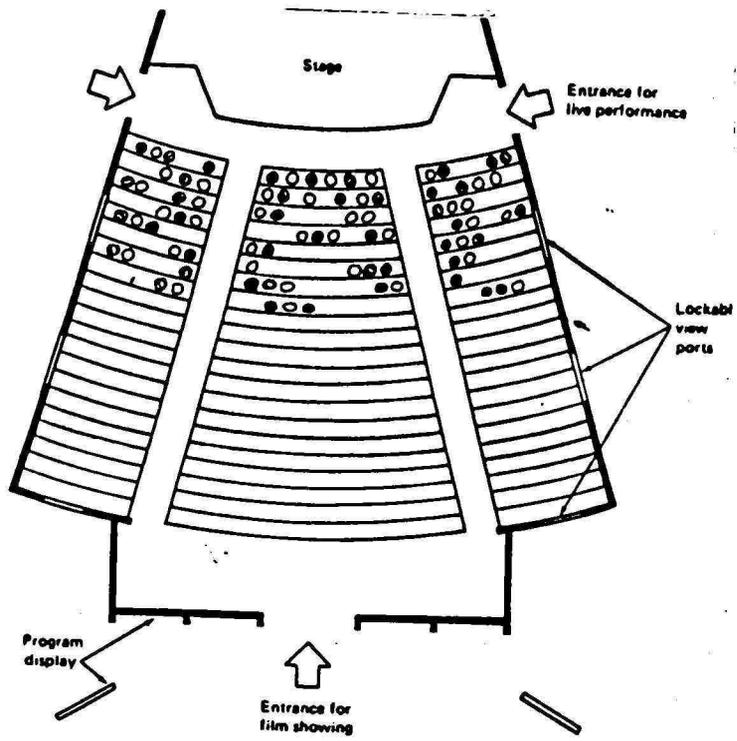
To make possible for all audience to see without obstruction and to hear clearly what the performers have to offer and vice versa in an agreeable environment.

Architectural Response

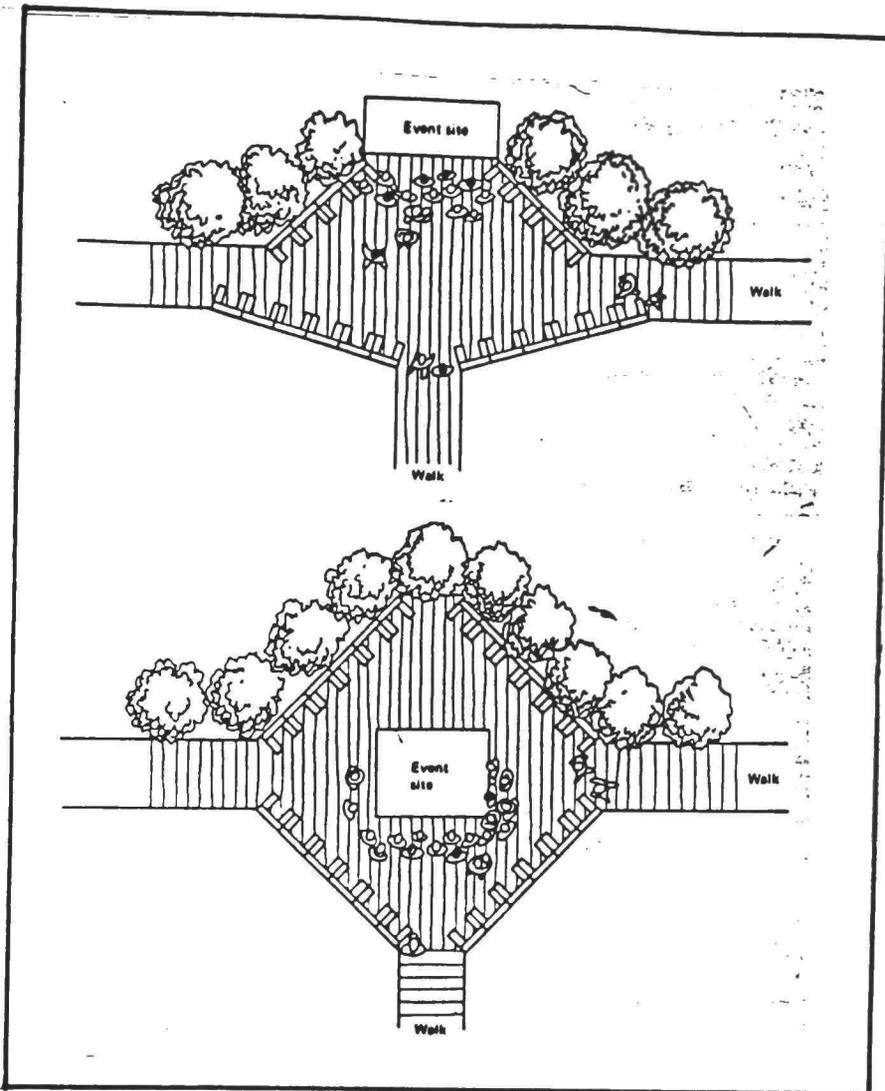
For the purpose of this facility, we are dealing with a mini-auditorium that could handle about 50 people at a time.

For performances in the auditorium, the facility should provide the best possible conditions of various type. A great deal of technical lore is available on such problems as acoustic control, sight lines, floor slopes, lighting, seat spacing, aisle width and the technique of scenery and set management.¹⁰⁵ Once again, communication requirement which requires visibility and audibility is essential in the success of this auditorium.

Meanwhile, for outdoor performances, location of the plaza is critical. The outside performing area should be highly visible for them to be apparent to passing traffic. As people move along the complex whether through the building itself or through the pedestrian walkways, they will always react in to ways: in an habitual mode or in an exploratory mode.¹⁰⁶ Those who are familiar with an area move with confidence and pay obvious attention to their



surroundings. Those who are new and exploring the facility for the first time, are more tentative in their movement and much more attentive to their surrounding.¹⁰⁷ As a result, the more attentive user will notice the performance and the familiar users will not.



Therefore, it is important to locate the plaza adjacent to heavy traffic or near major entrances since those area attract more passerby. A large open space with comfortable atmosphere where people can stand or sit in the sun or shade while watching is another important factor. Finally, the space should have easy access to the inside amenities such as restroom and telephone.

Other related activities

Siting, standing, listening, eating, drinking and observing.

Activity Type: EATING/DRINKING

Place:

Eating facilities

Participants:

The users can be categorized into three types:

The center administrative and store staffs, which constitute a routine activity. ¹⁰⁸

The users who decide to eat while they are at the center, for many this is a decision made on impulse rather than preplanned activity. ¹⁰⁹

The participants who go specifically to a certain restaurant located in the premises but do not intend to visit the other businesses or public activities in the center. ¹¹⁰

Primary Activity

Eating, drinking and socializing

Secondary Activities

Preparing food and maintaining the facility

Issue

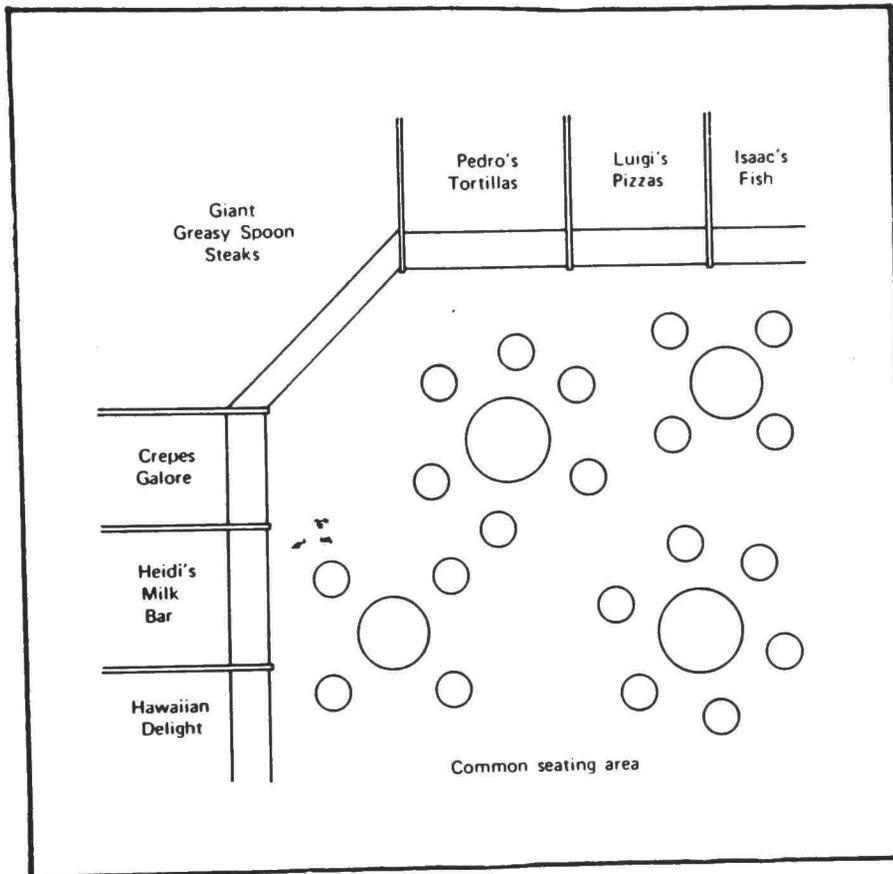
Even though the needs are different for the three type of groups, they shared a similar need and that is the eating establishment or area should be sanitary and odor-free environment.

Architectural Response

For the first category, convenience and time saving is among the important factor that they are looking for due to the fact they have a limited time to spent eating during lunch hour. Therefore, stand-up snack bar, free-standing kiosks or fast food take out might be attractive to them. However, there are still some of them that enjoy eating in a quality eating establishment even though they will be eating in a time constraint. Therefore, accessibility and proximity to their work place is essential to work with time limit.

Even though the users of the complex, the second category, might like the idea of stand-up snack bar, most of them have enough time in their hand to eat well but informally. They might want to taste a variety of food and a place that serve mixes of food

is an attractive thought. The gourmets' fair, a new concept in shopping center, is a centrally located area prepared for and occupied by a number smaller snack bars and/or restaurants, usually with a common seating area.¹¹¹ It creates an interesting eating atmosphere because it pulls traffic to a specific part of the center in addition to offering variety of food to the customers.



Gourmets fair. This is usually a collection of snack bars with an international background. There are facilities for counter and takeout service, with a seating area that is provided by the shopping center.

For the third group, speed and convenience are relatively unimportant. They are people who savor excellent food and regard the act as formal behavior. They are willing to pay more and expect a high quality of services in return. Full-size restaurants with an exterior entrance for after-hours operation is a good choice for this category.

As was mentioned earlier, sanitation is critical in this facility because the public's general concern with this issue is magnified when it comes to food service. The actual sanitary conditions that prevail in an establishment are impossible for the public to measure especially in the food preparation area. In any rate, the public is very conscious of the impression of cleanliness created by design and choice of materials. The following are some of the steps that should be taken to promote this important concept:

The exterior and the interior of a food service establishment must convey an image of immaculate cleanliness. ¹¹² It is not enough to keep the premises clean. Trash and waste storage area must be completely segregated and out of public view. In addition the biggest problem can be created by the stand-up bar in term of cleanliness, traffic obstruction, and noise and this space requires a separate area for food preparation and a storage and garbage area.

Eliminate food odors both inside and outside. ¹¹³ Some food odors are a magic stimulant to appetite; others are not. While an exception could certainly be made for popcorn vendors and bakeries, as a general rule it is safest to exhaust all kitchen air so that it cannot possibly be short-circuited back into the interior.

Eating is a social event in every society. At home it is a family event. Outside the home it is time when people gather with friends and acquaintances. Whether lunch, dinner or snack time, the motivation is is the same: to treat mealtime as a social event to be shared with friends and acquaintances. The social nature of mealtime is the elements that need to be captured in the design of eating establishments no matter if they were fashionable restaurants, employees' cafeterias, food courts or stand-up snack bar. Hence, cleanliness and enough common seating area and interesting environment are essential provisions to reflect the idea of eating as a social event in a community.

Other related activities

Buying, listening, sitting, talking, relaxing and observing.

Activity Type: ADMINISTRATING

Place

Administration suite

Participants

The Community Shopping Center's personnels.

Primary activity

Managing

The personnels has various functions in organizing the management of the complex which include recreational facilities and retail areas as a whole. The duties of administration are handled by the director who has numerous staffs working under him/her wing. With the cooperation of all the departments, separate management must set up systems for every phase of development and administration. In conjunction with the leasing, construction, and accounting departments, the director deals with tenant relations and store changes as they occur and prepares data and statistics to be applied to future development.¹¹⁴ The following list supplies detail regarding duties and responsibilities of the administrative personnels:

Taking care of day-to-day operating of the center.¹¹⁵

Supervising and controlling maintenance of the building and parking lot.¹¹⁶

Assisting center management in negotiating service contracts for various services, including cleaning, alarm and security system, security guards, garbage removal, music services and telephones.¹¹⁷

Administering service contracts in conjunction with the maintenance department.¹¹⁸

Assisting center management in negotiating labor contracts for center's work force.¹¹⁹

Administering the center's work force.¹²⁰

Setting and controlling the complex's separate operating time: the retail areas and recreational facilities' hours.¹²¹

Taking necessary measures and coordinating special events such as fashion show, art and craft displays,

to name a few, with sponsoring and advertising agency.¹²²

Arranging and implementing emergency procedures in case of fire or other disaster and distributing evacuation route plans to stores.¹²³

Taking all the necessary precautions to control and minimize vandalism.¹²⁴

Taking all possible measures to conserve energy and ensure economy of operation of all mechanical and electrical equipment and systems.¹²⁵

Meeting with tenants and participating in merchants' meetings to foster goodwill and also meeting with community leaders to set agendas for community activities.¹²⁶

Secondary Activities

General work such as hiring and dismissing employees, discussing problems and other plans.

Individual and group meetings.

Filing and documenting of records.

Holding conference

Resting during break hour.

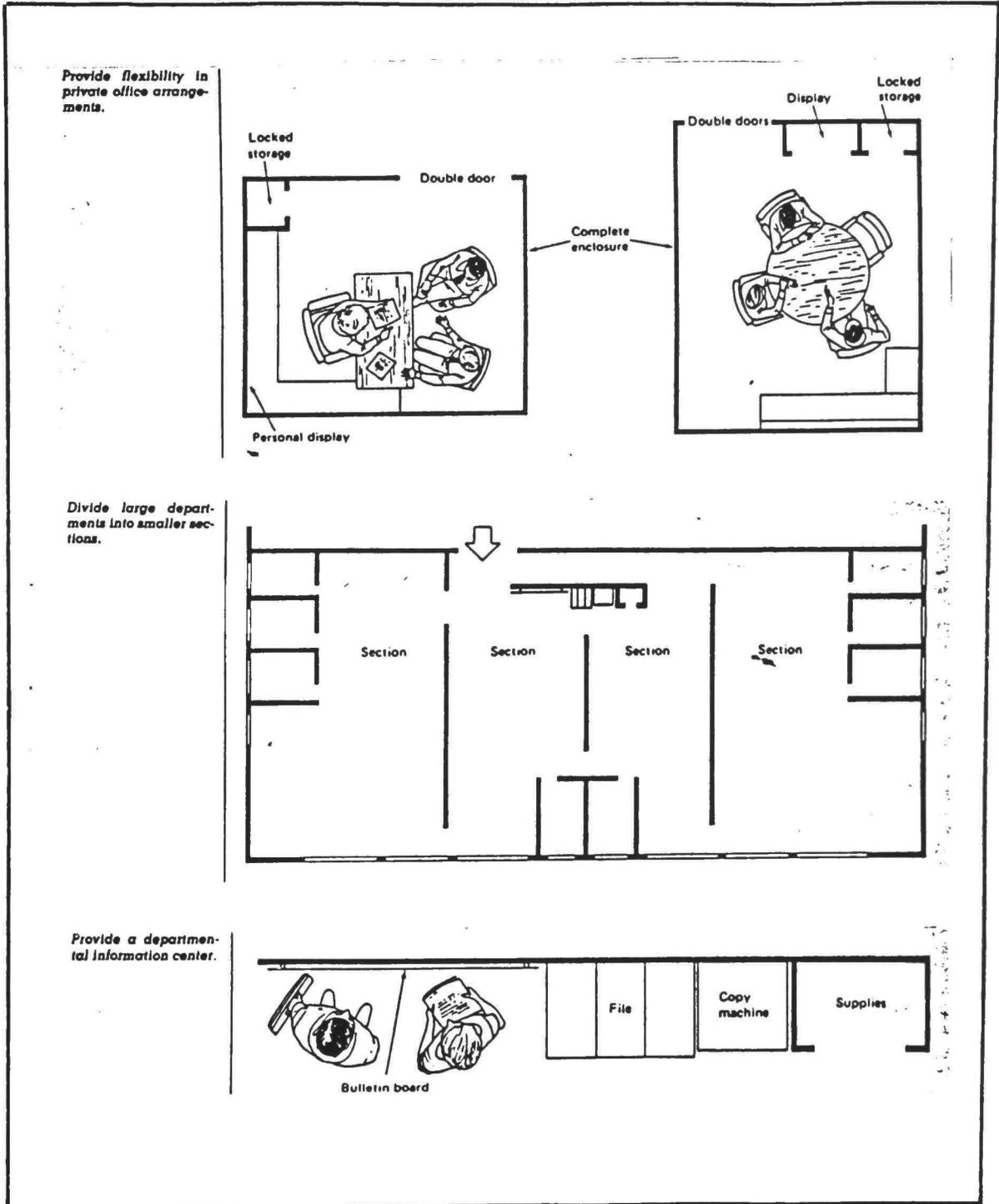
In general, administering the complex includes all the management of the above activities along with the maintenance of the services. The director of the complex has make sure that the management of the operation will run smoothly in addition to minimize any problem that deals with the center.

Issue

This activities need several degree of privacy, ranging from public, semi-public to private. Some of the administrative positions that have high contact with tenants and community leaders, need a private space for effective communication. A shared workplace is also needed to trigger close cooperation and face-to-face interaction between group of employees. In addition, a place to take a break is also critical in this area.

Architectural Response

Given the need for higher ranking personnels to conduct certain operations in private and the desire to control access, the only kind of office that fully satisfies those requirement is one that is actually private. Complete acoustic and visual privacy is required to ensure isolation in this space.



Most working groups are assembled as a result of managerial decisions. They are not, in other words, self-selected social group. As a result they do not fit exactly into category of favorable social groups. These chance groups do, however exhibit normal preferences in regard to group size: they much prefer to work in smaller rather than larger groups.¹²⁷ For a shared workplace to be successful, the followings are some factors that can be considered.

Established clear boundaries for working groups.¹²⁸

The minimum requirement for defining boundaries is not clear. Ceiling-high partitions or partial enclosures accomplish the purpose of visual and acoustic separation.

Concentrate entering traffic.¹²⁹

The traffic entering this area should be focussed at a single major entry point.

Provide an obvious focal point for the group.¹³⁰

An information or communication center should be provided at some point that is central to the group area or adjacent to an entrance to the group area. This may be as simple as a small bulletin board where group invitations, announcement, vacation schedules, ride exchanges can be displayed.

Arrange space so the group can assemble.¹³¹

This might not be a formal assembly area but some part of the floor area where furniture can be shifted temporarily to permit a gathering

The space should have outside windows.¹³²

Study shows that people prefer to work in places with windows and furthermore, select locations close to windows in preference to any other locations.

Protect the space from distracting noise.¹³³

Obvious noise sources within the space should be controlled. Noisy equipment should be enclosed in acoustic hoods. The most troublesome noise, however, are those originating outside the space. Of these, the most distracting are the sounds made by other people, mainly other people talking.

Finally, a pleasing atmosphere is essential for the break room. It does not have to be grandeur to be pleasing, but comfortable enough for the workers to sit and have a cup of coffee while relaxing. Suitable

seating, plants, paintings, sunlight and slow beat music are soothing effects to the room. In addition, separate restrooms should be provided near the area.

Other related activities

Typing, discussing, maintaining, repairing

S P A C E A N A L Y S I S

S P A C E A N A L Y S I S

In Social Design approach, architectural spaces should have these characteristics:

Adaptibility--capable of becoming suitable for different activity patterns, new use or situation at different time without requiring physical changes.

Flexibility--capability to physically change in order to accommodate/suit circumstances or different types of activities.

The followings are analysis of spaces for the Community Shopping Center. For the purpose of the study, the spaces are divided into three major groupings. It is important to note that the groupings of the spaces in no way indicate any design thoughts and processes.

ADMINISTRATIVE SPACES

1) Lobby Area

Space area.....250 sq. ft
Number of participants.....1-5 people

Description

The lobby area can also be characterized as an entrance area.

Requirement

It is necessary to provide enough seating in appropriate kind and amount for people who must wait for appointments. Adjacency to restrooms is also important.

2) Receptionist Area

Space area.....100 sq.ft.
Number of participants.....1 person

Description

This space is located in the lobby area where the receptionist will receive the guests.

Requirement

Comfortable work area for the receptionist to reduce fatigue.

3) Director Office

Space area.....500 sq.ft.
Number of participants.....1-4 people

Description

The director oversees all activities in the administration, management, coordination, and planning for smooth functioning of the mall. All of these activities are conducted in to office and the need for privacy is a critical factor.

Requirement

Identification of the room with name and title is necessary to symbolized rank in addition to having a comfortable work place. Since small and private meetings are also held in this office and a small meeting room is appropriate to support this purpose.

The space should be flexible enough to accommodate different type of convergences. Acoustical isolation is necessary to provide privacy in this area.

4) Conference Room

Space Area.....600 sq.ft.
Number of participants.....9-12 people

Description

The room will be utilized for regular meetings of the board and will also be used for staff meeting and group presentations.

Requirement

Since visual presentation might occur in the room, a horseshoe-shaped arrangement is required for effective discussion and meeting. In addition, acoustical control is necessary for a good presentation.

5) Common Work Area

Space area.....1,500 sq.ft.
Number of participants.....8-10 people

Description

This is a shared work area for the rest of the employees.

Requirement

Even though this is a large area, partitions are essential to create a personalized working spaces without being totally enclosed. Specially designed office furniture is useful to create this effect. Good ventilation and window views are necessary to reduce fatigue and boredom. In addition, a space for copy machine is also a good inclusion in the area.

6) Filing/Record Room

Space Area.....300 sq.ft.
Number of participants.....2 people

Description

This room is going to be used to keep files, documents and records of the complex.

Requirement

Adjacency to common work area is important.

7) Break Room

Space Area.....250 sq.ft
Number of participants.....5-6 people

Description

This is a place where the workers can take a quick break and refresh themselves before going back to work.

Requirement

Comfortable seating, slow beat music, plants, sunlight are some considerations that can be added to the relaxation effect in the room.

8) Restrooms

Space area.....200 sq.ft.
Number of participants.....1-4 people

Description

The area will be used by the staffs only.

Requirement

Easy cleaning and adjacency to the break room.

9) Storage

Space area.....100 sq.ft.
Number of participants.....1-2 people

Description

The purpose of this space is to accommodate office supplies such as stationary, extra office furniture and other equipment.

Requirement

Enough shelf space and adjacency to the work area.

COMMUNITY AND RECREATIONAL SPACES

1) Activity room

Space area.....800 sq.ft.
Number of participants.....10-12 people

Description

This is the area which hold activities such table tennis, pool, card games, chess, checkers, to name a few.

Requirement

A large area with movable chairs and tables to accommodate this kind of activities.

2) Library

Space area.....1000 sq.ft.
Number of participants.....20-25 people

Description

This is a small community library for reading enjoyment of the participants.

Requirement

Good lighting sources and sufficient seating and writing surfaces to the point where materials is discovered. Enough shelf-space to put books and other reading materials.

3) Meeting room

Space area.....500 sq.ft.
Number of participants.....8-10 people

Description

This is a space to hold small meeting, discussion and lectures.

Requirement

Round or U-shape table is required for effective discussion. The room needs to be noise-free.

4) Art and craft center

Space area.....800 sq.ft
Number of participants.....15-20 people

Description

The center is a workshop that holds art and craft activity such as painting and sculpting and a good place to stimulate creativity in everybody.

Requirement

A large area with good ventilation and easy clean-up. Storage, material shelves, and sinks are also necessary.

5) Multi-purpose room

Space area.....1200 sq.ft.
Number of participants.....20-30 people

Description

This is a mixed-use space that can be rented out for fashion shows, weddings, receptions and conventions.

Requirement

Well-lighted, carpeted and elegantly decorated.

6) Health studio

Space area.....1000 sq.ft
Number of participants.....20-30 people

Description

This studio comprises a gym, a jogging track, racquetball courts, an aerobic room, and changing rooms which also include restrooms and shower stalls for men and women.

Requirement

Good ventilation, sunlight and outside view are essential elements in the gym area.

7) Lounge

Space area.....500 sq.ft.
Number of participants.....10-12 people

Description

This can be an where area people wait and rest. It is also an information center on activities that are held in the community and recreation center.

Requirement

Adjacency to entrance and other activities. Appropriate seating arrangement, outside views sign directories, restrooms, telephones and snack bars.

8) Mini- auditorium

Space area.....1500 sq.ft.
Number of participants.....85-100 people

Description

This auditorium holds band concerts, ballet, drama, and other public performances.

Requirement

Technical requirement such as appropriate sight lines, floor slopes, lighting, soundproofing, seat spacing, aisle widths and other techniques of scenery and set management. Ticket booth and restrooms adjacent to the auditorium.

9) Playground

Space area..... 1000 sq.ft
Number of participants.....15-20 people.

Description

This is a play area for children while their parents are engaged with other activities.

Requirement

Enough variety of play material which is useful and decorative. Safety features which include safety of the playground area and possibility of special attendants overseeing the activity.

10) Community room

Space area.....800 sq.ft.
Number of participants.....15-20 people

Description

This is a fairly large room comprise of separate washrooms, cloakroom, kitchen facilities, and a serving pantry.

Requirement

A well-ventilated room and adjacency to the multi-purpose room.

11) Snack bar

Space area.....800 sq.ft

Number of participants.....10-12 people

Description

This is a space where food are prepared and eaten.

Requirement

This space need to be well-ventilated, enough seating arrangement, adjacency to receiving area, lounge and restrooms.

12) Restrooms

Space area.....200 sq.ft.

Number of participants.....10-12 people

Description

This space will be used by the participants of the community only.

Requirement

Adjacency to the lounge area and easy access to other facilities.

SHOPPING SPACES

1) Retail areas

Space area.....20,000 sq.ft
Number of participants.....50-500 people

Description

This area will be filled by independent retailers with gift, drug, beauty, book, jewelry, electronic shops, women and men's wear eating facilities and other specialty stores.

Requirement

Most of the areas requires other support facilities such as office and service areas.

2) Indoor courts

Space areas.....1500 sq.ft
Number of participants.....40-50 people

Description

This area is a space where people rest, relax or wait for their spouses or friends.

Requirement

Appropriate seating arrangement, landscaping, water elements, and sculptures. Adjacency to amenities such seating facilities, restrooms and telephones.

3) Plazas

Space area..... 2500 sq.ft
Number of participants.....80-100 people

Description

This is an outdoor area where social gatherings and public performances take place.

Requirement

Pavement, sign directories, shading, landscaping, fountains and sculptures. Adjacency to major entrances and necessary ancillary services. Safety features such as appropriate warnings and barriers.

4) Restaurants

Space area20000 sq.ft

Number of participants.....75-100 sq.ft

Description

This is a space where food are prepared and eaten. The restaurants are for people who want to experience formal dining experience.

Requirement

Enough seating and table arrangement is essential for the restaurants. Desirable standards in term of appearance, sanitation, good production and service are critical to attract customers. A well-ventilated kitchen and storage area are necessary to avoid unpleasant odors from escaping to the dining areas.

5) Food court

Space area.....1500 sq.ft

Number of participants..... 75-100 people

Description

Food court offer an informal dining with a variety selection of food.

Requirement

The food court must convey an image of cleanliness. Enough seating arrangement and waste storage area are required. A well-ventilated preparation area is necessary to avoid unpleasant food odor.

6) Public Restrooms

Space area.....1000 sq.ft

Number of participants.....30-40 people

Description

An area with stalls and sinks for washing.

Requirement

The shopping center will need several restrooms due to the size of the shopping space.

5) Public telephones

Space area.....100 sq.ft.
Number of participants.....15-20 people

Description

Public telephones are an important item of customer services, apart from being a source of revenue for the shopping center.

Requirement

Multiple arrangement ranging from two to five telephones per area. The area have to be clean and the partitions need to be free of graffiti.

6) Maintenance and storage

Space area.....500 sq.ft.
Number of participants.....4-5 people

Description

This is a space where all the equipment for maintenance will be stored and kept. It also will serve as a changing area for the workers.

Requirement

Separate partitions for storage, maintenance and changing activities. Easy clean-up and good ventilation.

S U M M A R Y

O F

S P A C E S

ADMINISTRATION SPACES

SPACES	SQ.FT	PARTICIPANTS	TOTAL
Lobby	250	1-5	250
Reception	100	1-2	100
Director	500	1-4	500
Conference	600	9-12	600
Common	1500	11-13	1500
Filing	300	1-2	300
Breakroom	250	5-6	250
Restrooms	100	1-4	200

Total Net Area (A)	3700 sq.ft
Circulation (.3 x A = B)	1110 sq.ft
Mechanical (.2 x (A + B) = C)	962 sq.ft
Gross Sq.Ft (A + B + C)	5772 sq.ft

COMMUNITY AND RECREATIONAL SPACES

SPACES	SQ.FT	PARTICIPANTS	TOTAL
Activity	800	10-12	800
Library	1000	20-25	1000
Meeting	500	8-10	500
Craft	800	15-20	800
Multi-purpose	1200	15-20	1200
Health	1000	15-20	1000
Lounge	500	10-12	500
Auditorium	1500	85-100	1500
Playground	1000	15-20	1000
Community	800	15-20	800
Snack bar	800	10-12	800
Restrooms	125	8-10	250

Total Net Area (A)	10150 sq.ft
Circulation (.3 x A = B)	3045 sq.ft
Mechanical (.2 x (A + B) = C)	2639 sq.ft
Gross Sq.Ft (A + B + C)	15834 sq.ft

SHOPPING SPACES

SPACES	SQ.FT	PARTICIPANTS	TOTAL
Retail	20000	50-500	20000
Indoor court	500	40-50	1500
Plazas	1250	80-100	2500
Restaurants	1000	75-100	2000
Food court	1500	75-100	1500
Telephones	50	10-15	100
Maintenance	250	4-5	500
Restrooms	100	30-40	1200

Total Net Area (A)	29300 sq.ft
Circulation (.3 x A = B)	8790 sq.ft
Mechanical (.2 x (A + B) = C)	7618 sq.ft
Gross Sq. Ft (A + B + C)	45708 sq.ft

PARKING SPACES

SPACES	SQ.FT	PARTICIPANTS	TOTAL
Parking	200	700-1000	20000

TOTAL GROSS SQUARE FEET

Administration	5772 sq.ft
Community and Recreational	15834 sq.ft
Shopping	45708 sq.ft
Parking	20000 sq.ft
TOTAL	87314 sq.ft

E C O N O M Y A N A L Y S I S

PROJECT COST

ADMINISTRATION SPACES

Gross Square Feet.....5772
sq.ft.
Building Cost/Space Unit.....\$66.39
% of Total Project.....6.61%

Building Cost = 5772 sq.ft x \$66.39
 = \$38,3203.08

COMMUNITY AND RECREATIONAL SPACES

Gross Square Feet.....15834
sq.ft.
Building Cost/Space Unit.....\$58.55
% of Total Project.....11.62%

Building Cost = 15834 sq.ft x \$58.55
 = \$927080.70

SHOPPING SPACES

Gross Square Feet.....45708
sq.ft.
Building Cost/Space Unit.....\$32.55
% of Total Project.....52.35%

Building Cost = 45708 sq.ft x \$32.55
 = \$1487795.40

PARKING SPACES

Gross Square Feet.....20000
sq.ft.
Building Cost/Space Unit.....\$21.45
% of Total Project.....22.91%

Building Cost = 20000 sq.ft x \$21.45
 = \$429000

TOTAL COST ESTIMATE ANALYSIS

TOTAL BUILDING COST

Administration.....	\$ 383,203.08
Community and Recreational.....	\$ 927,080.08
Shopping.....	\$1,487,795.40
Parking.....	<u>\$ 429,000.00</u>

A) TOTAL BUILDING COSTS.....	\$3,227,078.40
B) FIXED EQUIPMENT (8% x A).....	\$ 258,166.27
C) SITE EQUIPMENT (15% x A).....	<u>\$ 484,061.76</u>
D) TOTAL CONSTRUCTION (A + B + C).....	\$3,969,306.30

TOTAL BUILDING BUDGET

Total	
Construction.....	\$3,969,306.30
Site Acquisition/Demolition.....	\$ 500,000.00
Site Work (13% x A).....	\$ 419,520.19
Construction Loan Cost (11% x A)....	\$ 354,978.62
Contingency Cost (5% x A).....	<u>\$ 161,353.92</u>
TOTAL BUILDING BUDGET.....	\$ 5,259,958.90

ECONOMIC JUSTIFICATION AND METHODS

ADMINISTRATION SPACES

Rent per year.....\$18.35/sq.ft/yr
Total Space Area.....5772 sq.ft.

Total Administration Rent = \$18.35 x 5772
sq.ft. = \$105,916.20/yr

COMMUNITY AND RECREATION SPACES

Rent per year.....\$12.00/sq.ft/yr
Total Space Area.....15834 sq.ft

Total Community Rent = \$12.00 x 15834
sq.ft. = \$190,008/yr

SHOPPING SPACES

Rent per
year.....\$13.90/sq.ft/yr
Total Space Area.....45708
sq.ft.

Total Shopping Rent = \$13.90 x 45708
sq.ft. = \$635,341.20/yr

PARKING SPACES

Rent per
year.....\$12.00/sq.ft/yr
Total Space Area.....20000
sq.ft.

Total Parking Rent = \$12.00 x 20000
sq.ft = \$240,000/yr

TOTAL BUILDING RENT IN ONE YEAR

Administration Spaces.....	\$ 105,919.20
Community and Recreational Spaces.....	\$ 190,008.00
Shopping Spaces.....	\$ 635,341.20
Parking Spaces.....	<u>\$ 240,000.00</u>

TOTAL
RENT.....\$1,171,268.40

PAYBACK (YEARS) = $\frac{\text{TOTAL BUILDING BUDGET}}{\text{ANNUAL RENT}}$

$$= \frac{\$5,259,958.90}{\$1,171,268.40}$$

$$= 4.49$$

PAYBACK PERIOD : 4 YEARS AND 6 MONTHS

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ANIZAH ABUBAKAR
LUBBOCK COMMUNITY SHOPPING CENTER
01/25/93

INTENTIONS : GOAL & OBJECTIVES

To stress the importance of social design where people is the prime consideration in the design process.

To create a vital constituency for good social design by being submittal to occupants needs and wants through the awareness of the complexity of human nature.

To create a better understanding of the interrelationship between built environment and human behavior.

To create a good public space that becomes a school of social learning which accentuates the dramatic reflection of individual behaviors, social processes and sometimes conflicting public values.

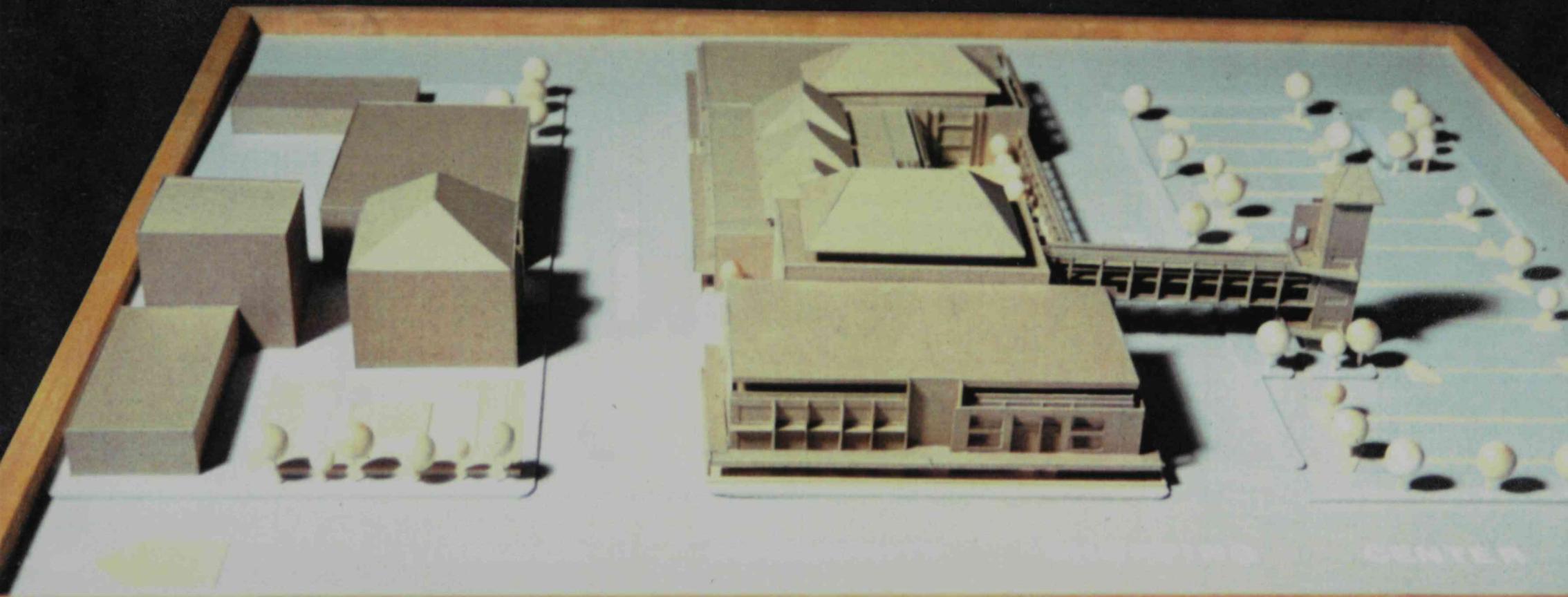
To create a social and recreational focal point of downtown significance through the introduction of community, recreational, cultural and shopping activities under one physical framework.

To create a better social environment for Lubbock community by creating a concentration effect in the dilapidating downtown area by acting as a highly concentrated, one stop places that offer most of public's physical and social needs.

To create a retreat for the public by designing a form of refuge away from the hectic daily schedule which builds up stress of modern life.

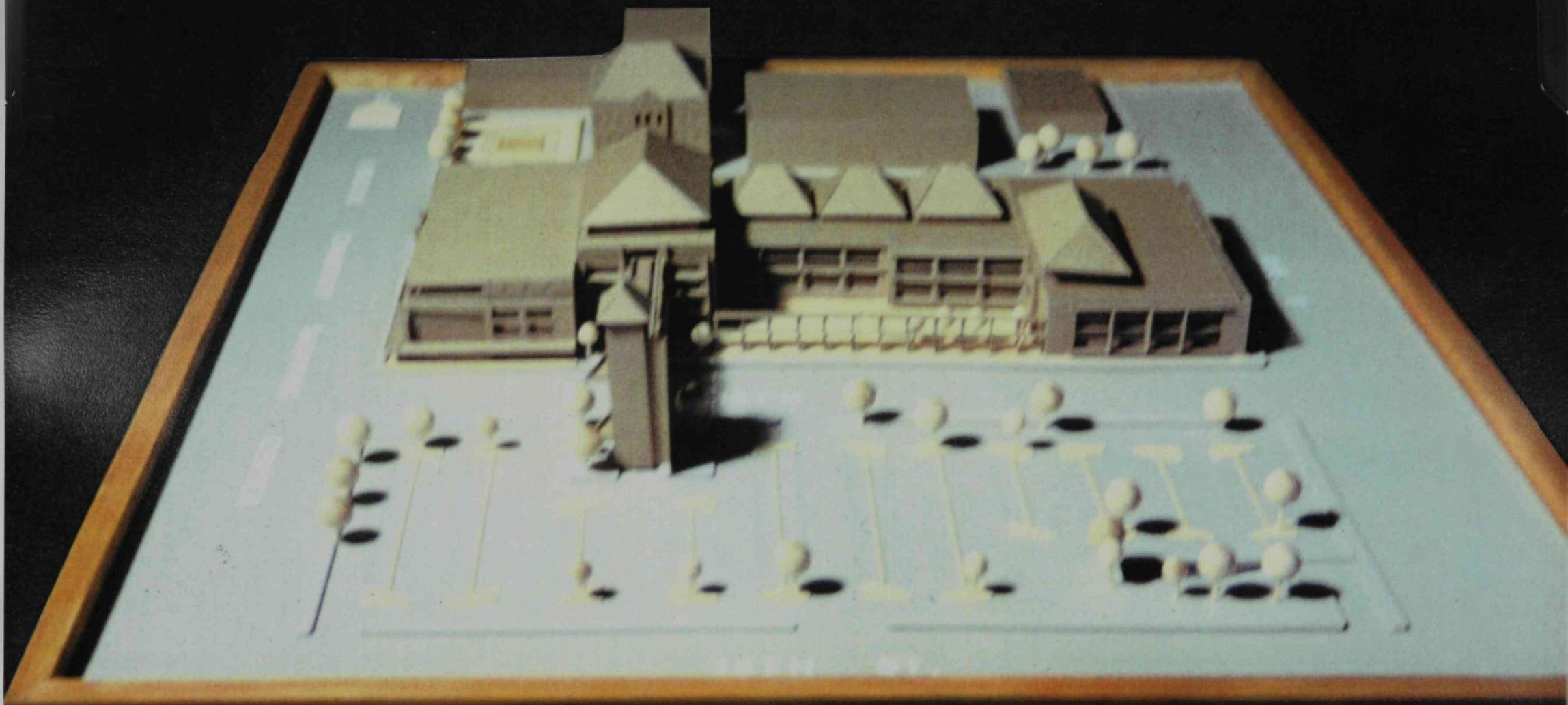
To offset the ongoing patterns of blight and decay in the downtown and simultaneously providing answers to the stagnate growth in the eastern areas of the City of Lubbock.

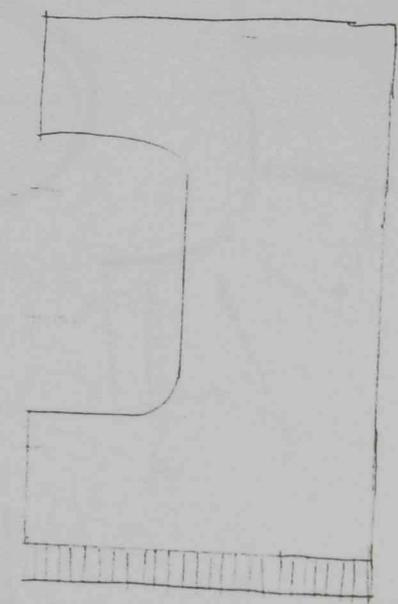
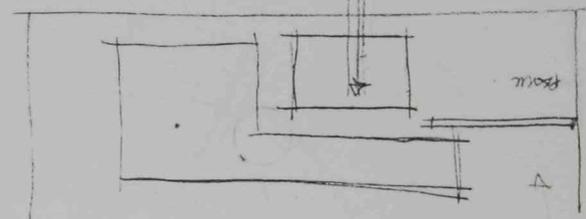
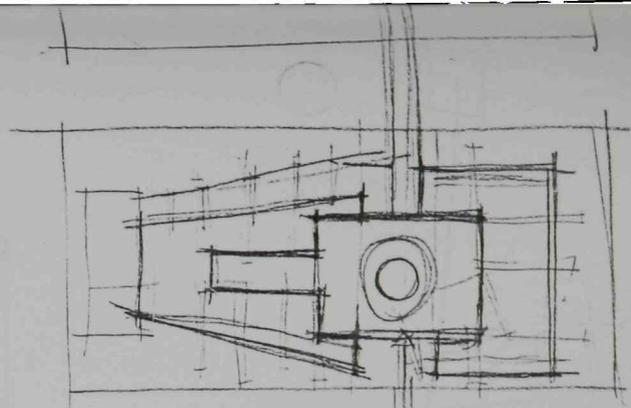
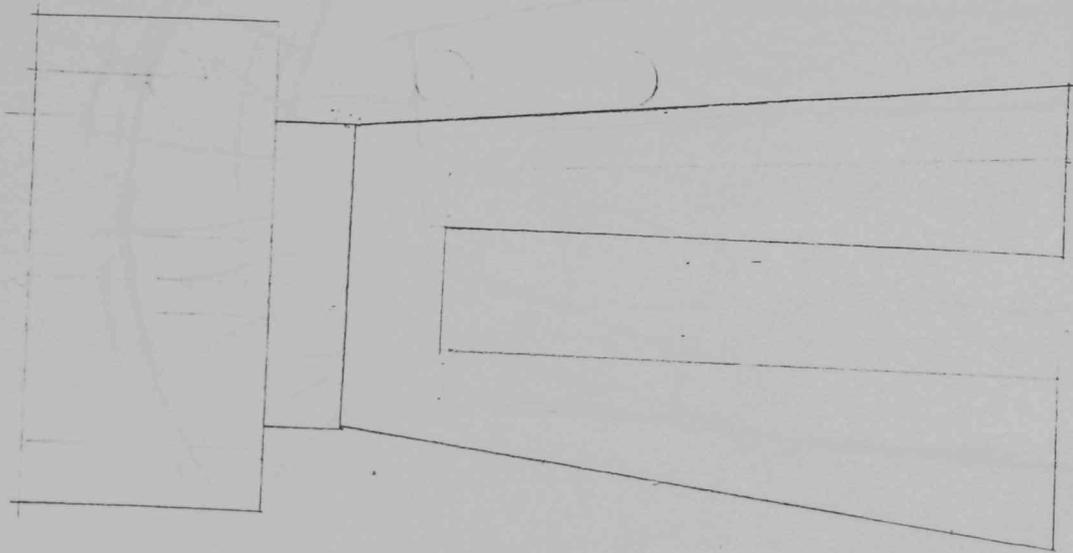
To confiscate the role now upheld by the South Plains Mall (southwestern suburban areas) which serves only the minimal social and recreational needs of Lubbock community.

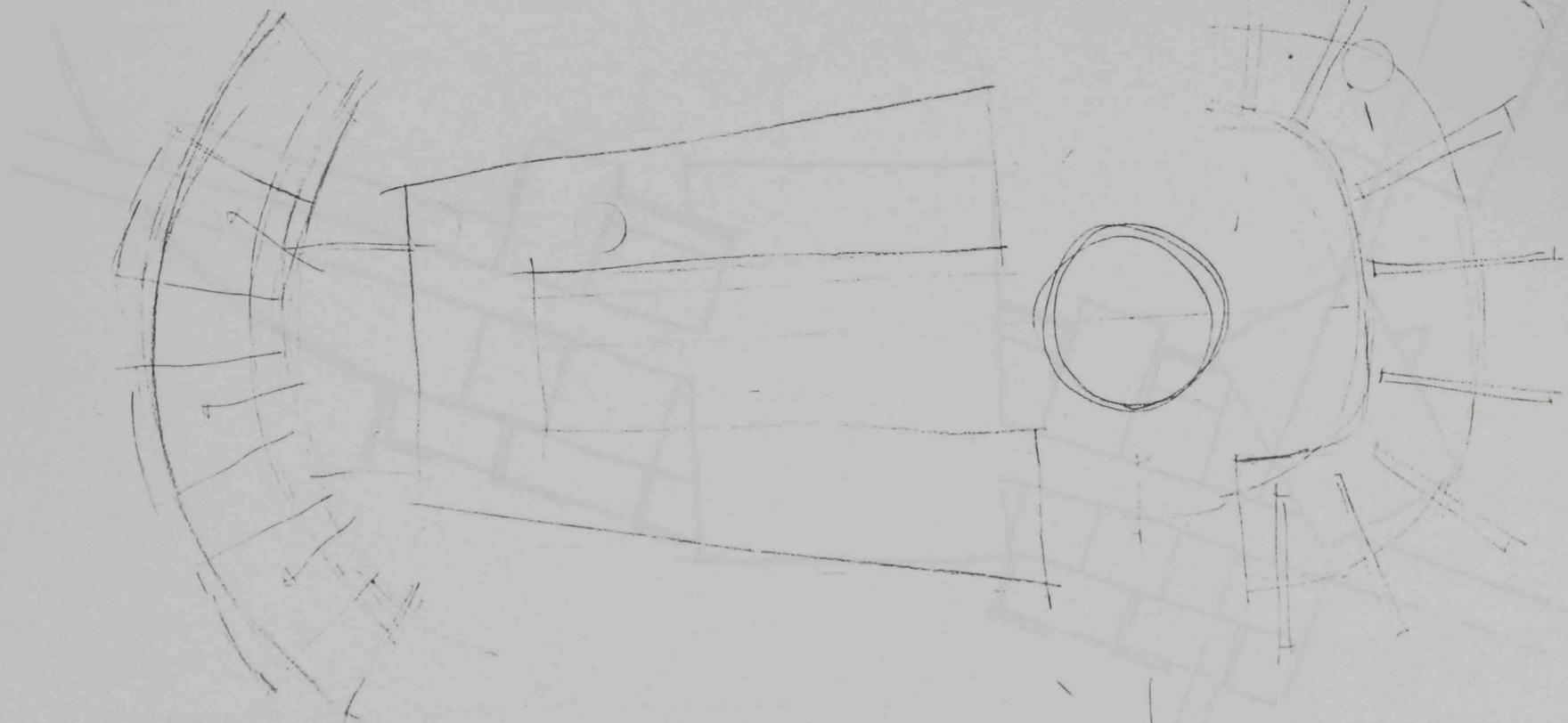


ANIZAH ABUBAKAR

THESIS SPRING





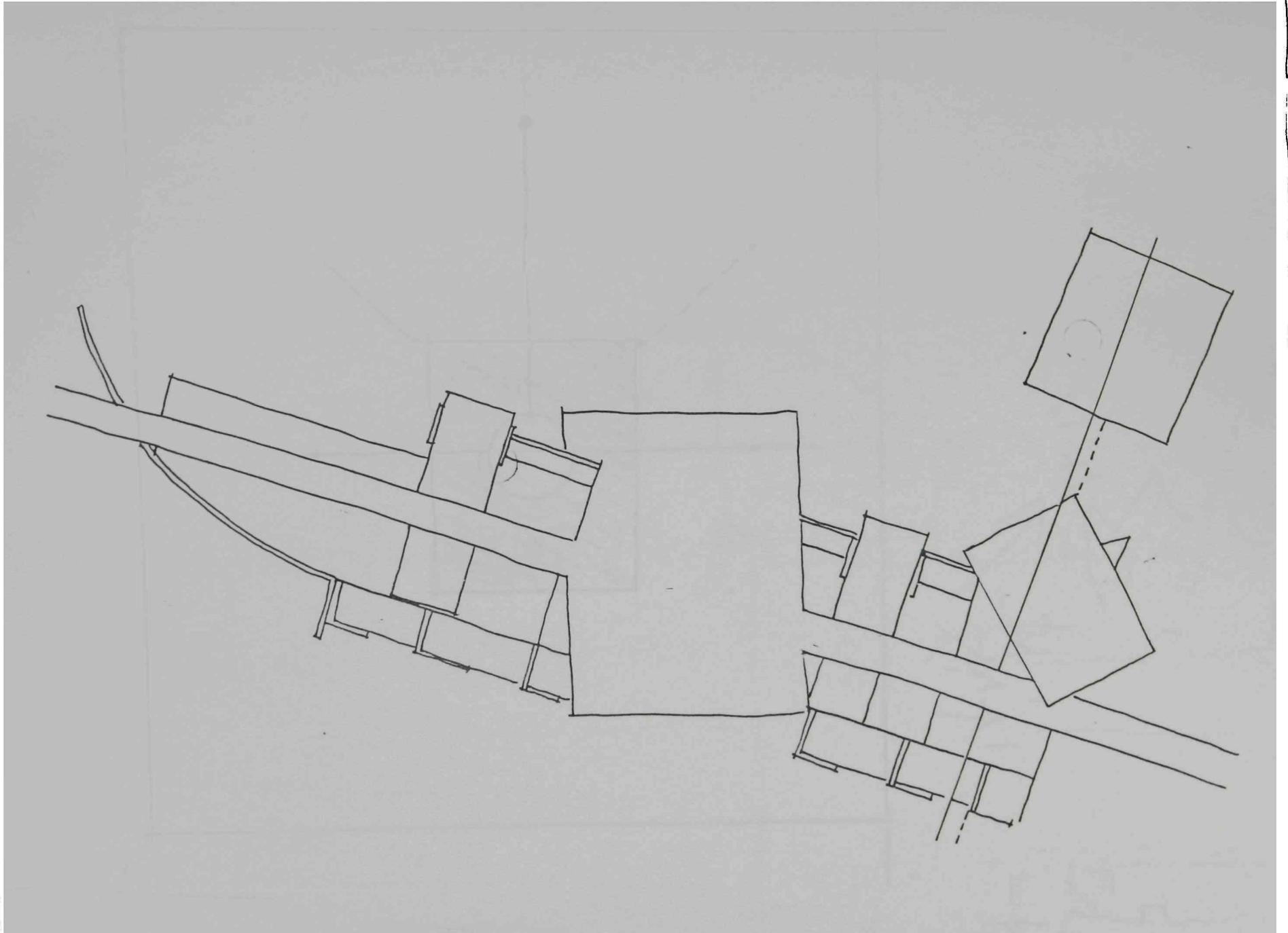


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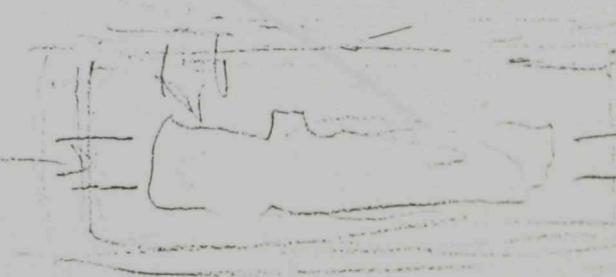
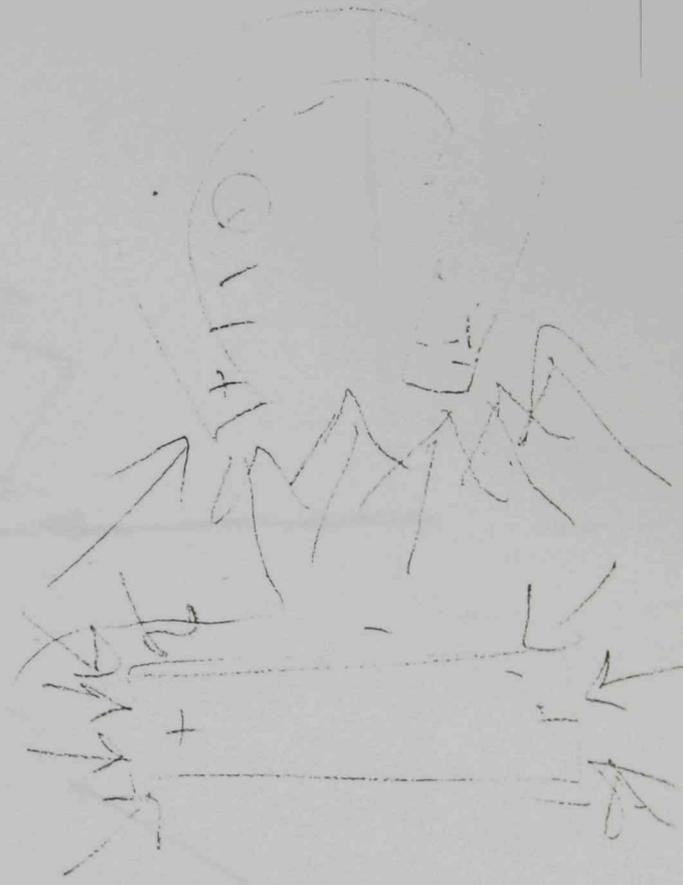
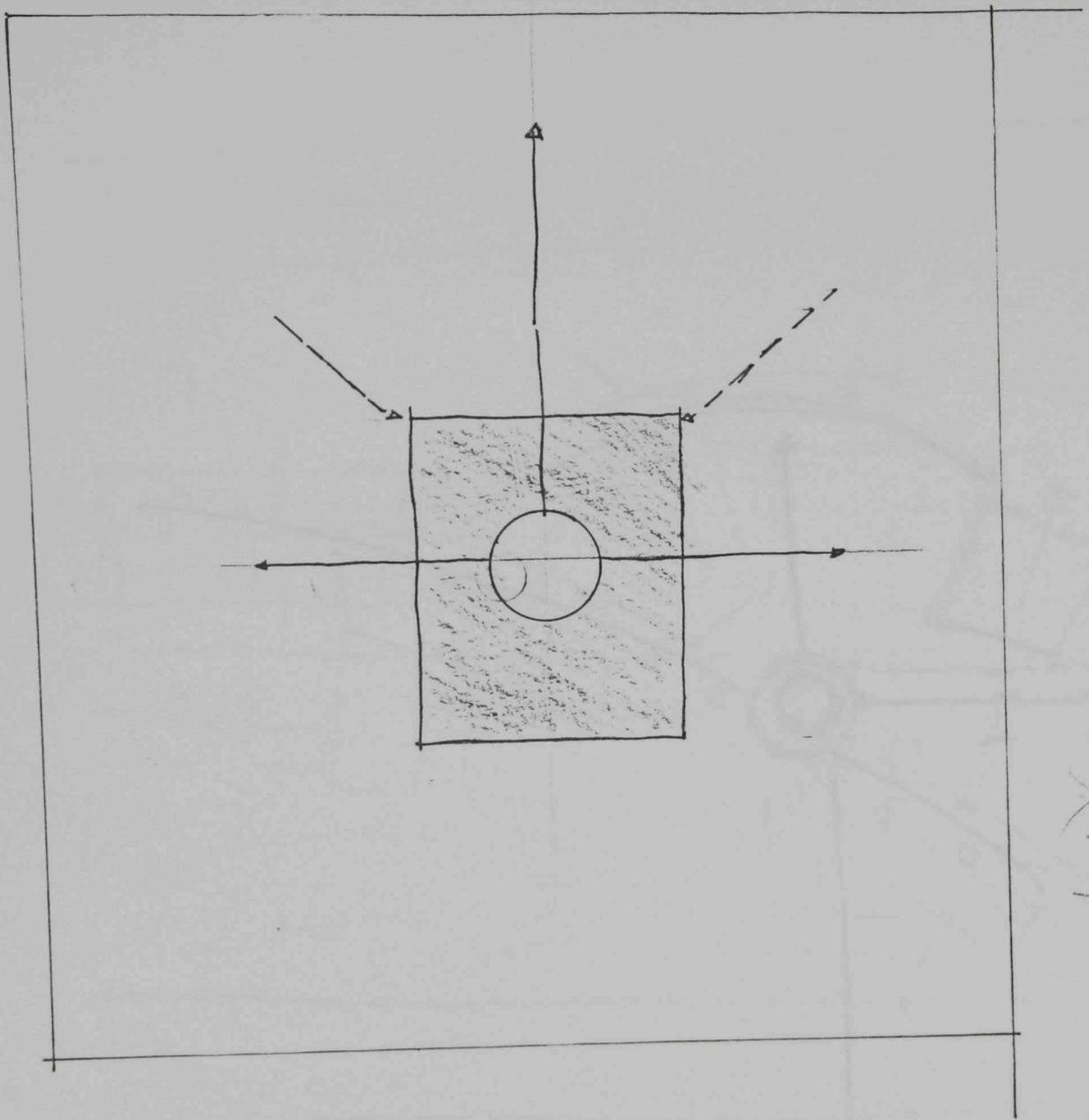
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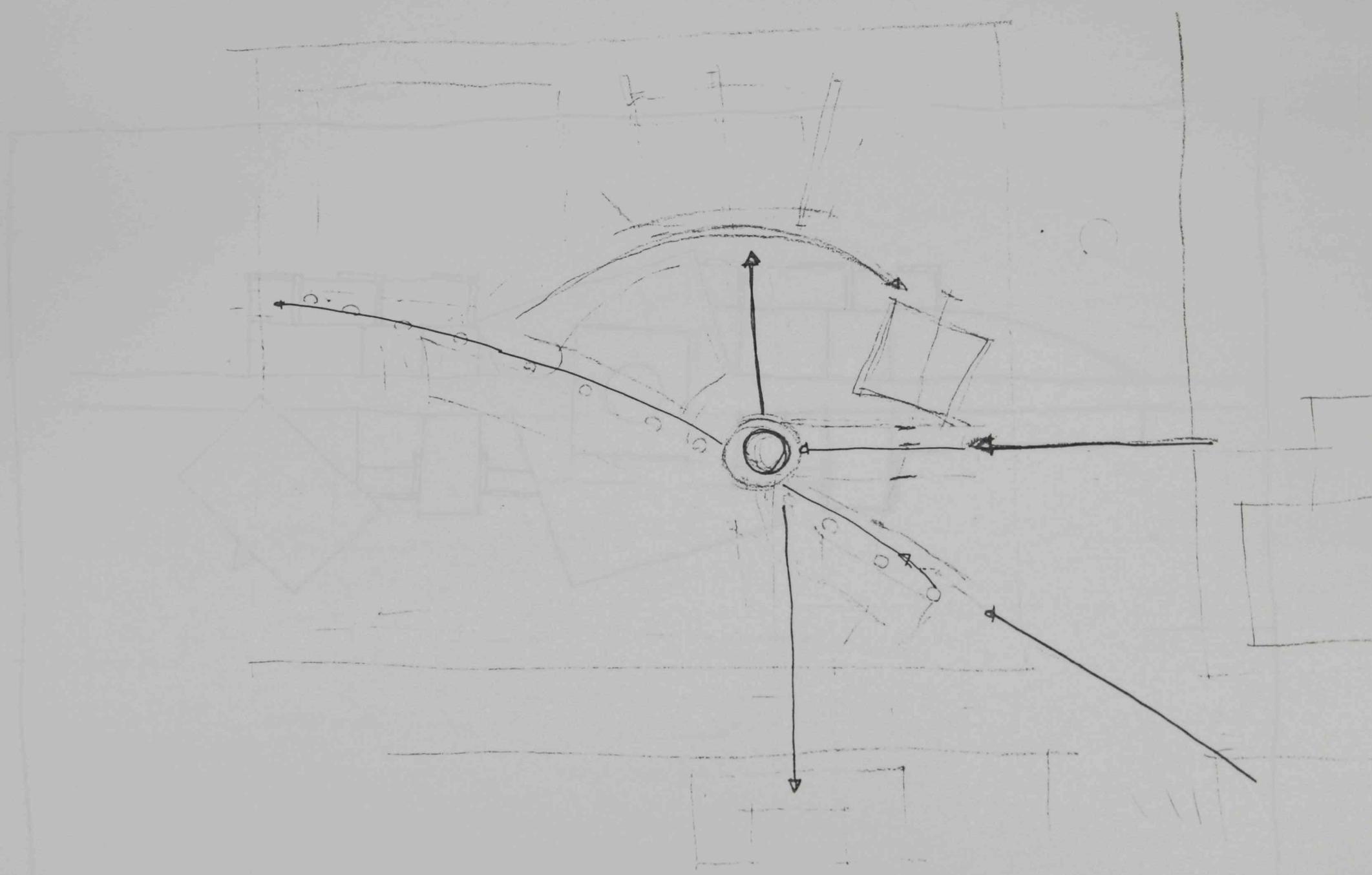
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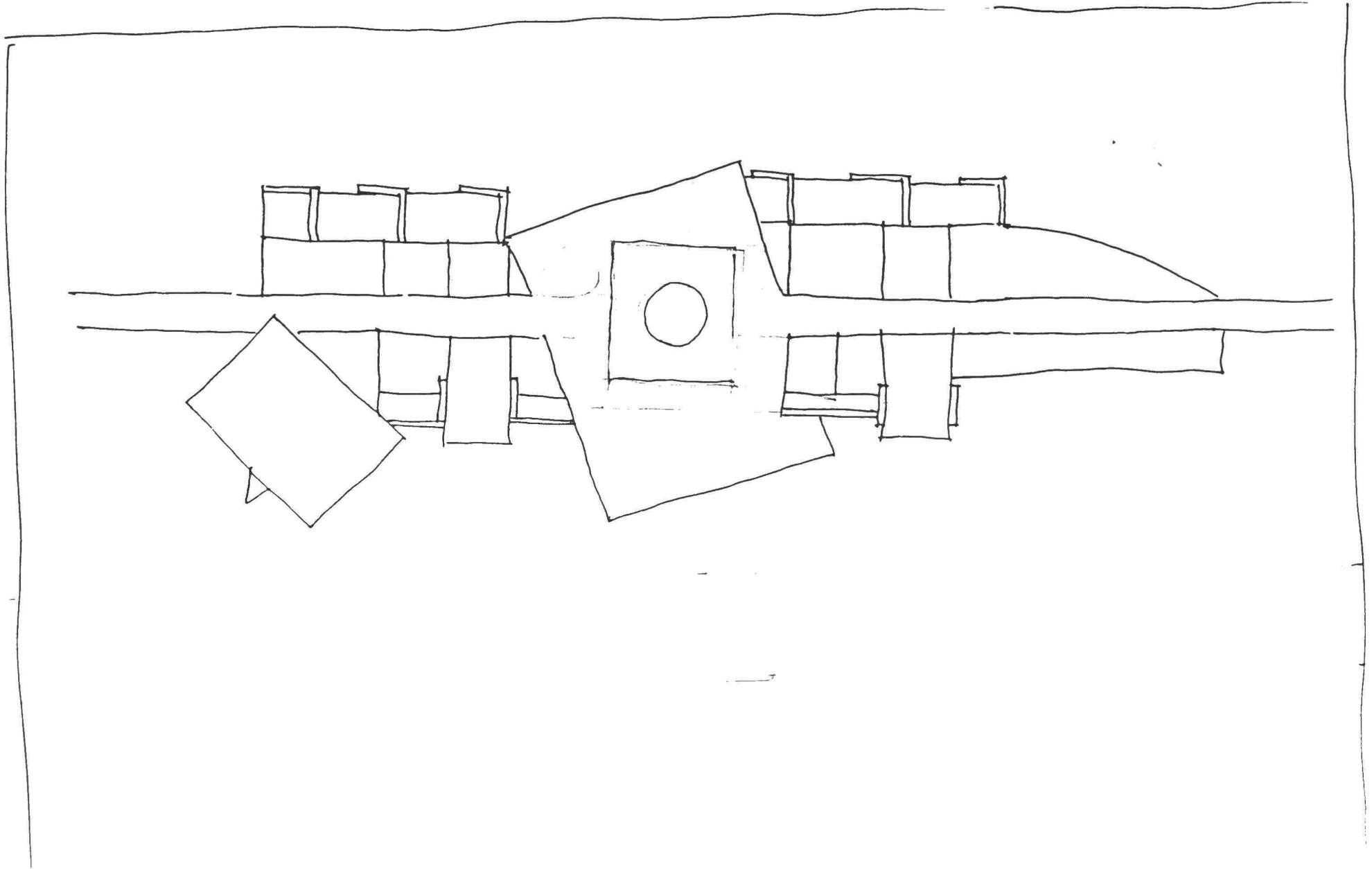




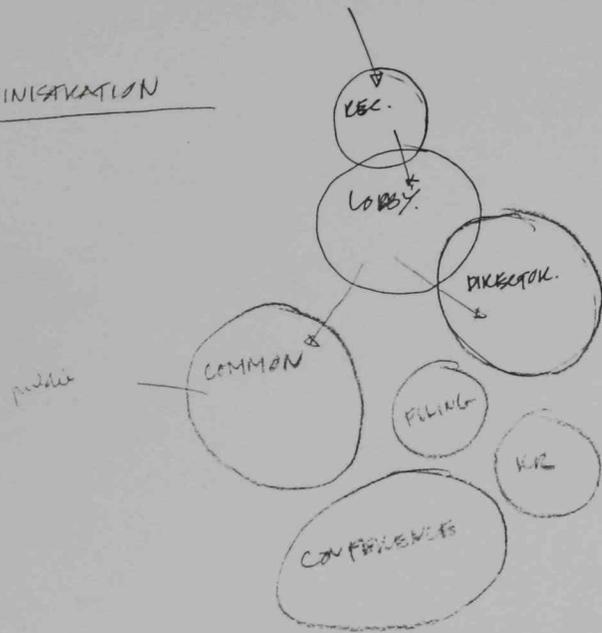
CONCEPT: MAGNET / POLAR POINT



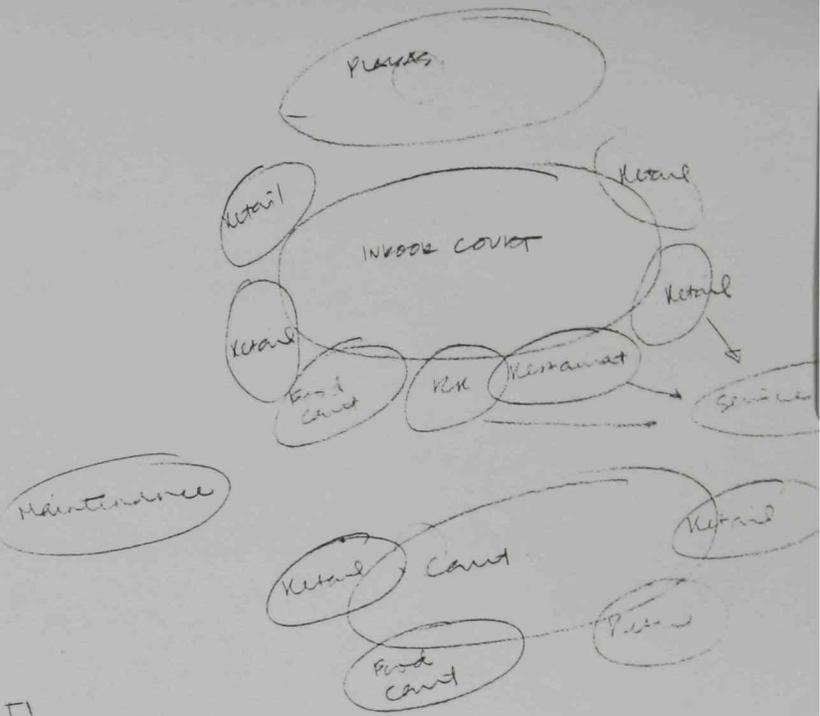




ADMINISTRATION



COMMUNITY



URBANITY COMMUNITY

- a circle
- continuity
- public
- density
- clustered
- a focal point / image.

Small plazas for efficient social interaction
 catalyze economic further development
 pedestrian network.

draws people