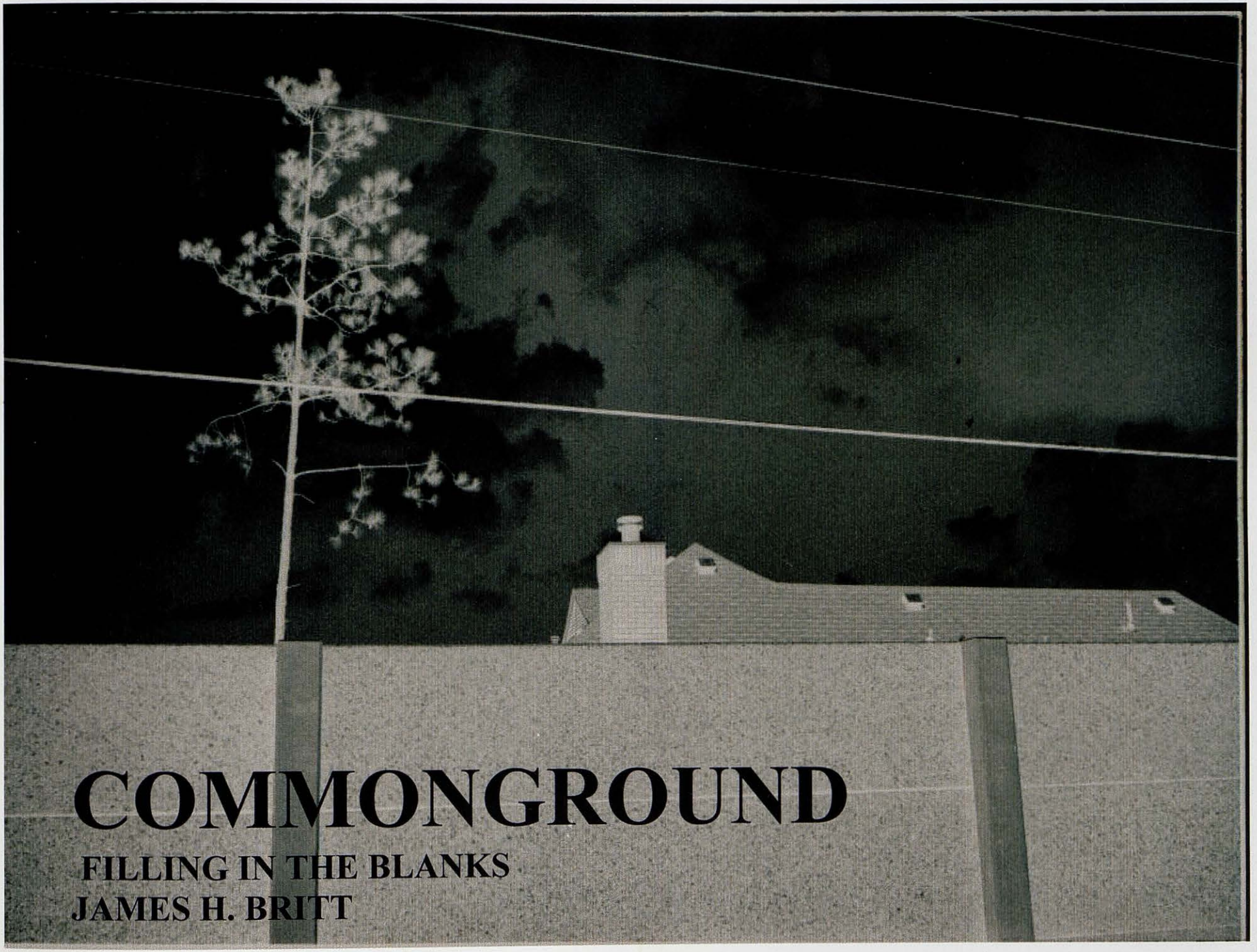

COMMONGROUND

FILLING IN THE BLANKS

JAMES H. BRITT

Commonground

Filling in the Blanks

by

James Hamilton Britt

A Thesis
in
Architecture

Submitted to the Architecture Faculty
of the College of Architecture
of Texas Tech University in
Partial Fulfillment for
The Degree of
Masters of Architecture

[redacted]

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Dean, College of Architecture

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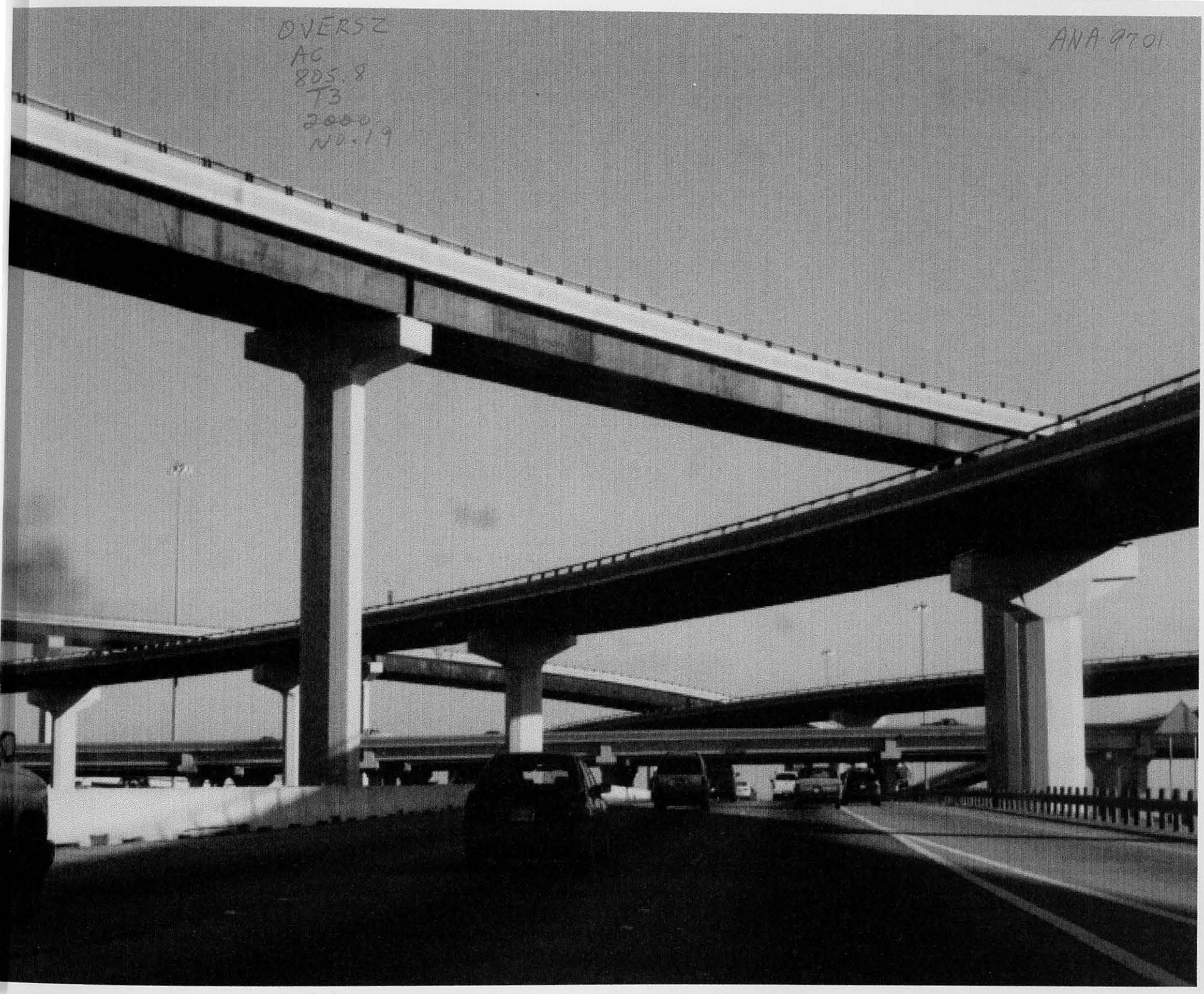

Clear Lake City

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PREFACE

Suburbs are nothing new, but their relation with the city has always been in a state of change.

Conceived in the late 19th century as a means for the wealthy and upper middle classes to escape the undesirable conditions of a growing downtown, suburbs were residential and leisure environments reached by trolley or motorcar.

In Ebenezer Howard's influential book, *Garden Cities of Tomorrow* (1898), he prescribes the construction of a ring of 'smokless, slumless, cities' around a central city to encourage healthy, pleasant living; the suburban environment quickly grew to do just this. The result was a group of dependent suburbs and a dominant 'urb' (fig. 1).

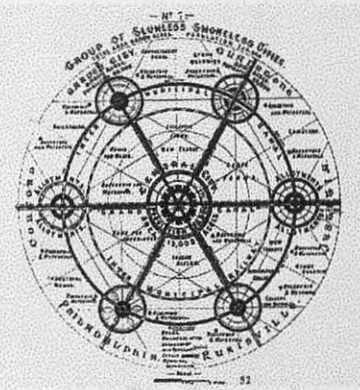

Figure 1.

Much has occurred in the past fifty years to alter this relationship which in itself is recognized as the first significant stage of a larger urban transformation called 'decentralization'[1]. Decentralization is essentially the multiplication of autonomous districts. In a decentralized realm, suburban and peripheral environments become places to live and work, transforming them into what is popularly called 'Edge Cities', after another influential book, *Edge City* (1991), by Joel Garreau.

Figure 2. Edge City:
Houston Medical District

What results is a 'polycentric suburban metropolis' made up of 'differentiated suburbs and varigrated exurbs' and the central city [2]. All of these components are interconnected by a

complex network of freeways and arterials [3].

This polycentric environment is nothing like the suburb/urb relationship which continues to be a strong concept in the public conscious. The growth and interaction of the polycentric environment (the latest phase of decentralization) spurs new development and growth between the periphery and city which begin to share a symbiotic relationship in a new process of 'metropolitanization', which is creating a type of middle landscape which is commonly criticized by architects, urbanists, and journalists as being fragmented, non-interactive, and enclavical [4].

It is this understanding of American urban growth that provides a basis for this thesis. Interest in this urban landscape began years ago upon my first visit to Boston in 1991. The juxtaposition between my experiences there and ones back home in suburban Houston made me look at my 'hometown' with a critical eye. I quickly discovered that my suburb, Clear Lake City—a Friendswood Development, did not connect to anything. In surrounding suburbs I also noticed the fragmented nature of development and the lack of comprehensive systems like bike trails, parks, and sidewalks. Moreover, I observed, there was nothing to do, nowhere to go. Sidewalks simply went around the corner and then another with nothing but skinny trees and backs of houses hidden behind concrete walls along the way. Compare this to Boston where I, a thirteen-year old, could engage in countless experiences such as museums, department stores, 'real' parks with fountains, gardens, and most importantly, people.

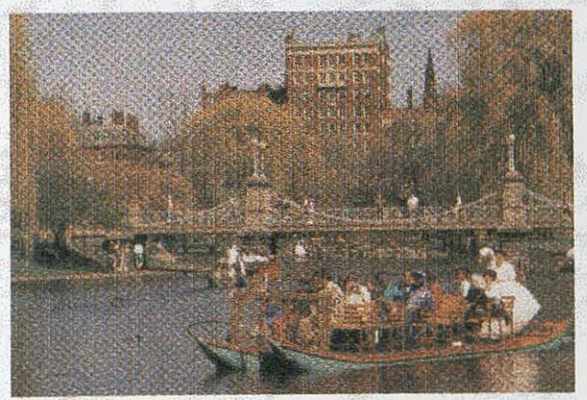

Figure 3. Boston Public Garden

I quickly began to over-dramatize my suburban experience to that of living in an Edward Hopper painting. Every time I would go out walking, and eventually driving, I would see nothing but a vacant, well composed landscape.

I blamed this on the car and speed and scale it brought to the land; quickly subscribing to the 'cities are designed for cars not people' school of critique, reasoning that if we could just start walking everywhere again, things would be O.K. Trips to Italian villages later on in college confirmed this belief. However, in this confirmation I was beginning to realize a shocking thing: America is not Europe. America will never be Europe.

I began to understand that while the car has had an undeniable impact on the land and its development, it **is** what the American city, particularly my native Houston, has grown-up with. This made me reconsider my problem with suburbia, which turned later out to be attached to issues of identity, interaction, and diversity.

Clear Lake City—a Friendswood Development, I began to notice, was nothing more than a name-brand which sold the image of a lifestyle rooted in family values and 'timelessness'. Living there just included me in the image but allowed me to participate in nothing outside of school and extra-curricular activities. Having 15,000 acres of houses may constitute itself as a political entity but not a community. A local community is not forged on the television set, or the living room, or online—it is forged in real, physical places outside the home that offer public experiences to a variety of publics. What good is privacy if there is no publicness?

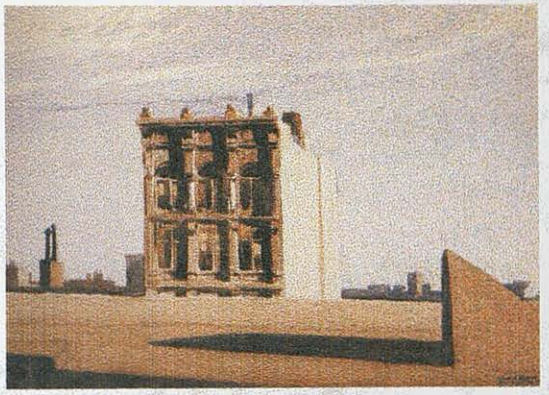

Figure 4. Edward Hopper,
Skyline Near Washington Square

This thesis sets out to see if alternative development patterns can be established to encourage human interaction in an existing, car dominated suburb. If successful, it will introduce new experiences, and expose existing diversities in a place that is sold on its image of sameness and conformity.

Notes

1. MacBurnie, Ian. "The Periphery and the American Dream," *Journal of Architectural Education* February (1995),135.
   This article offers a concise discussion examining the major development and growth themes of American cities.

2. MacBurnie, Ibid. 135.

3. MacBurnie, Ibid. 135.

4. MacBurnie, Ibid. 135.

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ABSTRACT

Thesis Statement: American suburbs are often criticized by journalists and some urbanists as being segregated, disconnected environments—those which lack variety and diversity in both their physical and socio-economic landscape. Existing nodes within master-planned communities can be diversified by interventionally concentrating and overlapping programs. In this way, a '*commonground*'—the space between private realms can be developed to connect, not separate, private and public.

Context Statement: Clear Lake City is a master-planned community in Houston, Texas, 20 miles South of downtown. Developed simultaneously with the nearby Bayport Industrial Park and N.A.S.A's Johnson Space Center, Clear Lake City has provided the housing and living amenities for these and many other growing Houston metropolitan area industries. As such, the development is home to over 40,000 residents.

Clear Lake City's convenience needs are addressed by sseveral shopping strip centers which are located adjacent to the subdivisions they serve. These commercial developments, however, lack strong vehicular, pedestrian, and identity connections to their neighboring subdivisions. Many of these strip centers are identical in program and physical layout—varying only in their choice of cosmetic 'clip-on' architecture.

The focus of this project will hinge around engaging these common suburban elements (along with added program) into their surrounding context to promote commonground and associated identities.

Action Statement: Action will be implemented at three scales.

Urban Scale: After an urban study of the context has been performed, a large scale interventional plan will be produced outlining the requirements for diversifying existing nodes and connecting them to their immediate surroundings.

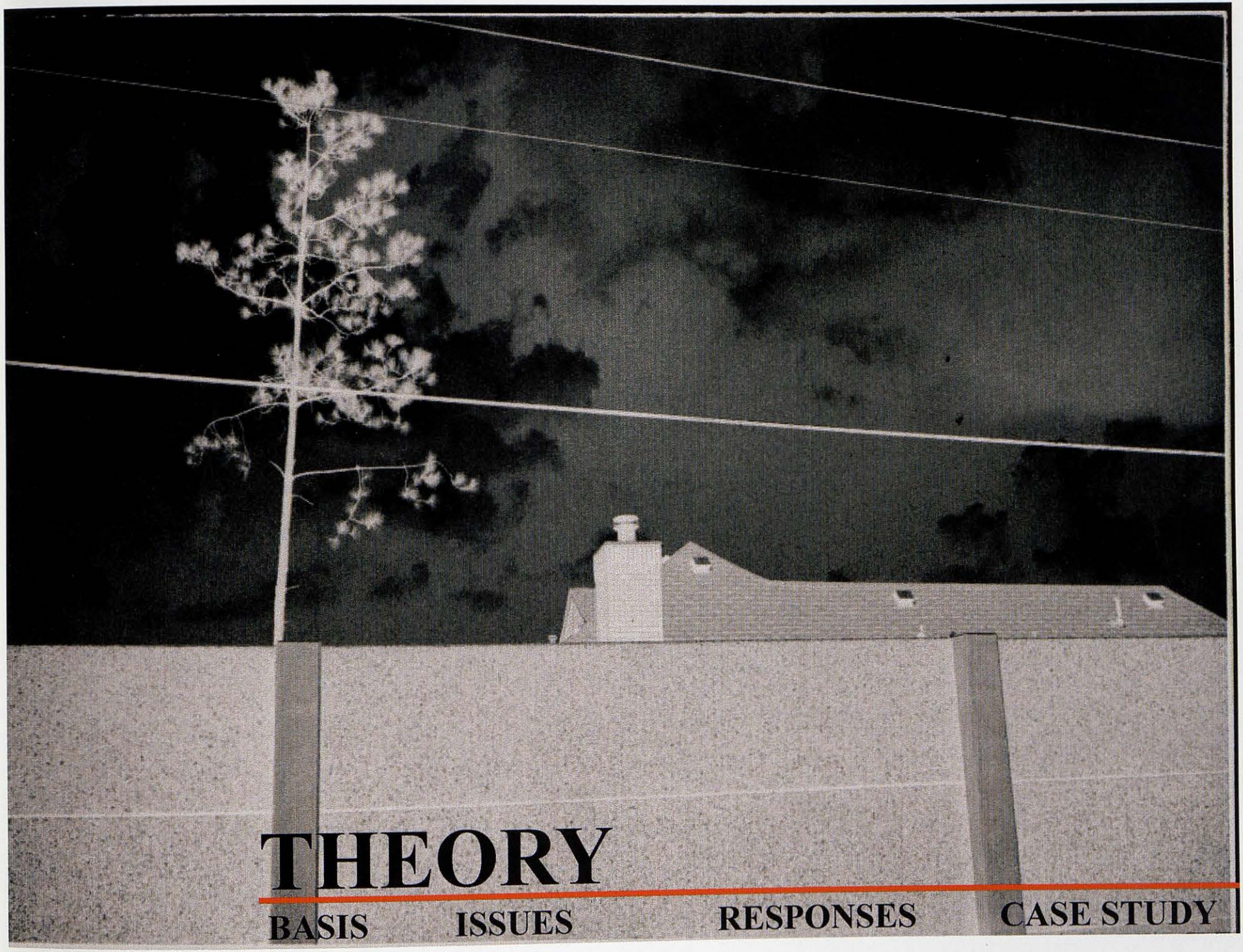
Nodal Scale: One node will be selected to demonstrate the implementation of the interventional plan. This closer study will focus on the specific programming of the node and various spatial relations will be explored between the proposed and existing programs.

Sub-Nodal Scale: Once an organization of the node has been developed, specific programs will be highlighted to demonstrate architectural responses that will support and further develop the nodal plan.

Figure 5. Urban Scale

Figure 6. Nodal Scale

Figure 7. Sub-Nodal Scale



THEORY

BASIS ISSUES RESPONSES CASE STUDY

Introduction

This investigation is about significantly changing the nature of suburban, master-planned communities.

The change itself does not occur architecturally with new and different forms.

The change itself does not occur with the rezoning of land.

Both of these things will happen, but they are just expressions of what will really change—the suburbanite's relationship to:

The Grocery Store
The Parking Garage
The Gas Station
The Movie House
The Church
The Restaurant
The Bank Branch
The Apartment Complex
The Liquor Store
The Single Family Home
The Nightclub
The Office
The Bookstore
The Cafe
The Cemetery

What fundamentally changes the suburbanite's relationship with all these things (called programs) is that these programs will begin to develop a relationship with each other through the development of something called 'commonground'.

This thesis is about expressing the relationships between programs and commonground—the space between. It is also about how these relationships are established through intervention with existing programs.

Commonground

The term 'commonground' is a concept derived here from discussions on public space, particularly from the writings of Lyn Lofland and Jurgen Habermas[1]. Commonground can be explained with two main points:

1) It is a space between private realms.
2) It requires the presence and interaction of people sharing the space.

While commonground finds its theoretical roots in the discussion of public space, it is not completely synonymous with it. Both share what at first may seem to be a peculiar quality—they are not public. They differ, however, in terms of acknowledging this fact.

After examining various definitions, one begins to realize that 'the public' is a relative condition defined by an unlimited number of qualifiers which can describe a group of people being related in some way. That is, the term 'public' is usually prefaced with some kind of descriptor (the *voting* public, the *American* public, the *shopping* public, the *disabled* public, etc.). There are other instances when the term's descriptor is implied. When a store says that it is 'open to the public', it is really saying that it is open to the *buying* public—people who can afford the goods and services of that business. In reality, we are dealing with 'publics' not a 'public'.

Therefore, 'the publics' are dependent on descriptors to exist.

With this understanding, one can see how the term 'public space' is misleading and unsatisfactory. 'The public', in this case, has no descriptors; the term makes no communication of the conditional nature that the space really has. In essence, the space is not described.

The term 'commonground,' however, begins to describe a relationship between the conditions which inform it. A sense of the common, or the shared, is expressed in the term. If a relationship is defined as having a commonground, it is defined in opposition of relationships which do not have anything in common with it. An exclusive or conditional nature is implied in the term, whereas the phrase 'public space' does not do this.

Therefore, 'commonground' is an expression of a public (s) in space. It is dependent on some kind of descriptor/ informer to exist, and that is fulfilled by program.

Program

The concept of program here is taken from the theoretical writings of Bernard Tschumi. His stress on the importance of program and event is what drives the existence of commonground. Tschumi identifies two definitions of program:

> "A descriptive notice, issued beforehand of of any formal proceedings...."[2]

> "An architectural program is a list of required utilities; it indicates their realtions, but suggests neither their combination nor proportion"[3]

Understanding the dependent nature architecture has with its program sheds light on the structure of commonground. Just as architecture needs its program, so does commonground; and program needs *its* people,

its selected users (members of a particular public or publics). As stated above, commonground can only exist with people and their interaction. Tschumi's program provides reasons for congregation and interaction.

Therefore, both commonground and architecture are dependent on program to exist.

This dependency does not exist for long. While program makes commonground possible, if the program changes, the commonground will change, and a changing commonground can in turn change program. In other words, once a commonground is established with a beginning program, it takes on a dynamic relationship with the program. This relationship is applicable to architecture as well.

Therefore, more than just a concept of space, commonground is a physical thing that can be subordinated to reflect the nature of program as well as empowered to affect it. Commonground is an expression of the relationship between program and its public(s). It has the power to be a hammer or a mirror with its program because it organizes it[4]. In this project, both can happen via program juxtaposition and time.

Intervention

The term 'intervention' is used to describe how the relationship between program and commonground will be implemented. Inspiration for this approach is drawn from a political and artistic movement that existed between 1957 and 1972 known as the Situationist International (SI). This group of artists, architects, writers, and filmmakers produced work that was critical of rational, modern planning; claiming that modern architecture was founded on control and surveillance and therefore removed elements of unpredictability and playfulness from the city[5]. In short, people were subordinated to the rigors of modernism. The situationists were concerned about restoring "choice, chance, and humanist power," going so far as to proclaim: "Put switches on the street lamps, so lighting will be under public control"[6]. Exactly how these goals were to be achieved could not be agreed upon by the situationists. However, one influential idea was of 'detournemet' or intervention.

'Detournement' comes from the French word 'detourner' meaning hijack, embezzlement, misappropriation, or corruption. The situationists used it to describe the "recycling of the old city and existing artistic resources"[7]. In essence, detournement favors layering and integrating the new with the old. It favors the juxtaposition of seemingly unrelated elements together to generate new

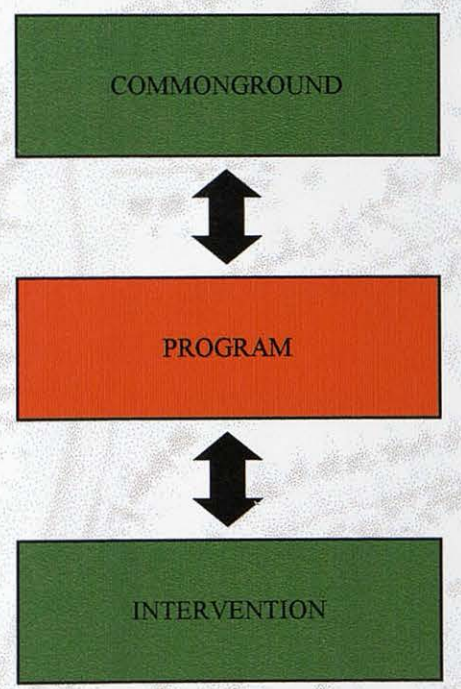
relationships which "supersedes the original elements and produces a synthetic organization of greater efficiency"[8].

The intervention, or, the detournement occurs with the juxtaposition between new and old programs, or unrelated programs, or both. In some cases, as the situationists well noted, the juxtapostion is the program or event itself. Tschumi recognizes this as a series of concepts regarding programming (cross-programming: a church is used as a bowling alley, transprogramming: a planetarium with a rollercoaster, disprogramming: planetarium becomes a rollercoaster and the rollercoaster becomes a planetarium)[9].

Therefore, intervention is the act of juxtapositioning programs in order to express new, previously unseen relationships.

Summary

1) Program establishes and changes commonground.
   Commonground changes program.
2) Intervention changes program
   Program inspires intervention
   Intervention can be program
3) Intervention changes commonground through changes in program.
   Commonground informs intervention through changes in program
4) Intervention and commonground require program.



Urban and Architectural Issue

As demonstrated, this project hinges around the issue of program in order to express commonground. Therefore 'program' is the overriding issue for the entire thesis at all scales.

Therefore: juxtapose a diverse range of programs; some related, some not. These new programs should overlap into existing ones; especially between private program types and more public ones (i.e. a grocery store that has an entrance off a residential street).

Potential Design Responses

These responses will solely be expressed in potential programs. In order to understand the change these programs will bring to the site, typical programs from the prospective sites are listed with the proposed interventional programs—juxtaposed for maximum impact.

Church (existing)
Nightclub
Grocery Store (existing)
Apartments
Restaurants
Bank Branch (existing)
Cemetery
Single Family Homes (existing)
Cafe
Office Space
Gas Station (existing)
Parking Garage
Liquor Store (existing)
Bookstore

Case Study

Urban Design Proposal for Chartres, France[10]

Bernard Tschumi, 1991

"Can a new urban strategy encourage a new type of architecture? Reciprocally, can one invent an architecture capable of generating a new urban lifestyle?"

This project pursues such questions through spatial organization of program. Three organizational elements are employed. The most dominant and representative of commonground is the 'long-cours'(shown in red). This contains such program as busniess centers, shopping and dinning, outdoor theaters, as well as sports and recreational facilities. The 'long cours' is intersected by an 'office grid' (shown in yellow) and the surrounding gridded landscape (shown in green) which is filled with housing, light industry, parks, recreational facilities and entertainment centers.

The 'long cours' comes within contact of all the organizing elements and close range of most of the plan's programs, thus demonstrating the plan being "based on intersection and superimposition rather than on segregation". This engaging of many elements is carried to an even larger scale with the development's orientatioin, guided by the axis of the axis of the 'long cours', towards downtown Chartes.

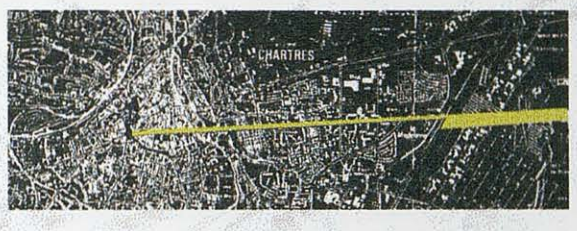


Figure 8.

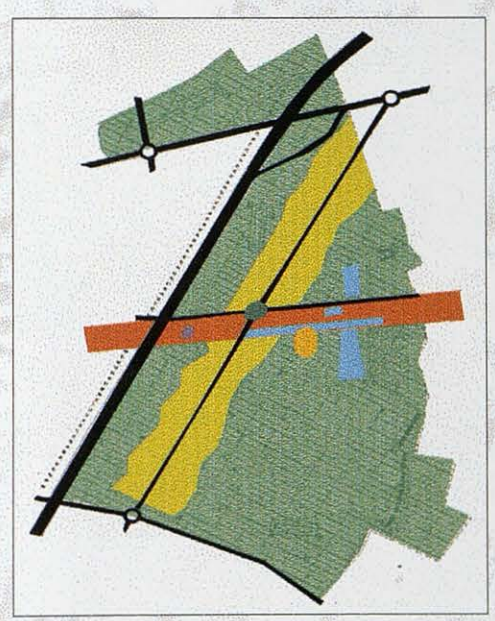


Figure 9.

Notes

1. The following works are credited for inspiring the concept of 'commonground'.

   Lofland, Lyn H. The Public Realm: Exploring the City's Quintessential Social Territory. New York: Aldine De Gruyter, 1998.
   Habermas, Jurgen. "The Public Sphere." Rethinking Popular Culture: Comtemparary Perspectives in Cultural Studies. Eds. Chandra Mukerji and Michael Schudson. Los Angeles: University of California Press, 1991.

2. Tschumi, Bernard. Architecture and Disjunction. Cambridge, Massachusetts: MIT Press, 1998. p112.

3. Tschumi, Ibid., p113.

4. The hammer/mirror metaphor is borrowed from the writtings of John Grierson who was an influential figure during the British Documentary Film Movement of the 1930's. Many times during this period, he proclaimed film was a hammer, not a mirror in regards to its societal role.

5. Sadler, Simon. The Situationist City. Cambridge, Massachusetts: MIT Press, 1998. p51.

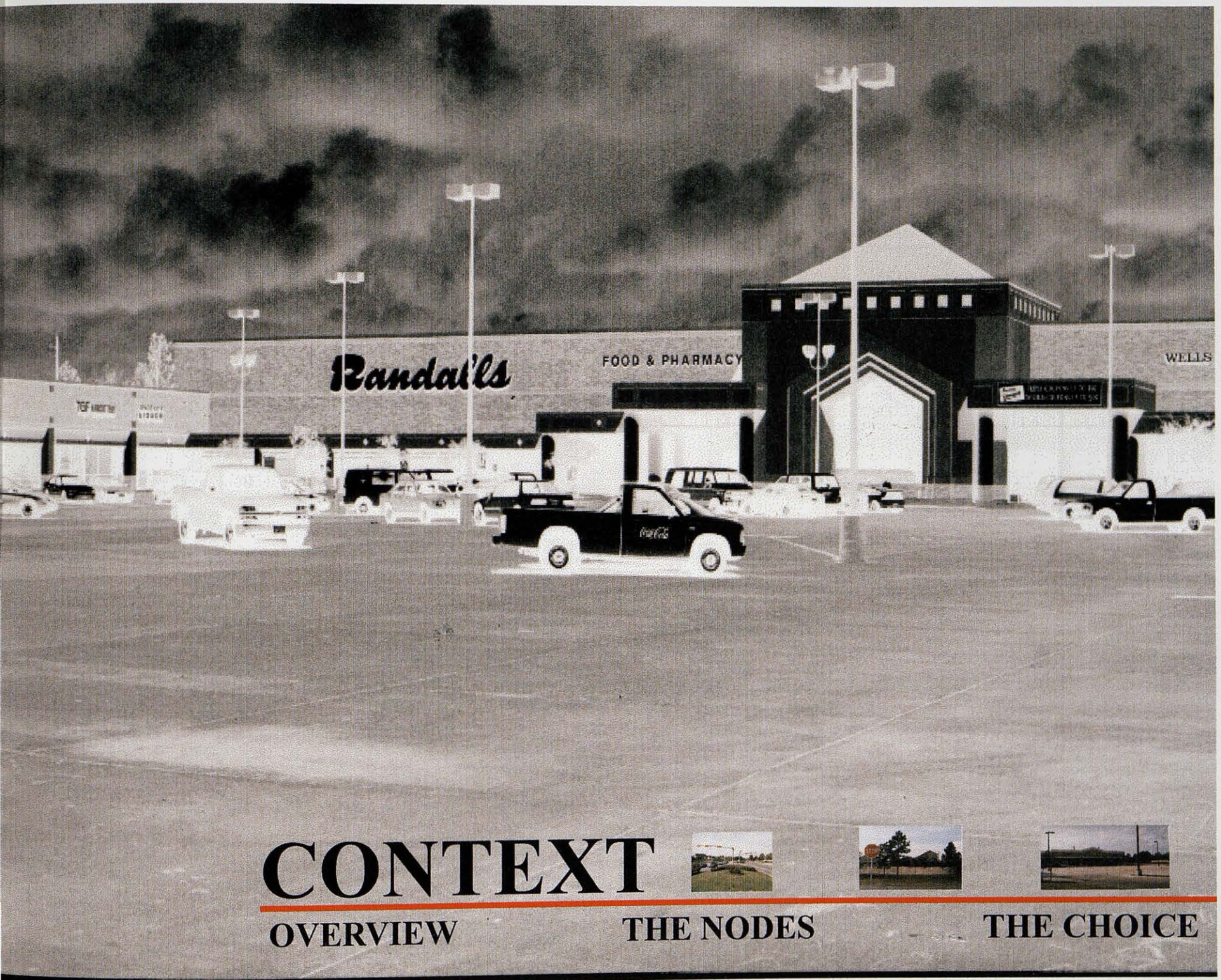
6. Sadler, Ibid., p110.

7. Sadler, Ibid., p107.

8. Sadler, Ibid., p108.

9. Tschumi, Ibid., p205.

10. All case study information taken from:
    Tschumi, Bernard. Event Cities. Cambridge, Massachusetts: MIT Press, 1994. 41-75.



CONTEXT

OVERVIEW THE NODES THE CHOICE

Overview

Introduction

Clear Lake City is a master-planned community in Houston, Texas, twenty miles South of downtown. Located near Clear Lake (the body of water fed by Armand and Taylor Bayous and Clear Creek), Clear Lake City and surrounding cities make-up the Clear Lake Area commonly referred to as 'Clear Lake, Texas' despite the fact there is no such governmental jurisdiction.
This sixty-four square mile area, now teeming with multiple industries such as N.A.S.A and the petrochemical industries, and home to over 60,000 residents, has only recently come into existence. Just over thirty years ago, the region consisted of cattle and rice farmers. A major force in the development of the area was the City of Houston and its business elite who had an interest in the region since the turn of the century.

Figure 10.

Early rice farmer's home near intersection of NASA Rd. 1 and I-45.

History[1]

To understand the growth of the Clear Lake Area, one must understand the growth of Houston. Since its beginnings in 1835, Houston's driving force has been its private sector—a group of businessmen interested in aggressive economic development. This interest has been expressed in two ways: 1) by diversifying the local economy by developing various industries, crops, and businesses, and 2) by 'capturing' land, which already had or had potential for such interests, through annexation. The mechanism of annexation satisfied the general perception that spatial and population growth were signs of a healthy economy. Aggressive annexation also provided a way for the city to keep its taxes low while increasing its tax base, and at the same time preventing future developments from incorporating –a phenomena which would limit the city's future growth towards new interests.

Today's Clear Lake area was born out this combination of interest-developing and annexation. It started simply with Houston investors introducing rice farming to the area around the turn of the century, and later with the addition of Ellington Air Field in 1914 (one of the nation's first military air fields and a much desired government dollar project brought to the area—thanks to Houston's political connections in Washington). As Houston's port grew, so did its interests with the Clear Lake area. The region possessed valuable coastline and much needed waterways for the port to grow into. At the time, around 1955, much of the land was owned by the Humble Oil Company (now Exxon). Humble bought the land in 1938 when oil was discovered and had been operating it since.

The City of Houston approached Humble with plans for expanding the port and developing an industrial complex nearby in conjunction with a 'new town'—a master-planned all inclusive community. Humble, after much negotiating, agreed and the plan went public in 1960, just shortly before the securing (through the City's Washington connections) of N.A.S.A's Johnson Space

Center on the shores of Clear Lake.
The 'new town' in the middle of it all was to be Clear Lake City, a community to be developed by the Friendswood Development Corporation (then a subsidiary of Humble Oil). Construction of the first phase began in 1963, and Clear Lake City was considered to be one of "largest and most completely planned communities in the nation"[2]. It was designed for over 40,000 homes in addition to shopping centers, office buildings, hotels, a hospital, supporting medical facilities, utilities, roads, schools, a university, churches, parks, and golf courses. Clear Lake City and the surrounding area grew successfully, and in the mid 1970's, Houston expressed its intention to annex. After years of court battles with the city and attempts by Clear Lake residents to incorporate, Clear Lake City was annexed into Houston in 1977.

Demographics (derived from 1997 census projections)

Total Population:	40,936
Population over 25 yrs old	26,453

Income

Median Income	$73,736
Percent of pop. over 25yrs old that makes over 75K:	29%

Education (for pop. over 25 yrs. old)

Some college:	22%
Bachelors	40%
Graduate	18%

Race

White:	81%
Hispanic	9.2%
Asian	8.2%
Black	6.5%
Other	3.7%

Clear Lake City is an middle/upper middle class, white community.

Figure 11.

The Middle Class

What follows is a brief survey of popular stereotypes and themes often associated with the middle class.
A classic look at this class comes from observations made by Herbert Gans in his well-known book *The Levittowners*. While published in 1967, this study still nicely outlines many of the stereotypical values and attributes of this class.
The middle class is a predominantly white, well to do community of professionals whose realm is suburbia. An important attribute is independence which is achieved through a college education. Intensive education is an important theme Gans brings up again and again. Parents aggressively peruse it for their children and expect their children to perform well in it so that they may become "a totally autonomous individual who can operate at all spheres of life, especially rewarding professional careers"[3].
The independence developed often makes for a weak connection with the family, particularly the extended family for which there is little in middle class life; the smaller nuclear family is often the focus. Relationships outside the family are typically forged in organizations like church or the P.T.A. Here friends are made with those with similar interests.
Gans polarizes the class into conservatives and liberals. The former leads sober controlled lives with little socialization. They have adopted a kind of Calvinist-Puritian work ethic and value set. Conservatives are usually stereotyped as being managerial in occupation—ones who prefer membership to the country club rather than the museum. Liberals on the other hand, are described as being much more free, leading an aggressive social life. They are professionals with graduate level educations who typically organize elements of high culture such as lectures and take an interest in politics and decision-making.
Others have written on the middle class since Gans, John Kenneth Galbraith describes them as ones who subscribe

to a 'culture of contentment'. Those of this culture are purely self-interested and are structured not to deal with problems directly but instead to 'pass the buck' down the chain of command[4]. Those not of the middle class are therefore judged good or bad depending if they serve their state of contentment or not. The government, for example, is liked and supported when they develop programs which support contentment like the military; however the auspices of tax collectors is not liked—they disrupt contentment, despite the obvious connection that they collect the taxes to support the military.

Other contradictory observations are made claiming that middle class suburbanites "lack personal conviction.... and care a great deal about material consumption and security yet without the risks of individual ambition[5]. At the same time others like Barbara Ehrenriech note the nature of the middle class as being one of constant individual re-invention: "In this class, no one escapes the requirements of self-discipline and self-directed labor"[6]. This coincides with Gans earlier observation of the Calvinist-Puritan work ethic employed in order to lead successful, comfortable lives.

Suburban environments lend themselves nicely to this relatively conservative group of hard working individuals. There is a structure and consistency in the landscape that does not call attention to itself and seems more than willing to hide individualism rather than promote it. In a promotional video produced by The Woodlands Corporation for their master planned development North of Houston, *The Woodlands*, the idea of individualism is presented again and again in the context of education with private schools and personalized programs, and of homes which can be custom built so that one can have a home (and community) that reflects your *personal* style of living—despite the fact that all the homes shown in the video look very similar[7]. The dual message throughout was: You are an individual, you will be taken care of. The overwhelming success of such communities, Clear Lake City included, indicates the embrace of such a lifestyle.

Clear Lake City—a Physical Description

The 15,000 acre development is organized by a large grid of local roads which contain sixteen subdivisions, with five elementary, two intermediate schools, one high school, and one university campus (University of Houston at Clear Lake). Bay Area Blvd., along the southern edge of the development, is the only one of these roads to pass completely through Clear Lake City connecting the city of Friendswood to Pasadena. It is along this road that much of the commercial office space is located along with several convenience shopping strips. The rest of the development is serviced with six shopping strip centers which are normally placed at the intersection of local roads. Recreational parks (which are usually nothing more than soccer fields) are located in every subdivision.

The Clear Lake City landscape can be best described as homogenous, diffuse and disconnected. Many of the shopping strip centers, evenly dispersed between large residential subdivisions, offer the same goods and services (groceries, drugs, etc). This lends to a certain repetitivity which is stereotypically viewed as suburban. The lines between repeating elements are drawn very clearly and rarely ever blurred—each element is autonomous and independent of what surrounds it thus limiting any relationships to occur between or among

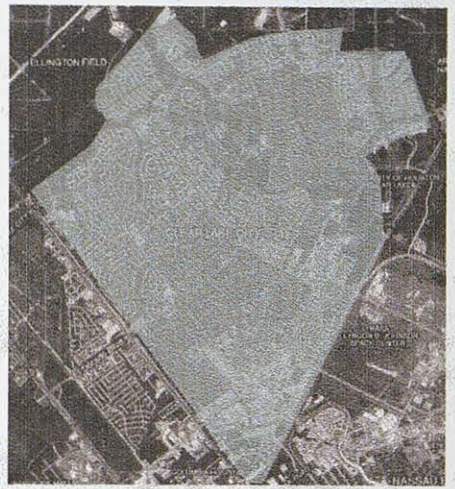


Figure 12. Clear Lake City

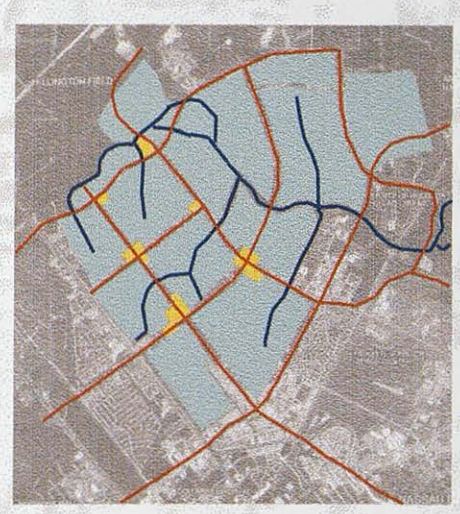
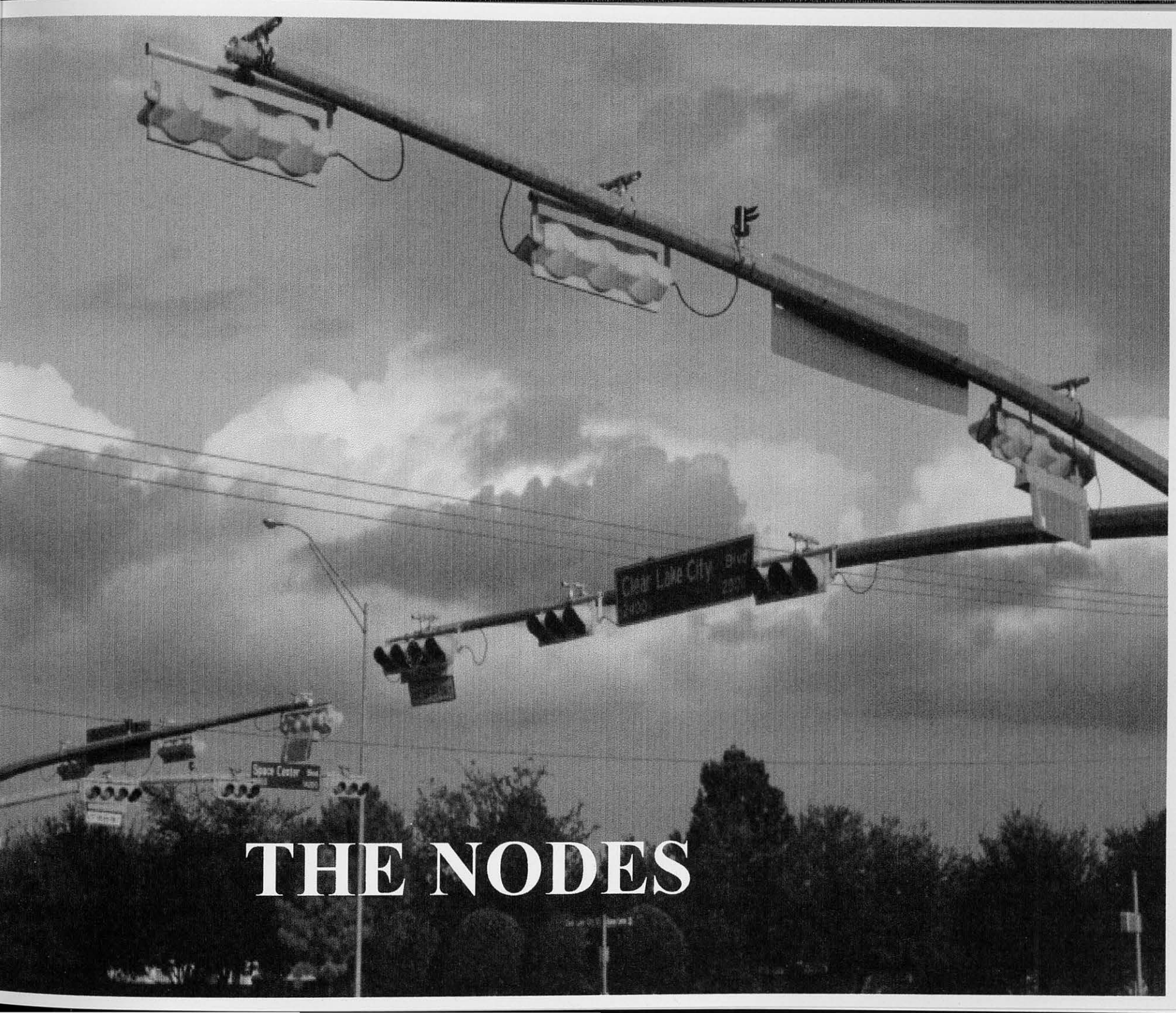


Figure 13. Major roads (red), Nodes (yellow), and Bayous (blue).

elements. For instance, a shopping strip center adjacent to a subdivision makes no connection with it. A resident who lives next to the center and wishes to patronize it must arrive by car since the subdivision is often walled off from the outside and pedestrian sidewalks only follow the long-winding curvilinear streets in and out of the neighborhood.

Car transportation is an important issue here due to the fact that places of employment and entertainment, while nearby, are outside the confines of the development. The car is the dominant form of transportation for getting to Clear Lake City and moving within it. Pedestrian concerns are usually dealt with in a cosmetic rather than functional manner. While sidewalks do parallel roads, they are not efficient means of travel for pedestrians. There are places in Clear Lake City where sidewalks begin to complement the road way system—running perpendicular to the roads, becoming 'short-cuts' for pedestrians and cyclists, but these examples are few and far between and rarely linked to form any kind of comprehensive network.

What is left between roads, houses, and shopping centers is a park-like landscape filled with wide, grassy medians and generous right-of-ways along local roads. It is a very designed and manicured environment meant to be looked at and not physically engaged.



THE NODES

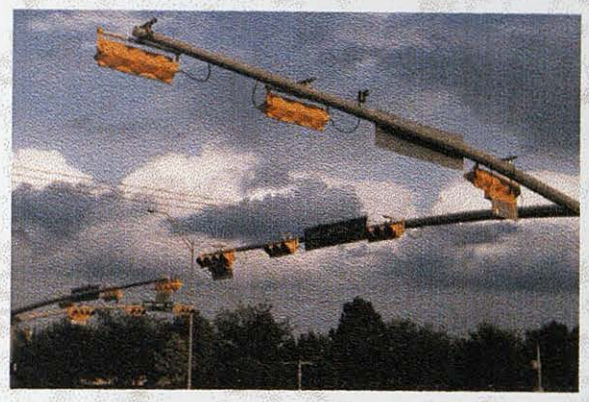
What are Nodes?

Nodes are defined by Kevin Lynch as:

"strategic foci into which the observer can enter, typically either junctions of paths, or concentrations of some characteristic"[8]

"Nodes, like districts, may be introvert or extrovert"[9]

These will manifest themselves in Clear Lake City primarily as the shopping strip centers found at the intersections of major thoroughfares in the development. They are programmatically different as well as physically separated from their surroundings, and therefore introverted.



The Nodes

The following six nodes will be examined for implementation of new programs and means of connections to their surroundings and the rest of the city. This will comprise the Urban Scale studies of the project. One of these nodes will be selected to be further studied at a Nodal Scale to develop and organize suggested program. It will then be examined more closely at a Sub-Nodal scale to begin consideration of architectural concerns among the new and existing programs.

Intersection of El Dorado Blvd. and El Camino Real

Intersection of El Dorado Blvd. and Space Center Blvd.

Intersection of Pineloch and El Camino Real

Intersection of Pineloch and Space Center Blvd.

Intersection of Clear Lake City Blvd. and El Camino Real

Intersection of Clear Lake City Blvd. and Space Center Blvd

The following descriptions list only non-residential elements; quadrants of the intersection which are not described will be assumed.

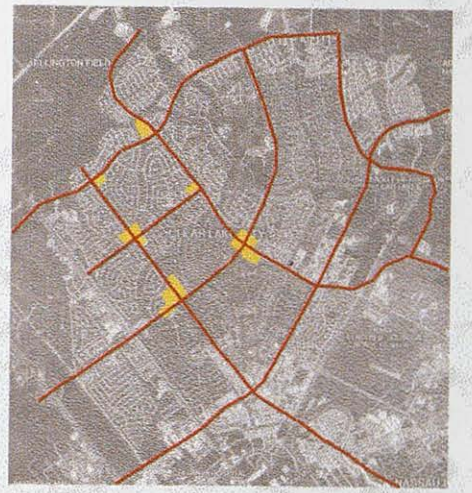


Figure 14. Clear Lake City

The accompanying mapping exercises are employed to demonstrate how the existing nodes are physically segregated from surrounding subdivisions. This lack of connection is reinforced by street layout and fences enclosing the subdivisions.

Intersection of El Dorado Blvd. and El Camino Real

Developments listed below occupy only two quadrants of the intersection.

Comprised of: Clear Lake Intermediate School
St. Bernadette Catholic Church
Church of Christ
Clear Lake City water tower
Shopping center
convenience store
Pizza delivery
Martial arts classroom
Florist

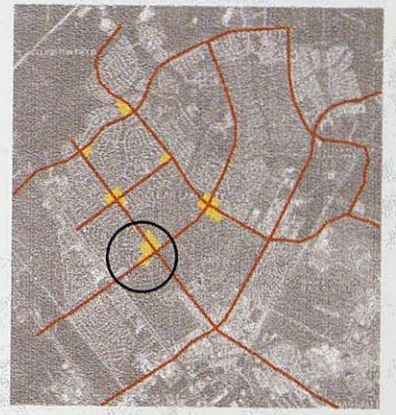


Figure 15. Clear Lake City

Green = Node outline
Red = Intersection streets
Yellow = Residential and Secondary Streets
Purple = Node buildings
Black = Fences

Figure 16.

St. Bernadette's

Shopping Center El Dorado

Intersection of El Dorado Blvd. and Space Center Blvd.

Developments listed below occupy all four quadrants of the intersection.

Comprised of: Kroger's Grocery Store shopping center
- Beauty Parlor
- Travel Agency
- Antique Shop
- Video Rental Store (non chain)
- Dry Cleaners
- Baskin-Robins Ice Cream
- Bank Branch

Shell Gas Station

Montessori School

Clear Lake Baptist Church

Shopping Center
- Blockbuster Video
- 2 Dry Cleaning Services
- Doughnut shop

Green = Node outline
Red = Intersection streets
Yellow = Residential and Secondary Streets
Purple = Node buildings
Black = Fences

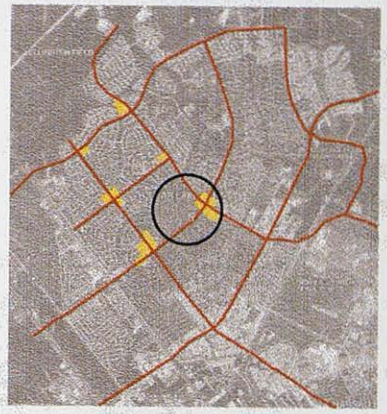


Figure 17.

Looking East towards Blockbuster

Looking West towards Krogers

Intersection of Pineloch and El Camino Real

Developments listed below occupy three quadrants of the intersection.

Comprised of: Post Office
Professional Medical Center
Diamond Shamrock Gas Station
Shopping Center
Perri's Grill
Dry Cleaners
Insurance Company
Bank Branch
Day Care Facility

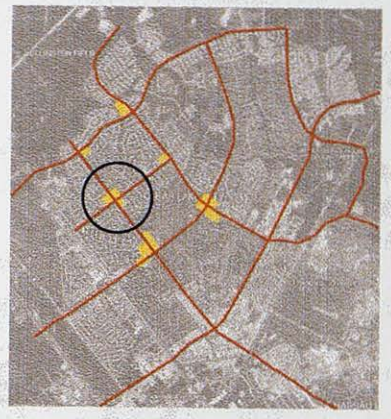


Figure 18.

Green = Node outline
Red = Intersection streets
Yellow = Residential and Secondary Streets
Purple = Node buildings
Black = Fences

Professional Medical Center

Shopping center with bank

Intersection of Pineloch and Space Center Blvd.

Developments listed below occupy only one quadrant of the intersection.

Comprised of: Shopping Center
Bank Branch
Liquor and Deli
Various Retail

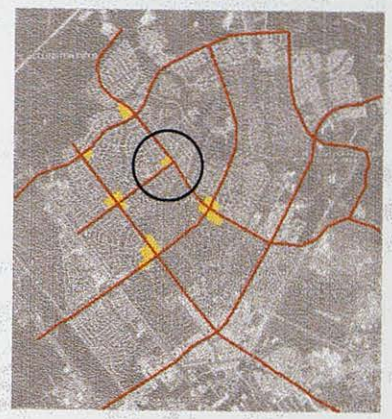
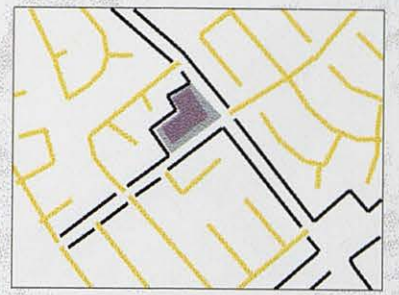


Figure 19.

Green = Node outline
Red = Intersection streets
Yellow = Residential and Secondary Streets
Purple = Node buildings
Black = Fences

South façade of Pinloch Center

Corner of Pineloch Center



Intersection of Clear Lake City Blvd. and El Camino Real

Developments listed below occupy only one quadrant of the intersection.

Comprised of: Blockbuster Video
Dry Cleaners
Oasis Coffee House
Denstist's Office
Medical Supply Store
Ventenary Clinic

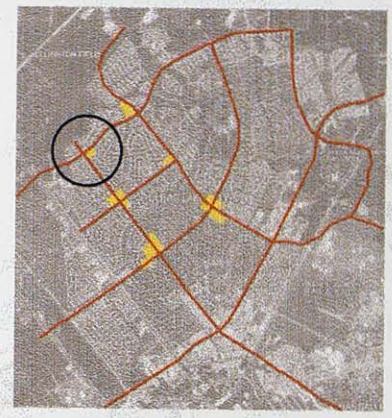
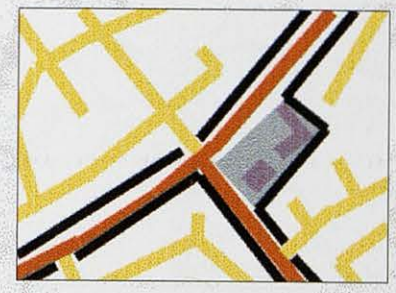


Figure 20.

Green = Node outline
Red = Intersection streets
Yellow = Residential and Secondary Streets
Purple = Node buildings
Black = Fences

Dentist, Vet, and Medical Supply

Blockbuster Video



Intersection of Clear Lake City Blvd. and Space Center Blvd

Developments listed below occupy only one quadrant of the intersection.

Comprised of: Randall's Grocery Store Shopping Center
Bank Branch
Liquor Store
Various retail
Shell Gas Station

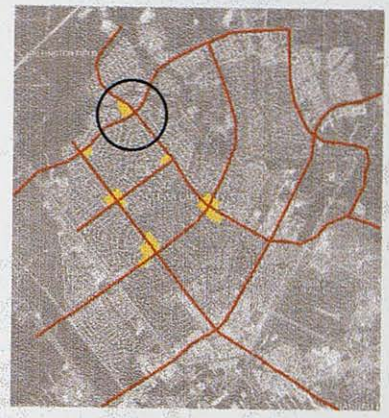
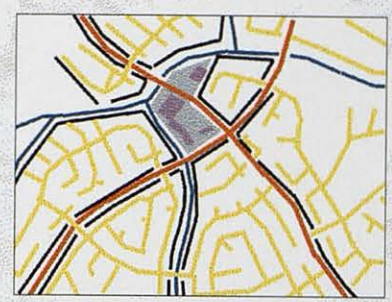


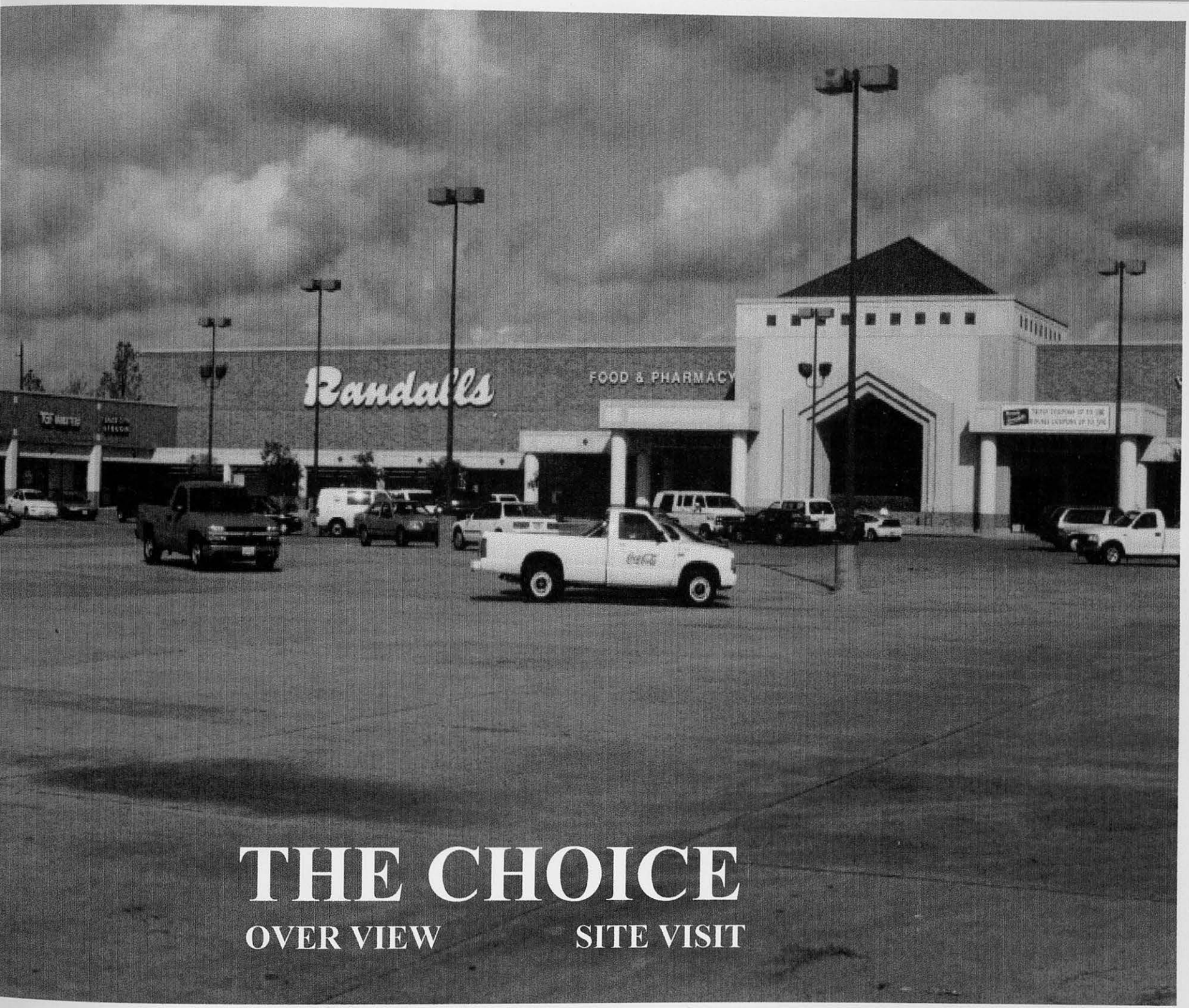
Figure 21.

Green = Node outline
Red = Intersection streets
Yellow = Residential and Secondary Streets
Purple = Node buildings
Black = Fences
Blue= Bayous

Randall's Shopping Center

Church





THE CHOICE

OVER VIEW SITE VISIT

The Choice:

Intersection of Clear Lake City Blvd. and Space Center Blvd

This intersection was chosen because it best represents the typical programmatic make-up of nodes in Clear Lake City. It contains a large grocery store, gas station, and various retailers. Like other nodes, it is near a church and is surrounded by subdivisions. It is also favored because of its location near two drainage bayous—a potential pedestrian artery once the 'urban scale' plans have been implemented.

Another positive quality of this site is the undeveloped land to the north, across the path of the bayous. This piece of land is about one and a half times larger than the developed node described above. The fact that it is undeveloped and green already makes it an attractive complement to the soon to be redeveloped node to the Southeast.

The idea has developed that this project could be about two nodes in one, or rather, a node with two foci. One can be developed, dense and active; the other quite the opposite, very park-like and open. In order for this to read as one defined node, the two will have to be linked;

Figure 22. The site beyond the intersection.

therefore placing them in some kind of a relationship which produces a single unifying quality. This is what is accomplished with juxtaposition. Things that do not seem to go together, at first, are later seen as inseparable; the two elements define each other.

What could this larger piece of land be? Clear Lake City already has plenty of neighborhood parks (18 and counting), what would make this different? Its function.

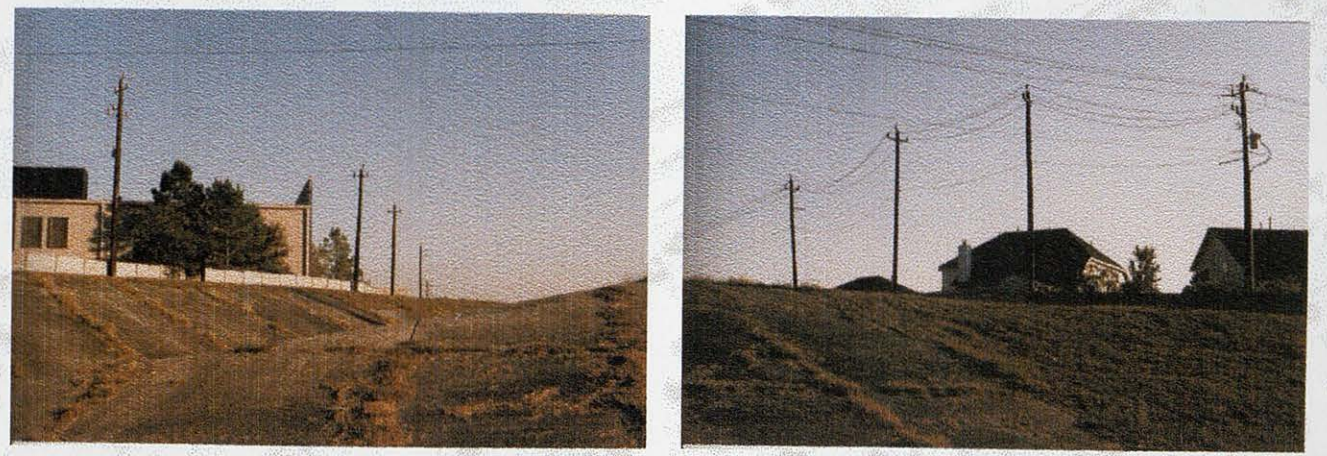
This would not be a park for little league sports—to be used once a week and abandoned. It would be a park which can always be used, because it can be engaged in a variety of ways (physically, mentally, spiritually).

It could be a cemetery.

SITE VISIT

BUILT AND UNBUILT

Looking North towards Randall's Shopping Center from Clear Lake City Blvd.



Where two bayous meet, division occurs.

Bayou Link Between Node Foci.....

Arrows indicate origin of photograph

Looking back at Randall's grocery store from the tip of undeveloped land.

From the same point, looking towards the right across the bayou.

From the same point, to the left, a play ground among the last set of houses before.....

.....undevelopment.

Notes

1. All information in the history section is derived from:
   Bacon, Amy L. From West Ranch to Space City
   (A masters thesis in history) Houston, Texas:
   University of Houston, 1996.

2. Bacon, Ibid., p70.

3. Gans, Herbert J. The Levittowners: Ways of Life in a
   New Suburban Community. New York: Vintage
   Books, 1967. p30.

4. Galbriath, John Kenneth. The Culture of Contentment.
   New York: Houghton, Mifflin, 1992. p65-8.

5. Rowe, Peter G. Making a Middle Landscape.
   Cambridge, Massachusetts: MIT Press, 1991. p37.

6. Ehrenreich, Barbara. Fear of Falling: The Inner Life of
   the Middle Class. New York: Harper Perennial, 1990.
   p.15.

7. *The Woodlands: A real hometown.* Mitchell Energy Corp.
   1990.

8. Lynch, Kevin. Image of the City.
   Cambridge, Massachusetts: MIT Press, 1960. p72.

9. Lynch, Ibid., p77.

ACTION

URBAN NODAL SUB-NODAL

Action Mission Statement

To reconfigure existing suburban nodes within a master-planned community to be conducive to supporting commonground through intervention, juxtaposition, and diversification of program.

URBAN SCALE
ISSUE
CASE STUDIES

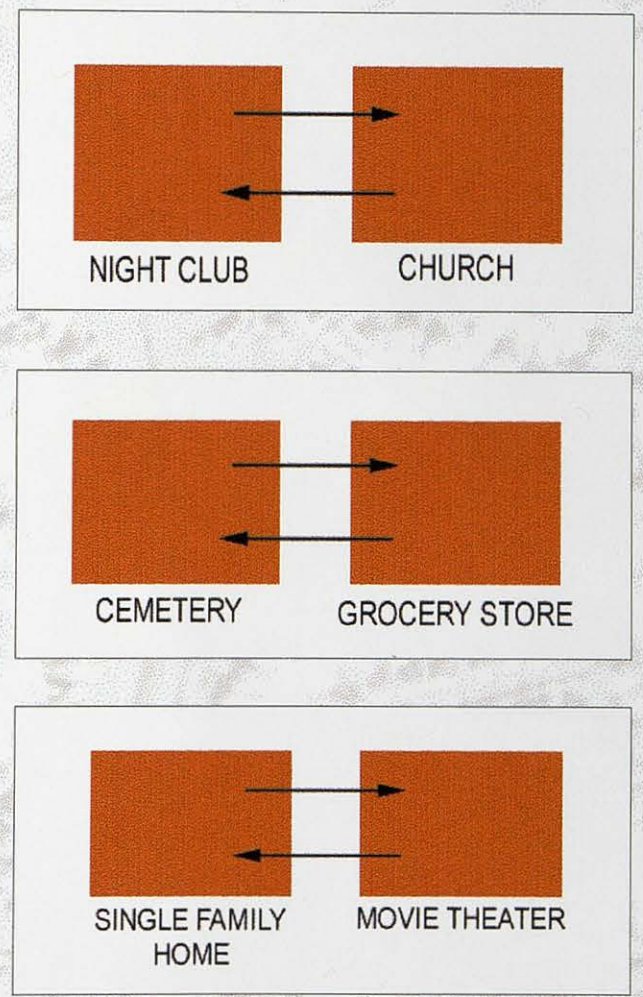
Introduction

Before detailed design objectives are drawn up, large urban scaled objectives must be conceived. As discussed earlier, 'program' is the overriding issue throughout the project. Therefore, a 'programmatic attitude' must be developed to direct the issues that will arise. Ideas of juxtaposition, connection, and projection are discussed here to explain the overall goal of the project and frame the detailed issues which follow at smaller scales.

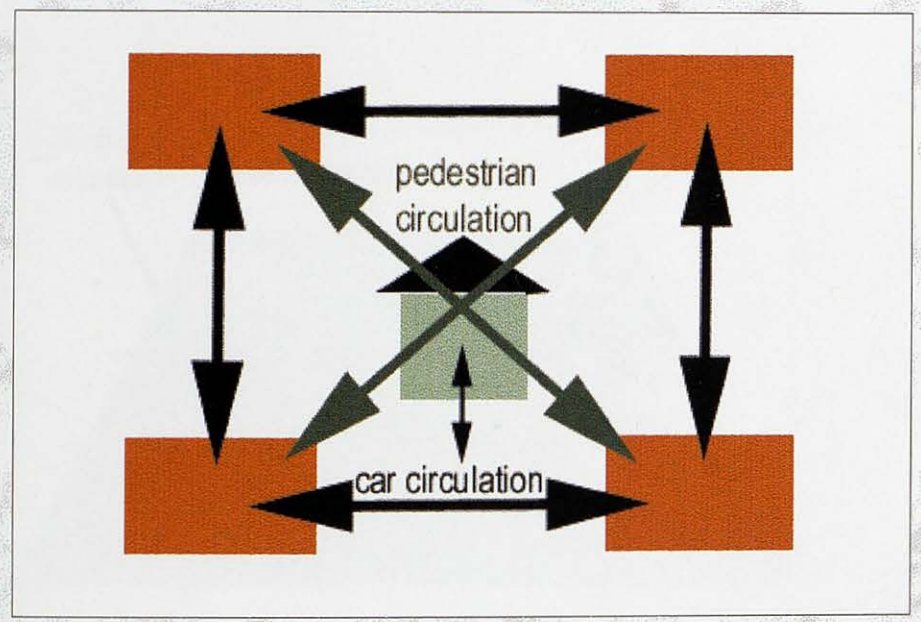
Program: Goal—Juxtapose a diverse range of programs; some related, some not, to generate an identity particular to each node.

Performance Requirement 1—Juxtapose new and different programs with older, conservative ones.

Through juxtaposition, previously held views and preconceptions are challenged—both new and old programs become new; one program brings out something of the other.

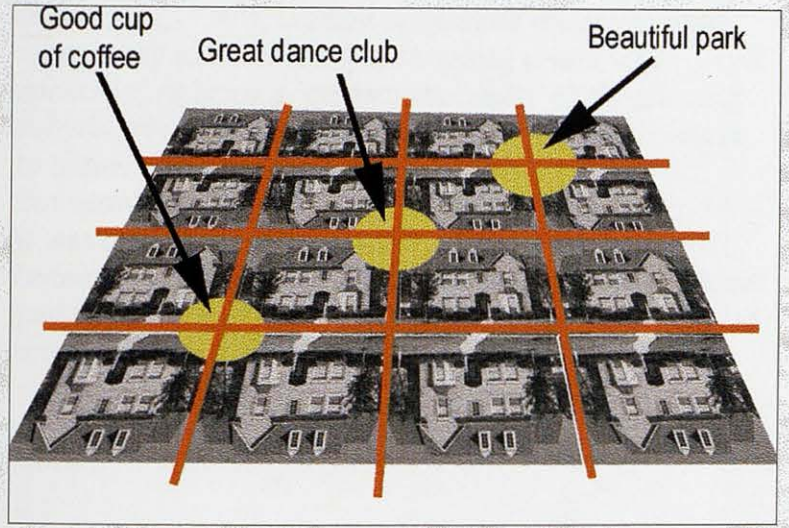


Performance Requirement 2—Connect programs to each other and surrounding context via paths for both cars and pedestrians. Path systems should be developed for both and be *complementary* to each other to allow efficient travel for both.



Performance Requirement 3—Project the image of each node through its program. Let it develop its own identity over time and become known as the place to go (fill in the blank).

Do not reconfigure each node in the same way (that has already been done). Develop and design each node to have its own set of unique programs. Some can be 'flashy' and aimed at a large, regional audience (like a movie theater or a nightclub). Others can be low-key and aimed at a specific group of people, who are perhaps just locals (like a coffee shop or a Zen center).



Case Studies

River Oaks Shopping Center, Houston, Texas[1]

Oliver Wilson, architect with Stayton Nunn, and
Milton McGinty, associated architects, 1937

Program

The River Oaks Shopping Center is a well-known development outside of downtown Houston which is considered by many to be an anomaly for its combination of program mixture and striking design.
Its beginnings were with the development of River Oaks in the early 1930's; the first large-scale master-planned community in Houston. The shopping center was conceived as being a 'community center' to the growing suburb, by offering a variety of goods and services close to home; thus avoiding the five minute drive into downtown.
It was due to the expressed relationship to the car, that it became successful. The shopping center offered off-street parking that ran along the store fronts, allowing patrons to drive up to the store of their choice. Two gas stations

were also included in the design that straddled the intersection of Shepherd and Houston-bound West Gray street.

Its range of programs and large sweeping design (inspired by a similar shopping center proposal by Richard Neutra) stood in stark contrast to the surrounding pitch-roofed houses of River Oaks just across the street; however the attraction of the center was intended from day one to attract more than just the local. Hugh Potter, the center's developer, conceived the shopping center with its convenience stores, clothiers, gift and antique shops to bring in prosperous citizens from throughout the city. The idea of pursuing an audience beyond the local boundaries is still in practice today. After spending a number of years in a state of decline, the property was acquired by a new owner, and changes were initiated. The center was reconceived as an art and entertainment district with the introduction of such programs as art galleries, dance studios, ethnic restaurants, clothing boutiques, and coffee shops; attracting customers from all over the greater-Houston area. Its parking lots (which are 25% larger than what The City of Houston currently calls for) are never in short supply; thus demonstrating how programs literally make the place.

Alexanderplatz, a proposal for Berlin, Germany[2]

Daniel Libeskind, early 1990's

Program

This proposal by Daniel Libeskind is studied for its sensitive treatment of existing program within his interventional scheme. Alexanderplatz was the center of the old Berlin—the Berlin before the wall. With the reunification of Germany, this center is finding significance again. During the years of Soviet rule, the old center found itself the site for state public housing which was expressed in isolated, repetitive building blocks, representative of the best housing in the DDR regime. The housing still stands today, and in Libeskind's plan would continue to stand. "My proposal calls for immediate interaction of the existing with the new, with the possible. I proposed to supplement and to alter, but to deal with what is there today". He continues:

> "I am not a fan of East German architecture and I do not think it has much merit architecturally, but this is not a question of aesthetics. The issue is the displacement of tens of thousands of people who have lived on this for fifty

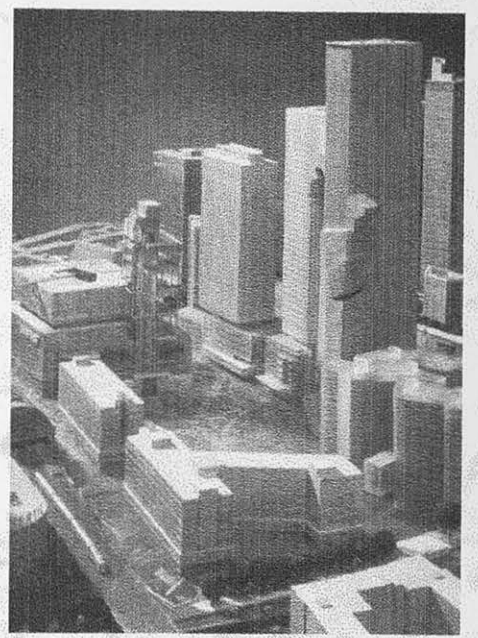
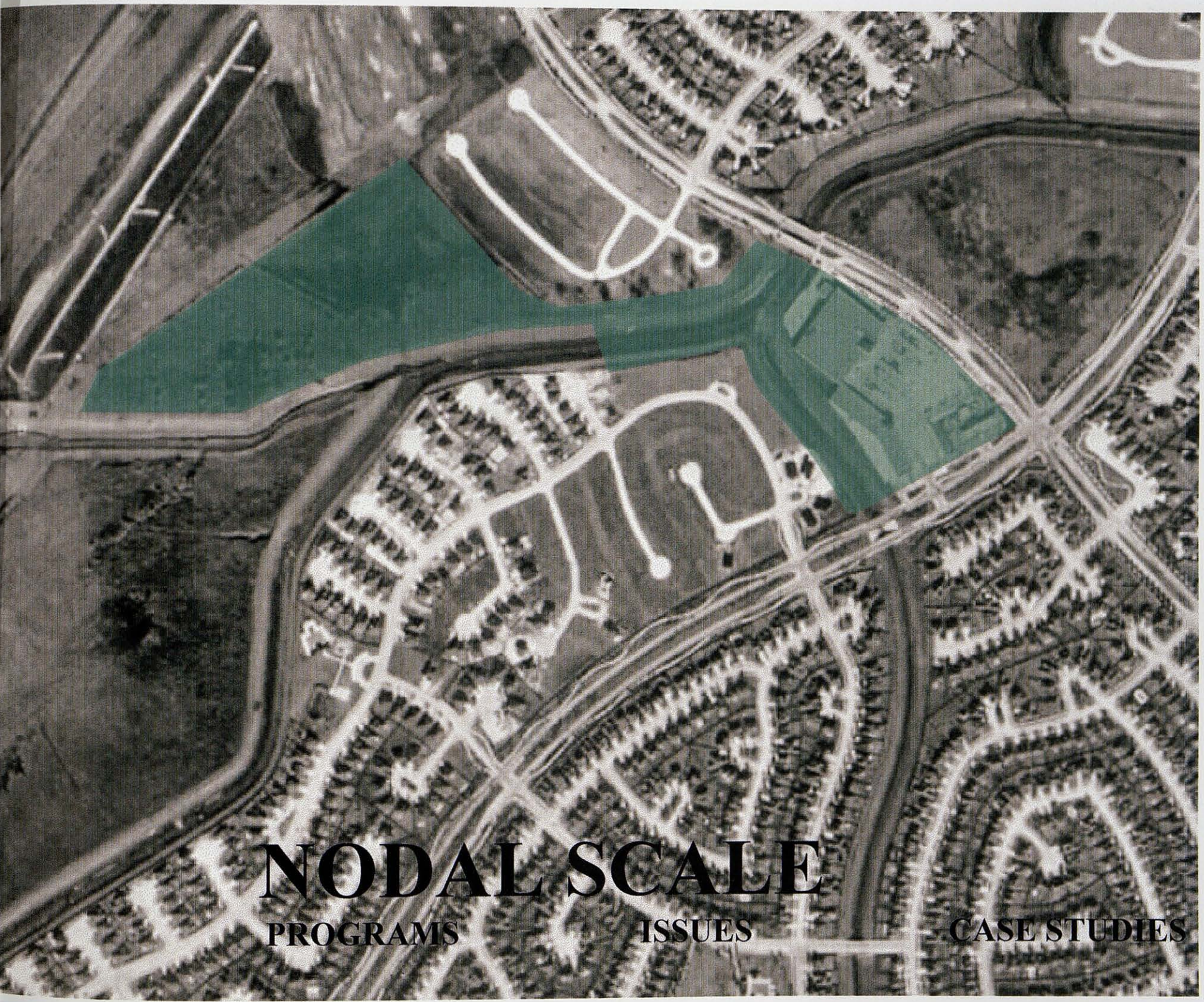


Figure 22.

years. This housing was built as a showcase for the DDR regime. This was the best housing, the best place to live. The radical feature of my idea in view of Berlin politics is to advocate the acceptance of the existence of these vast housing estates, and to accept the fact that people live there and their lives have to be bettered, and that these lives have a memory of at least two generations....This is an important point: Planning and architecture should not condone demolition; they should deal with construction and the incorporation of difficult conditions in a new and ecologically responsible manner"

This sensitive understanding of the existing residential state and the memories it holds—no matter what the containers—must be heeded. Respect the past: engage it.

Suburban homes, like the DDR housing, are part of an existing state which must be critically engaged.



NODAL SCALE

PROGRAMS ISSUES CASE STUDIES

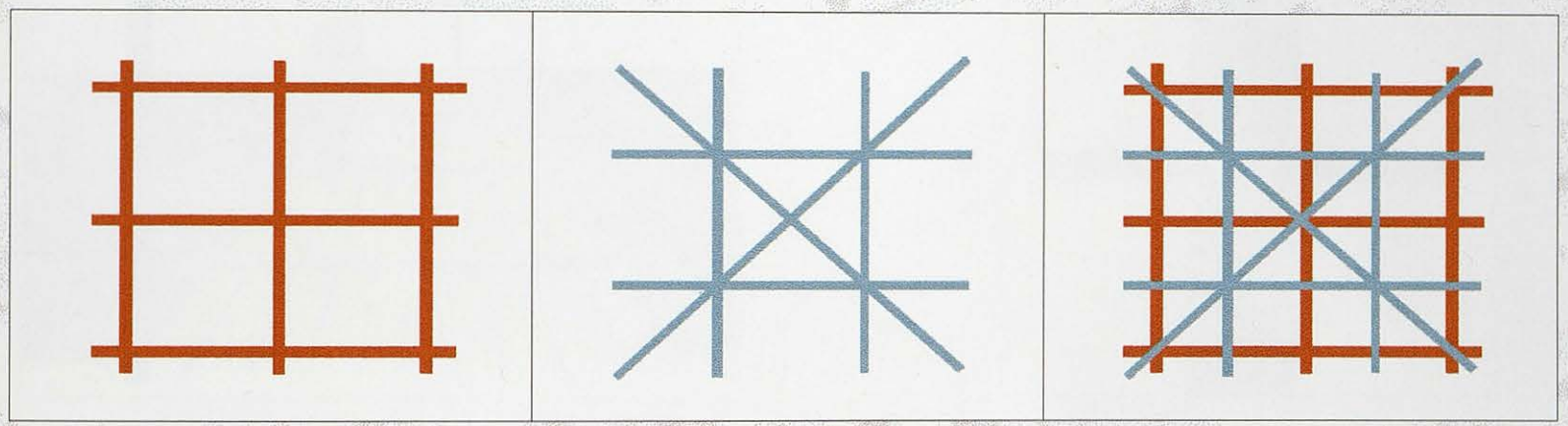
Introduction

Now that requirements have been laid out to organize the reconfiguration of the nodes at an urban scale, more specific issues can be introduced and examined at this smaller, nodal scale.

Node Issues:
Circulation
Parking
Image
Interaction
Privacy

Circulation: Goal—All program should be serviced with access for both vehicles and pedestrians in a way pedestrians are not subordinated to vehicular needs.

Performance Requirement 1—Create a complementary network of paths among vehicles and pedestrians.

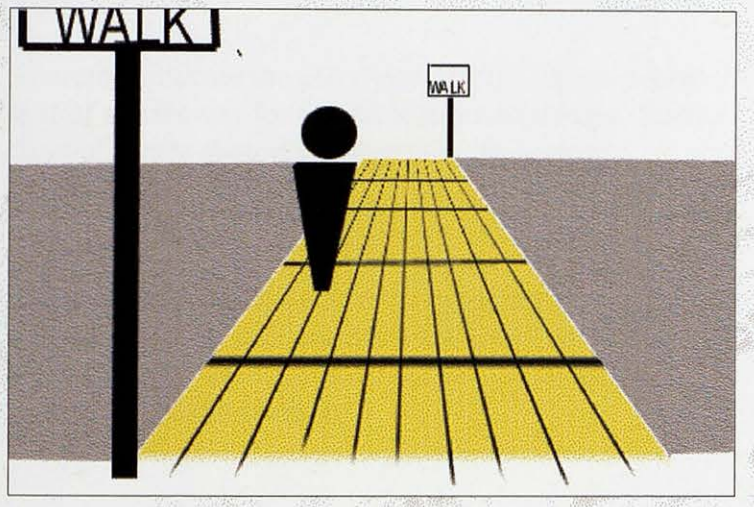


Car Circulation

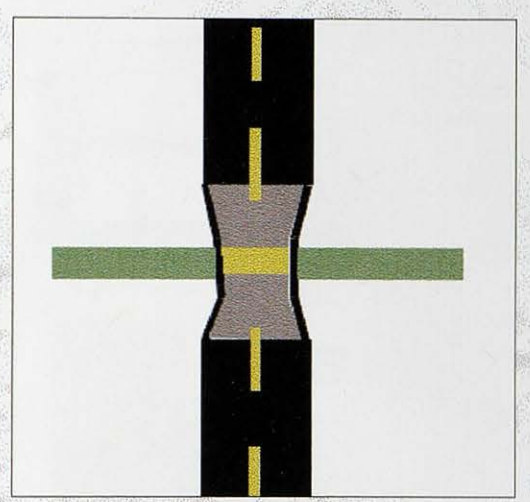
Pedestrian Circulation

Combined Networks

Performance Requirement 2—When car and pedestrian paths intersect, design the connection to be pedestrian friendly.



Clearly express crosswalk with different materials and 'walk/don't walk' signs.

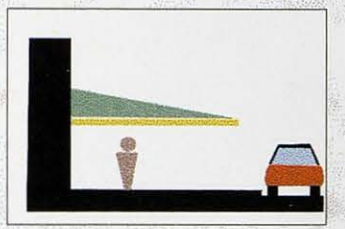


Design streets to narrow and change in material and color when approaching a crosswalk.

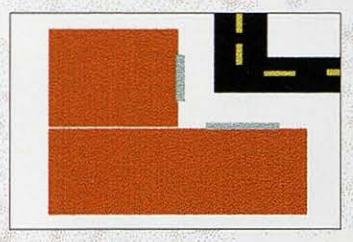
Performance Requirement 2—Concentrate programs that need pick-up/drop-off zones.

Some programs in the node may require a pick-up/drop-off zone (the grocery store, to allow customers to pick-up large purchases more easily; the nightclub, to allow patrons to be picked-up collectively at the end of the night).

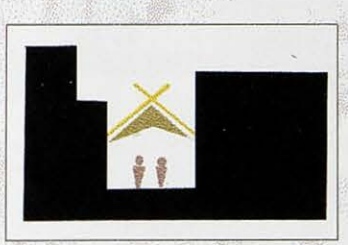
Therefore: Locate the entry/exit of the program within 30 feet of a driveway for a vehicle to pass through. Such a drop-off point should be physically designated.



When possible, orient entries of programs that require drop-off/pick-up zones toward each other, or at right angles to limit walking distances and the need for sprawling car circulation.



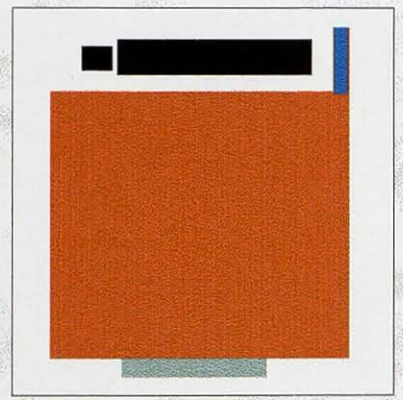
A collective drop-off/pick-up can even be considered a formal point of arrival for the node.



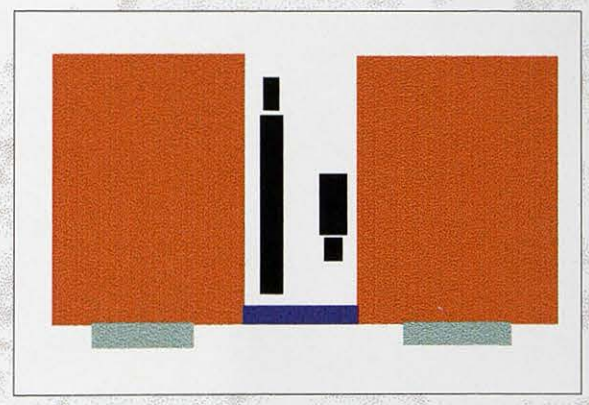
Performance Requirement 3—Separate vehicular delivery circulation from public vehicular and pedestrian circulation.

Some programs will require a special zone for delivery of goods (i.e. the grocery store). Such zones are made to handle large trucks which can be parked for considerable lengths of time. The circulation of the delivery vehicle and its standing zone must be kept away from all public circulation. Such a zone should be physically screened off to prevent interference.

Such zones should also be concentrated between other programs that require them.



Place delivery zones behind or.....

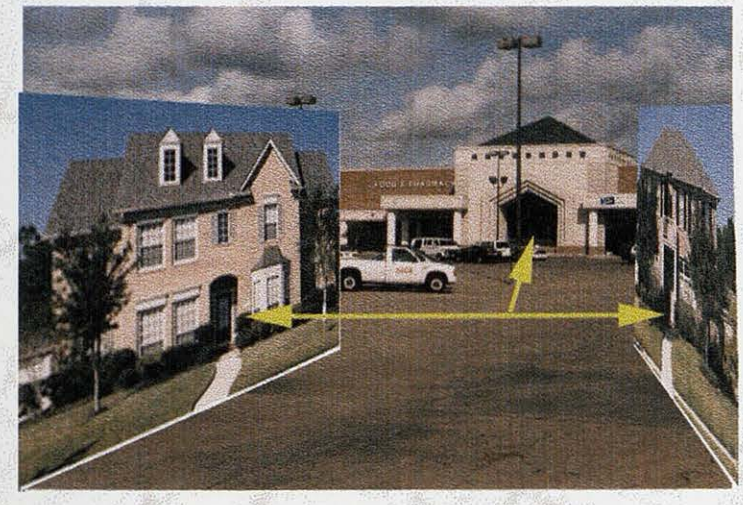


....between programs.

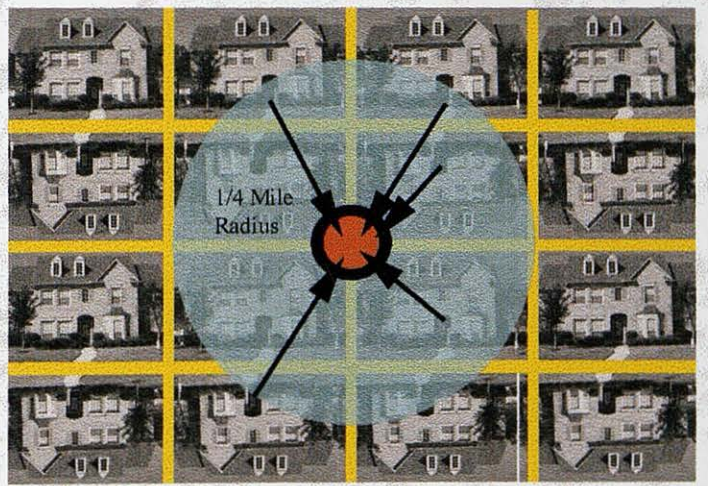
Performance Requirement 4—Orient nodes to pedestrian access from their surroundings.

Too often businesses turn their backs to the neighborhoods that surround them, forcing pedestrians who live adjacent to the business to walk the path the car drives—if not drive instead.

Allow people who live within a ¼ mile away from the node to be able to walk to it in five minutes or less.



Connect programs to the residents that surround them.

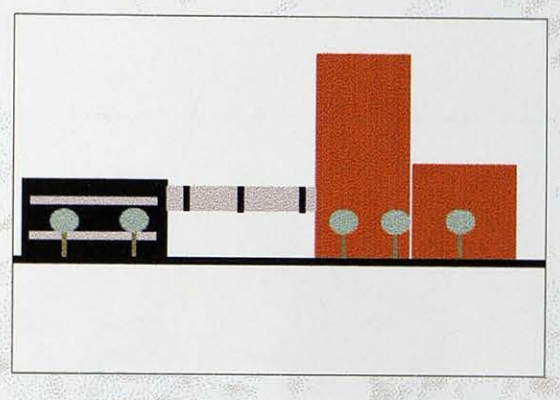


Allow those that live near the node to walk to it.

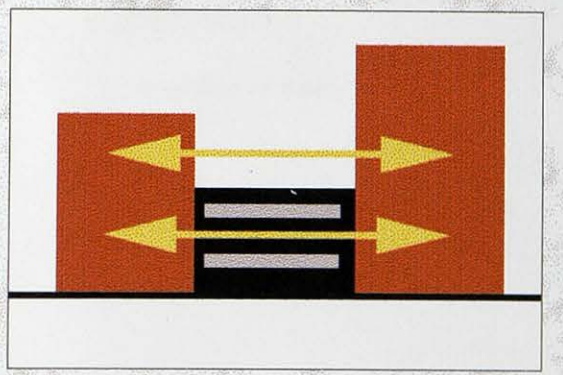
Parking: Goal—Allow the parking facility to become a unifying and organizational element.

Performance Requirement 1—Integrate the parking structure with surrounding program.

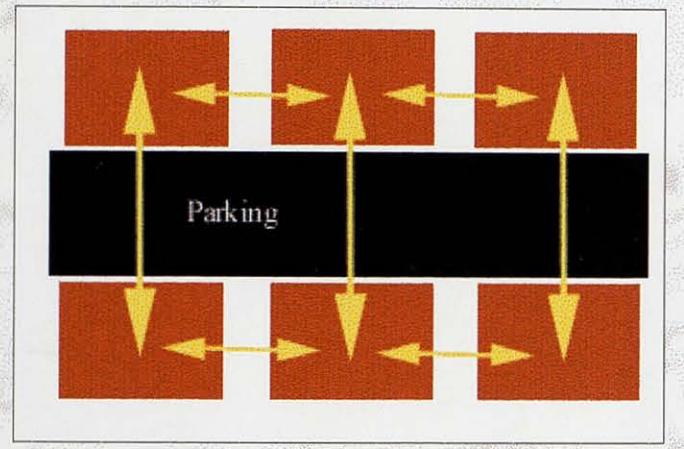
Many times parking facilities appear to be secondary, or 'tacked on' to the buildings they serve. The relationship between them can be made more dynamic by incorporating program entrances (not a hallway that leads to an entrance) into the parking facility.



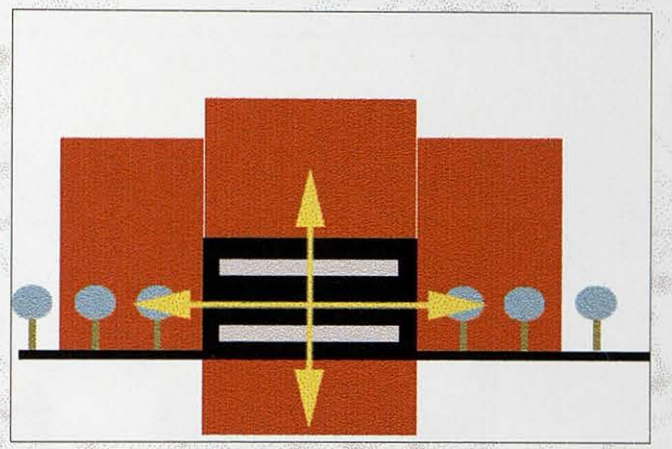
Therefore, the parking facility becomes an important unifying element for surrounding program—it can be commonground.



Performance Requirement 2—Develop the parking facility's relationship with other programs in order to become an active pedestrian circulation element between them, not just a beginning and an end point.

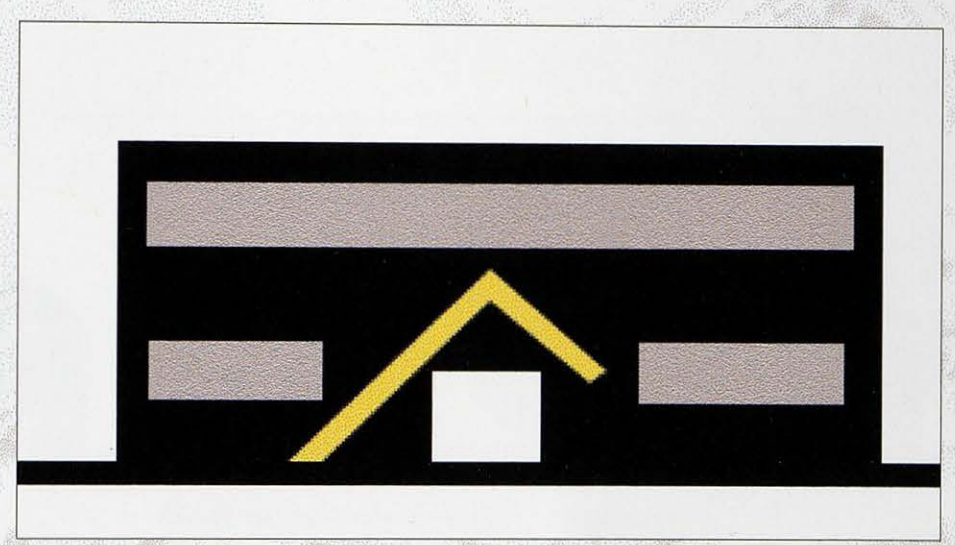


Place parking between programs either in plan.....



.....or section, or both.

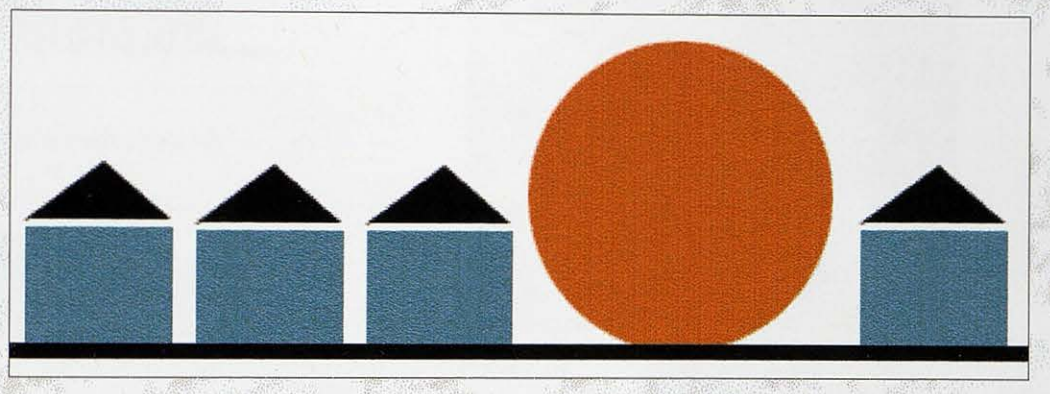
Performance Requirement 3—Since the entry to the parking facility will be the vehicular entry to the node, make it distinct and pronounced from the rest of the parking facility in terms of architectural vocabulary and scale.



Design the entrance to the parking garage to be distinct and identifiable from the rest of the structure.

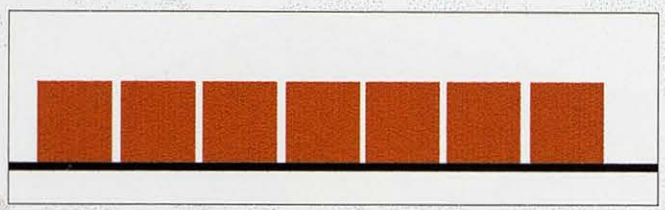
Image: Goal—Let the node have its own physical and mental identity separate from its surroundings so that it is recognized as a landmark.

Performance Requirement 1—Design the node's architectural style, vocabulary, and construction completely different from its surroundings.



Design the node to stand-out from its surroundings.

Performance Requirement 2—Design each program so that it establishs its own character from its neighbor, so that particular programs can be identified within the node.



Avoid repetitivity by expressing each program

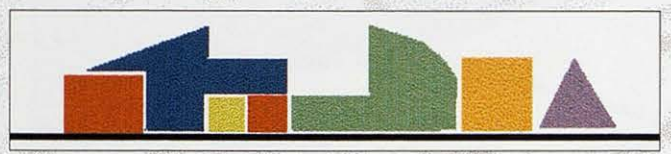
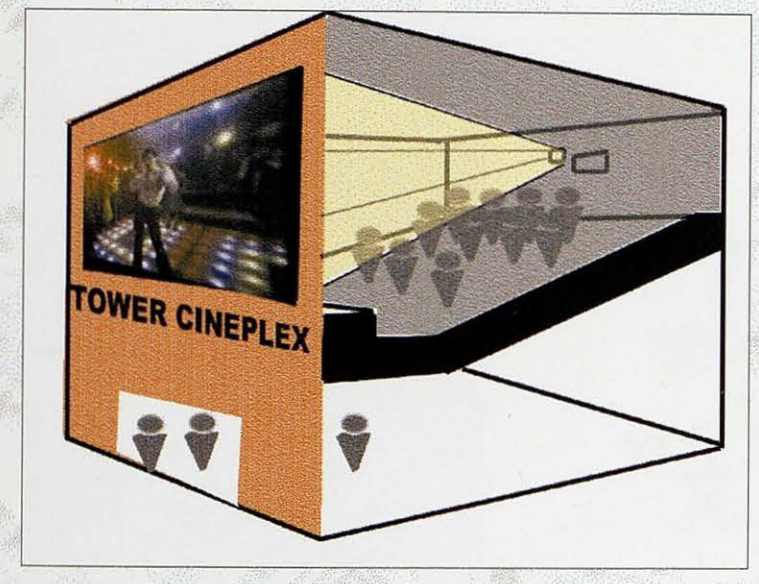


Figure 24.
Program can still be expressed while maintaining continuity with its neighbors.

Performance Requirement 3—Design each program to expose or highlight some feature of its function.



Allow the function to be displayed.

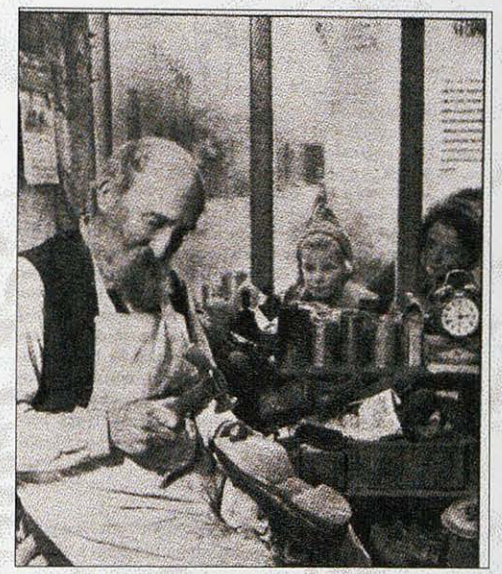
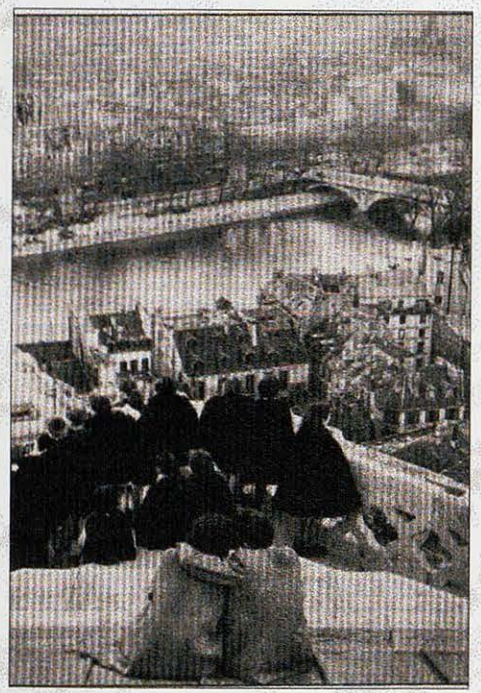


Figure 25.

Performance Requirement 4—Orient the node and its programs to have a visual relationship with their surroundings (see and be seen).



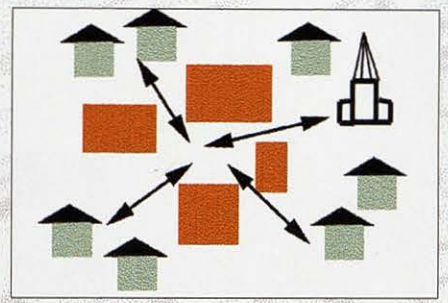
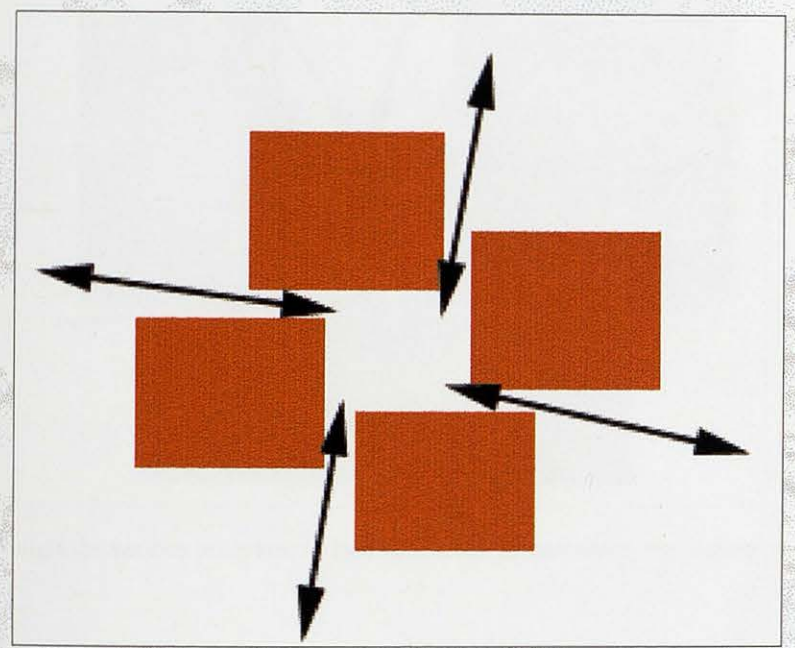


Figure 26. See and……

be seen.

Interaction: Goal—Create a node whose physical arrangement of program is conducive to casual interaction among people.

Performance Requirement 1—Design the program to cluster around small outdoor open spaces which are tied into pedestrian circulation, to allow patrons and non-patrons to interact.



Create spaces with in the node that are accessible from many places so that there can be cross-traffic and opportunities for different users to interact.

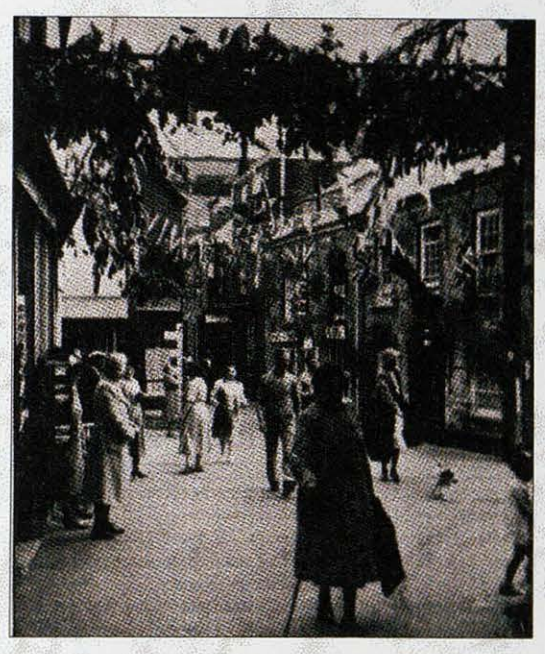
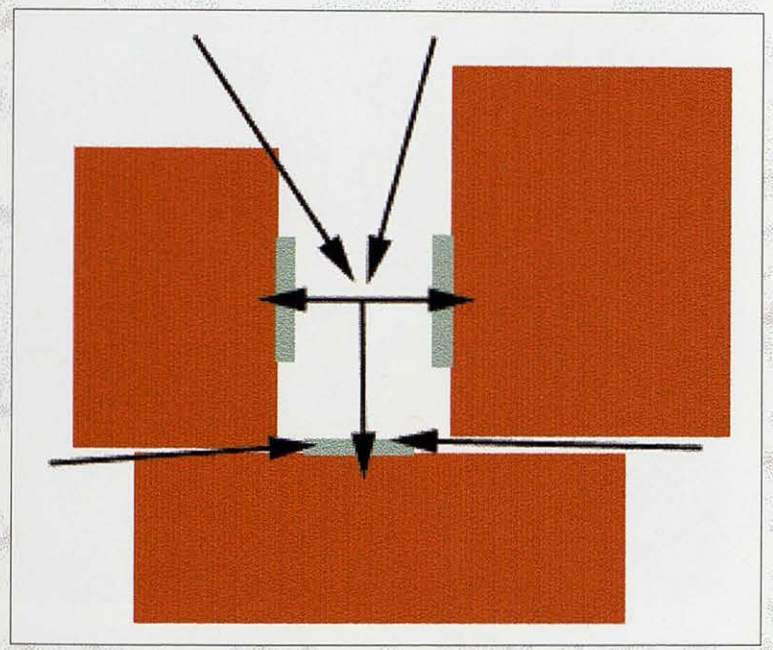


Figure 27.

Performance Requirement 2—Allow commercial/non-private programs to have their entries face each other or at right angles.



Design the various programs to face each other to encourage interaction.

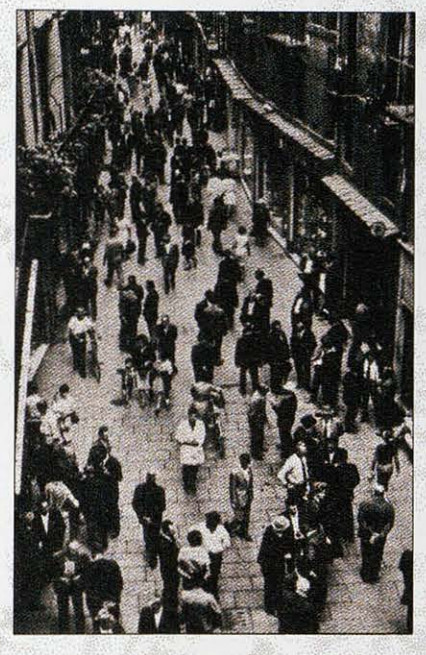
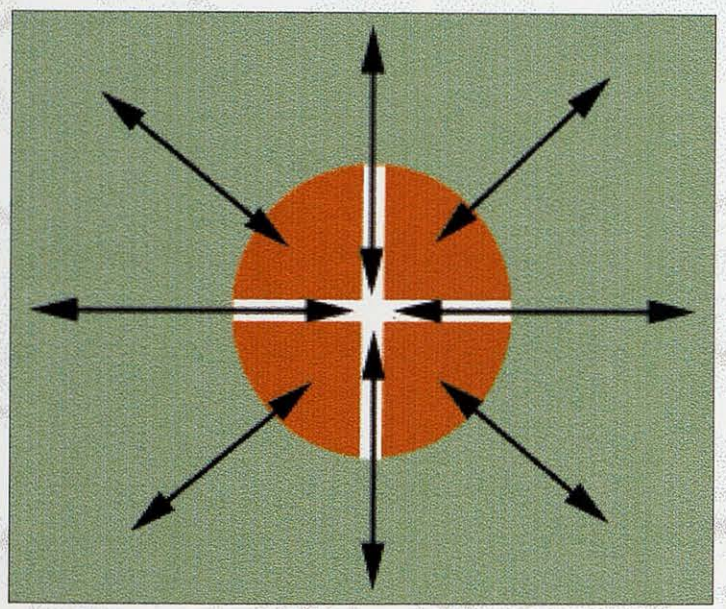


Figure 28.

Performance Requirement 3—Allow the node to interact with its surroundings by opening multiple entries which lead inside the node. Some entries will be directly linked to program, others will be through outdoor pedestrian circulation.



Design the node to be accessible from its surroundings, by creating a hierarchy of entrances. Some will be designed to be main entrances through public spaces, others will be designed to be secondary or 'backdoor' entrances to the offered program.

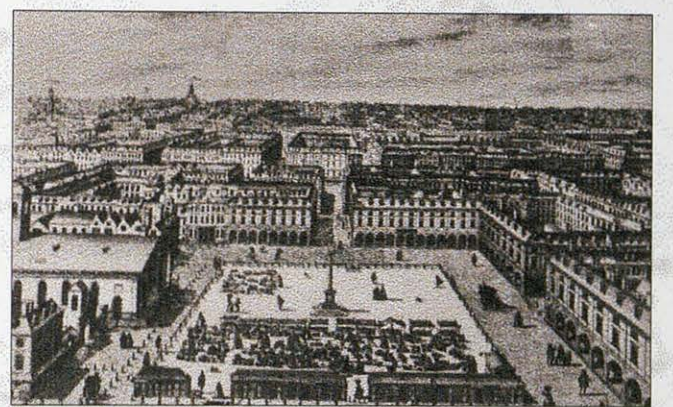
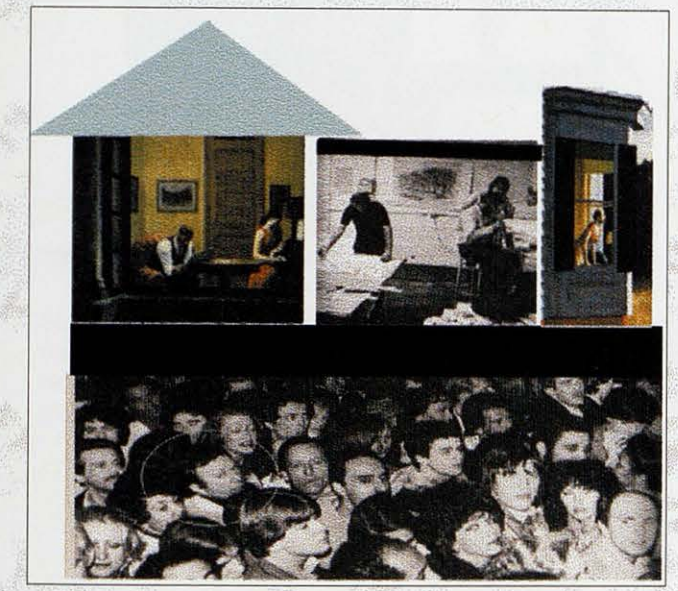


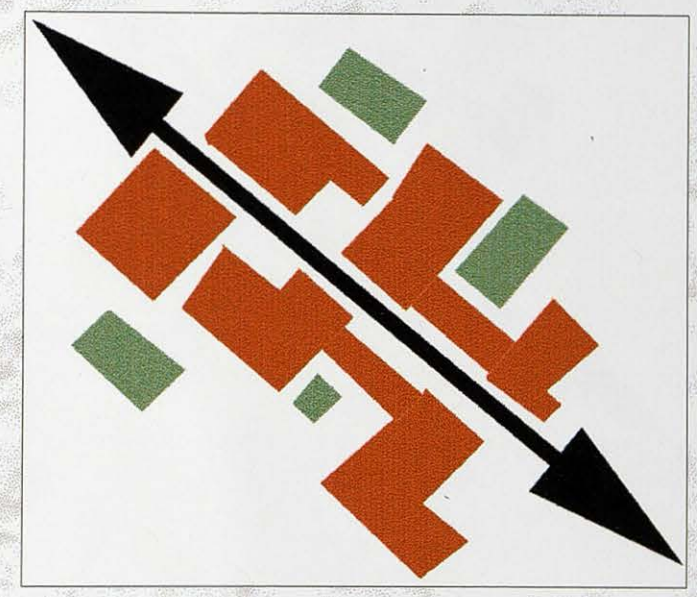
Figure 29. This English square, Covent Garden by Indigo Jones displays the qualities of a strongly identifiable node supported with primary and secondary entrances. The main streets serve as main entrances while openings from the surrounding program act as secondary entrances.

Privacy: Goal—Create an environment that allows programs which are more private in nature to be limited in contact with more public programs.

Performance Requirement 1—Place private functions out of the stream of public circulation.

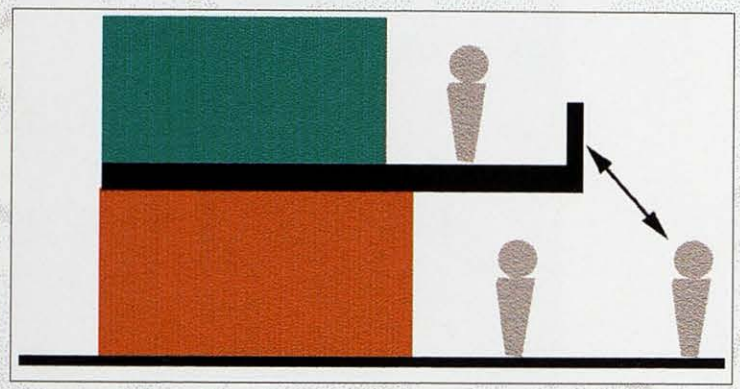


Place private functions out of the stream of public circulation by raising them above the traffic in section,.....

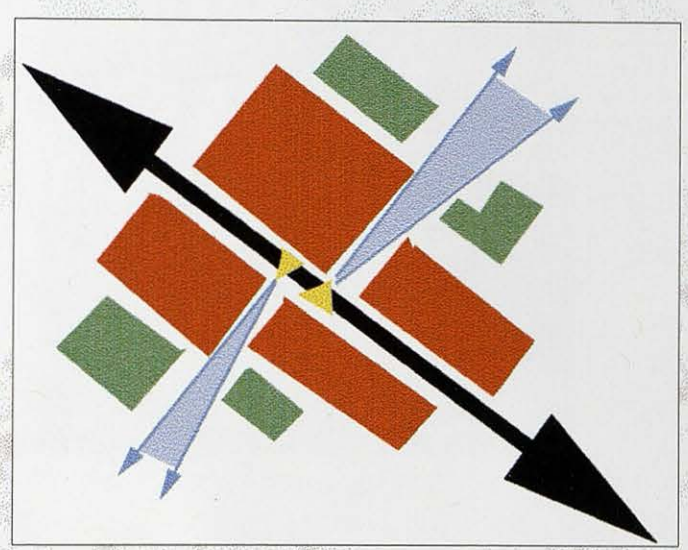


.....or by moving them away in plan. Private functions shown in green.

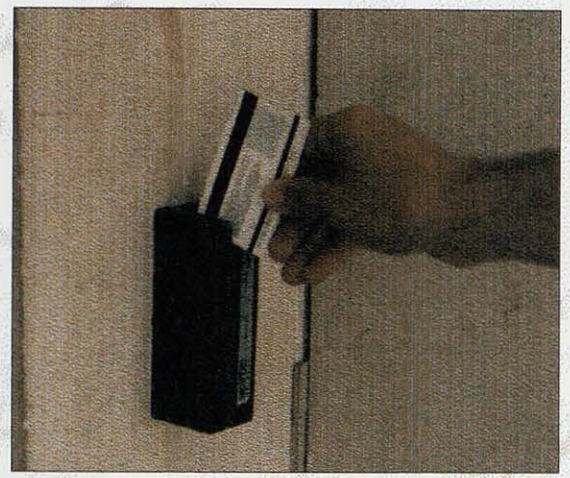
Performance Requirement 2—Design views into private functions to be limited.



Screen views into private functions either with physical building features such as a balcony or low wall, or by placing private functions out of the sight lines of public circulation. Private functions shown in green.



Performance Requirement 3—Have controlled access to private functions.



Electronic swipe cards and key operated locks are effective means of controlling entry into private programs.

Case Studies

River Oaks Shopping Center, Houston, Texas (revisited)[3]

Oliver Wilson, architect with Stayton Nunn, and Milton McGinty, associated architects, 1937

Image
Parking
Interaction

The River Oaks Shopping Center was last examined with emphasis on its programmatic attributes and their ability to make it a successful place. But the design of the center has a hand in this success, it has become the symbol of the experiences to be had there.

The center has a distinct image, especially when compared to the surrounding neighborhood. Its low, sweeping, bright white, curved forms and smaller side towers located across the street from each other, act as a gateway between River Oaks and Houston.

The emphasis on the car in this design is realized by the small lots located out front by West Gray street. The curved forms create an enclosure around the lots which are between two wings of shopping, dinning, and services, thus turning the parking area into a place to be

Figure 30. River Oaks Shopping Center 1939

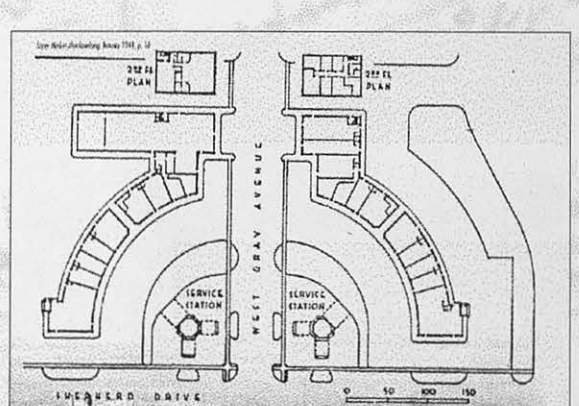


Figure 31.

passed through—not just a beginning and end point. The development's bi-lateral symmetry to West Gray support interaction by allowing users to see across into other stores and restaurants and easily cross between them. Each program has its own entrance off the sidewalk, no enclosed, internal circulation between programs, thus encouraging people to come and go from the sidewalk.

This clean choreography of vehicles and pedestrians through a simply expressed design is what culminates in the strong image that River Oaks has.

Zeebrugge Ferry Terminal Project, Zeebrugge, Belgium[4]

Rem Koolhaas, 1990

Image
Circulation

"This project opts for a form which avoids the familiar, instead of evoking successive associations: mechanical, industrial, utilitarian, abstract, poetic, surrealist....It combines excellence with maximum efficiency" (80)
The Zeebrugge Ferry Terminal is an example of how building circulation informs building image. The flow of incoming traffic is directed in an 'S' pattern which contains two circular pieces of land, one is a playground/ park, the other is a restaurant/amusement area. The result is a circular base which is intersected throughout with ramps and bridges for cars, trucks, busses and people, leading them to and from the ferries.
As this cylindrical form rises up, it widens out to accommodate support services such as offices, a hotel, and parking garage. The final level is expressed as a 'great public hall' which allows visitors to see the surrounding countryside and ocean, as well as peer into the parking garage below. The hall is protected with a large glass roof making this design look like a cross between a ball and a cone.

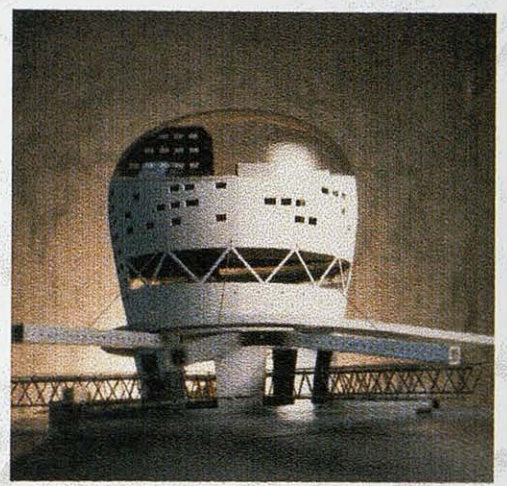


Figure 32.

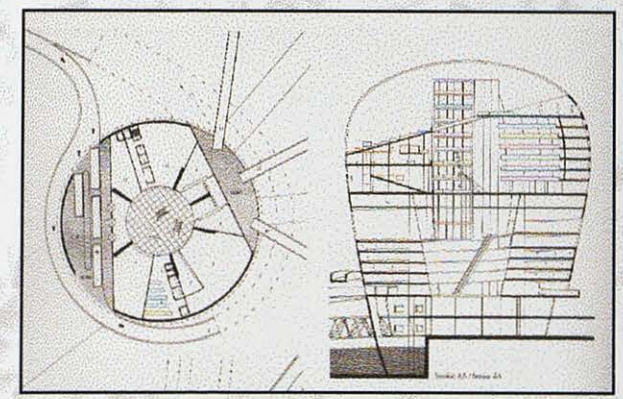


Figure 33.

SUB-NODAL SCALE

SELECTED PROGRAM ANALYSIS

Introduction

With the requirements to organize the program in the node formulated, attention can be turned to particular programs within the node to address their physical, measurable attributes. In addition to square footages, number of users, and activity analysis; architectural and adjacency will be assessed.

What follows is a description of the attributes and requirements of the chosen programs. It should be noted that the previous issues, goals, and performance requirements have been structured to allow for maximum flexibility in final program organization. The analysis presented next also allows for flexibility in the design phase. It should be recognized here that the programs discussed can share any relationship with the other either in complete separation or total integration. The physical arrangement of these programs can be anything possible (church on top of/ underneath, beside, inside/outside of a parking lot), provided that the issues and requirements are addressed.

Existing program in the final design can be reconfigured to address new program. In some cases the buildings of the older program may be completely or partially demolished to allow for necessary reconfiguration.

The highlighted Programs:

Grocery Store (existing)
Parking Garage
Movie Theater
Restaurants (3)
Bank Branch (existing)
Liquor Store (existing)
Nightclub
Bookstore/Cafe
Cemetery

Grocery Store

.....65,000s.f.[5]

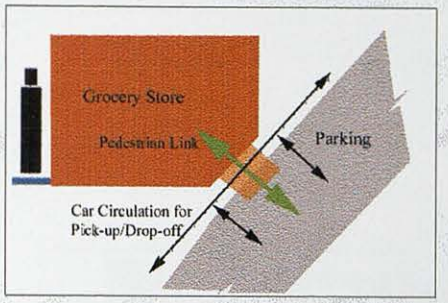
Participants: Customers and Employees

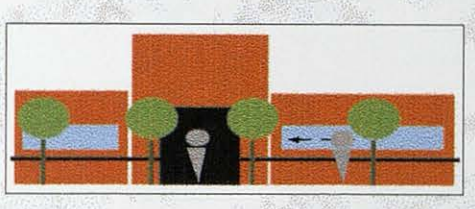
Number of Users: 1 to 200

Activities: Shopping, Stocking, Deliveries, Pick-up/ Drop-offs

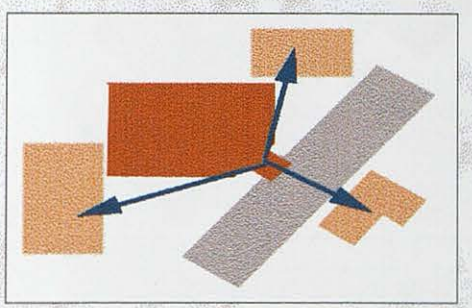
Architectural Requirements: Have a well pronounced entry that serves both the pick-up/drop-off zone and the parking facility. The store should make a formal connection with the structure of the parking facility in order to promote a sense of integration. Building facades that are not shared with neighboring program should be as open to light (direct or indirect) as possible. Primary entry should be engaging at pedestrian scale, allowing views into the store (particularly toward the check-out lanes) and places to sit and wait. Delivery zone should be placed out of view and circulation of the public.

Separation/Adjacency: Should be a short walk from parking (1-2 minutes) and visibly linked to surrounding programs





Landscape and scale entrance to human scale



Parking Garage

..... 280,000s.f.[6]

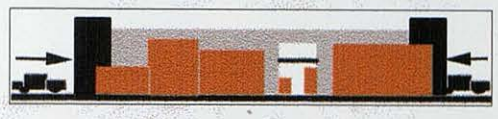
Participants: Customers and Employees of node's program

Number of Spaces: 700 spaces

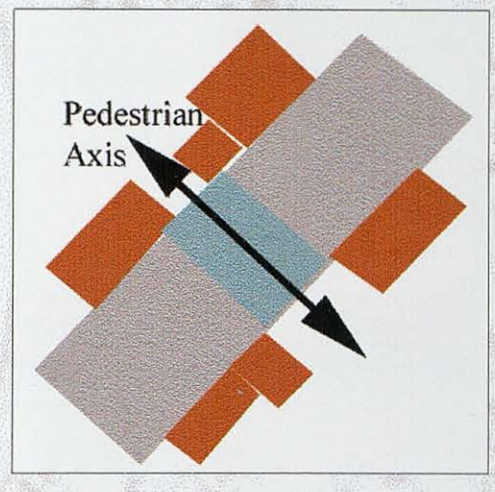
Activities: Driving, Parking, Loading, Unloading, and Walking

Architectural Requirements: Garage should read strongly as a unifying and organizational element by employing forms and materials different from the surrounding program. Entrances should be clearly indicated by the forms and openings of the structure and not the signs around it. The design of the garage should promote cross pedestrian traffic in selected areas with higher spaces which allow sun light to come in, landscaping, and softer materials. The garage while expressing its identity with strong forms and different materials than surrounding program should make formal connections with them. The garage, when seen from behind the program, should have screening which allows views out and circulation of air.

Separation/Adjacency: Close to as much program as possible (or 2 minute walking distance). Makes connection to nodes supporting roads.

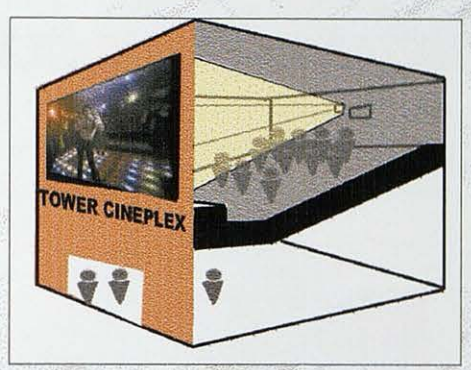


Place parking between program, develop it into a integral node feature.

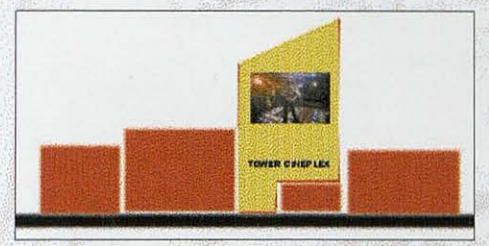


Movie Theater

.....	13320s.f.[7]
Participants:	Customers and Employees
Number of Users:	1200
Activities:	Viewing films, Waiting in line for tickets and concessions, Visiting, and Deliveries.
Architectural Requirements:	Make the facade of the primary entry serve as a sign for the theater by offering views inside to the lobby and even the back side of screens to glimpse movies being shown. The theater should be a dominant presence in the node in scale and style.
Separation/Adjacency:	Should be a short walk from parking (2-3 minutes) and immediately next to restaurants, cafes and filler retail that stays open late (book store). Should be part of the node 'center'.

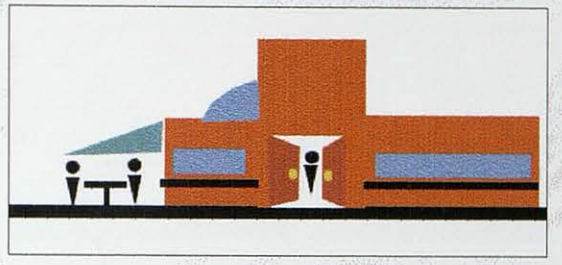


Façade becomes a sign of function.



Restaurant

.....	6,400s.f.[8]
Participants:	Customers and Employees
Number of Users:	1 to 200
Activities:	Waiting, Dinning, Visiting, Cooking, Cleaning, Deliveries.
Architectural Requirements:	Have well pronounced entry marked with open voids and outdoor eating at ground level or roof if available. Building facades that are not shared with neighboring program should be as open to light (direct or indirect) as possible. Primary entry facade should be engaging at pedestrian scale, allowing views in and conversation with outside guests.
Separation/Adjacency:	Should be a short walk from parking (2-3 minutes) and visibly linked to surrounding programs (movie theater, nightclub, filler retail).



Allow entry to be near outside dining.

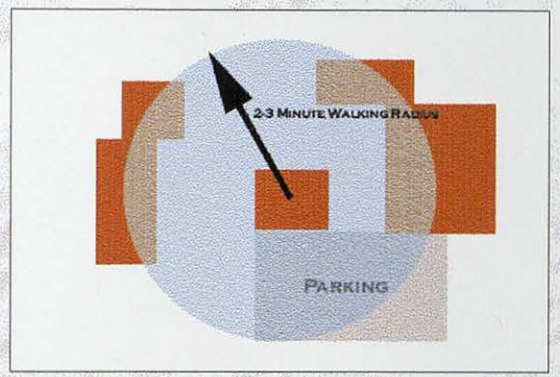
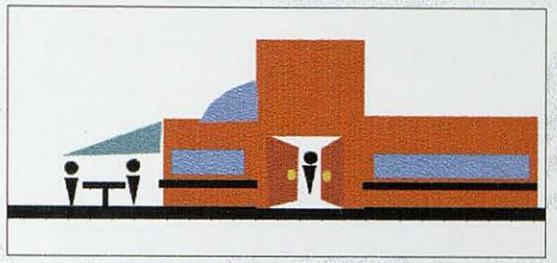


Figure 34.

Restaurant (two this size)

.....3,200s.f.[8]

Participants:	Customers and Employees
Number of Users:	1 to 100
Activities:	Waiting, Dining, Visiting, Cooking, Cleaning, Deliveries
Architectural Requirements:	Have well pronounced entry marked with open voids and outdoor eating at ground level or roof if available. Building facades that are not shared with neighboring program should be as open to light (direct or indirect) as possible. Primary entry facade should be engaging at pedestrian scale, allowing views in and conversation with outside guests.
Separation/Adjacency:	Should be a short walk from parking (2-3 minutes) and visibly linked to surrounding programs (movie theater, nightclub, filler retail).



Allow entry to be near outside dining.

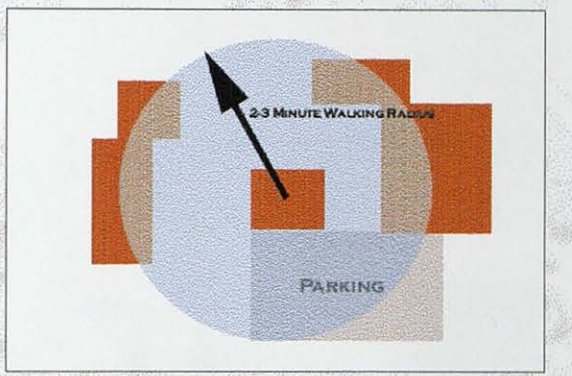


Figure 34.

Liquor Store

..... 2000s.f

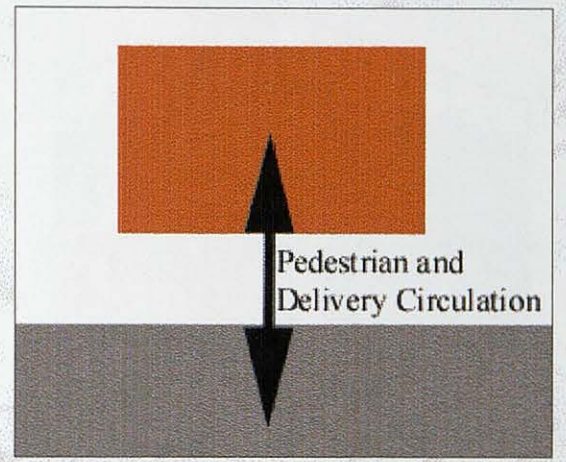
Participants: Customers and Employees

Number of Users: 1 to 20

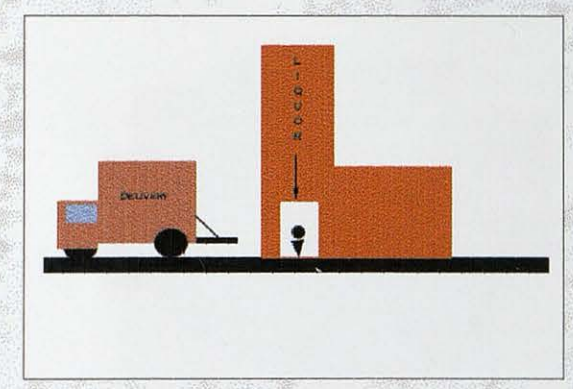
Activities: Shopping, Stocking, and Deliveries

Architectural Requirements: Should have a pronounced entry with solid elements giving depth to the facade. Should be located near car circulation so deliveries can be easily made with a cart.

Separation/Adjacency: Should be adjacent to grocery store and parking.



Design entry to be used both by customers and delivery persons.



Nightclub

..... 18000s.f.

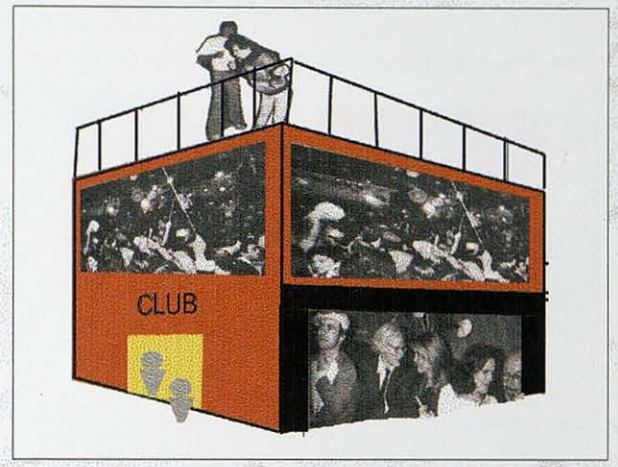
Participants: Customers and Employees

Number of Users: 2 to 360

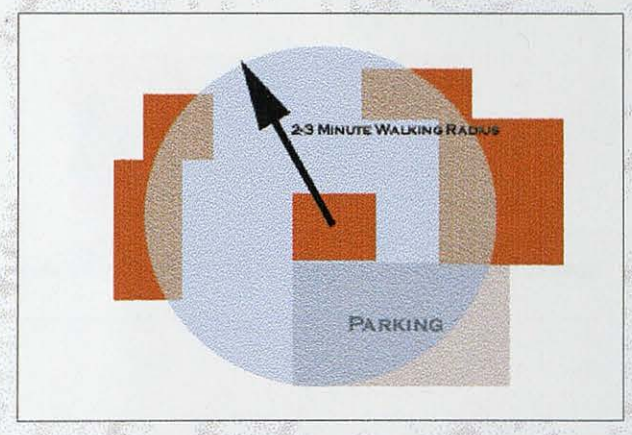
Activities: Dancing, Drinking, Singing, etc.

Architectural Requirements: Must have a clearly pronounced entrance with solids revealing depth within the facade. Must express its function by showing it. Reveal dance floors to the outside through transparent and translucent panels. Have outdoor space for dancing and lounging.

Separation/Adjacency: Must be near parking, restaurants, movie theater and other late-night program (all with-in 2 minutes of each other).



Let the dance floors be seen from the outside, so that the club becomes a stage for the dancers to perform on.



Bookstore/Cafe

..... 20,000 sqft.

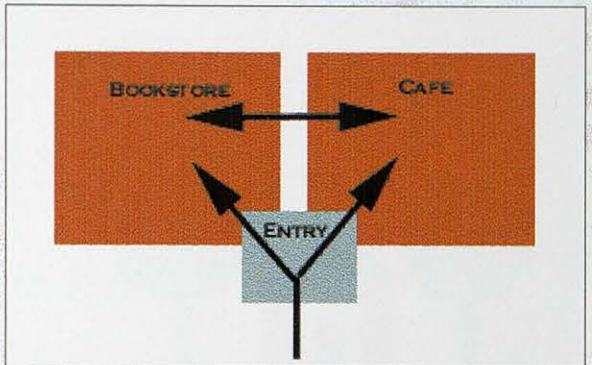
Participants: Customers and Employees.

Number of Users: 1 to 200

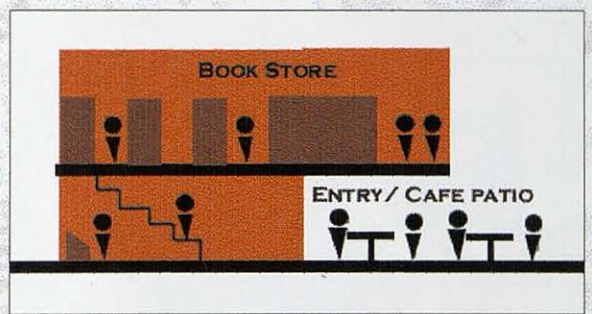
Activities: Reading, Drinking, Lounging, Visiting, Standing in Line, Buying.

Architectural Requirements: Design a distinct entry which addresses both the bookstore and the café. Allow customers to casually go back and forth between café and bookstore.
Café should open out to entry allowing casual interaction between those inside and outside.

Separation/Adjacency: Should be within a minute's walk of the movie theater and have easy access to parking garage.



Design entry to address both functions.



Cemetery

..... Will be spread throughout site.

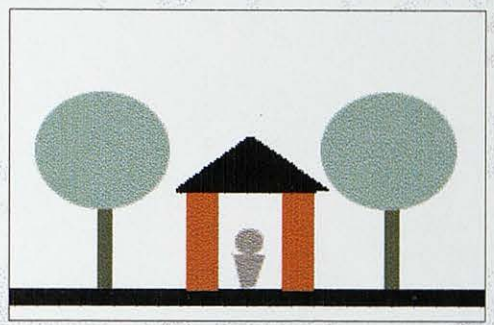
Participants: Anyone.

Number of Users: Varies.

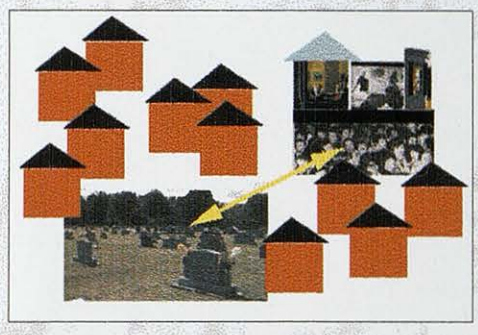
Activities: Internment, visiting, walking, sitting, relaxing, and mourning.

Architectural Requirements: Clearly mark paths and entries either with landscaping or solid objects. Treat the cemetery as a park-like landscape for remembering and looking forward, making it a sanctuary.

Separation/Adjacency: Have the cemetery separated from the commercial programs, keeping it close to residential areas outside the immediate area of the node but, maintaining a visual link with it.



Physically signify entry with landscaping and gateways.
Maintain a strong visual link with the node.



Notes

1. All information taken from:
   Longstreth, Richard. "River Oaks Shopping Center"
   Cite Winter, 1996. p8-12.

   Turner, Drexel. "Gray Line" *Cite* Winter, 1996. p14-15.

2. All information taken from:
   Libeskind, Daniel. "Traces of the Unborn."
   1995 Raoul Wallenberg Lecture. The University of
   Michigan: College of Architecture and Planning.

3. All information taken from: see note one.

4. "Zeebrugge Sea Terminal" *El Croquis 53*
   ed. Alegordro Zaera.

5. Based on existing grocery store on site.

6. Based on a 10ft X 20ft parking space multiplied by two
   for circulation.

7. Time Savers for Interior Design and Space Planning.
   eds. Joseph De Chiara, Julius Panero, Martin Zelnik.
   New York: McGraw Hill, 1991. p975.

8. Dorf, Martin E. Restaurants That Work.
   New York: Watson-Guptill Publications, 1992. p38.

9. Based on existing bank branch on site.

Space Summary

Parking Garage:	280,000s.f
Grocery Store:	65,000s.f.
Nightclub:	18,000s.f.
Movie Theater:	13,320s.f
Restaurant:	6,400s.f.
Bank Branch:	5,600s.f.
Restaurant:	3,200s.f.
Restaurant:	3,200s.f.
Liquor Store:	2,000s.f.
Bookstore/Café:	20,000s.f.
Cemetery:	Unknown
Total:	**416,720s.f.**

DESIGN

RE-VISIONS PROCESS FINAL DOCUMENTATION

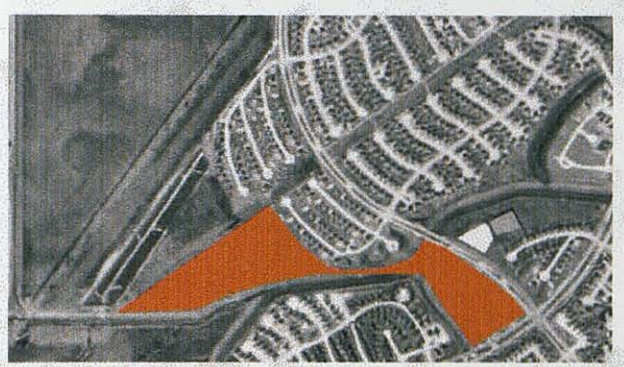
Re-visions

Between the time the program was written and its design expression began, a few important realizations were made regarding the physical and conceptual dimension of the project. These were: site expansion, program expansion, and 'urban scale' action.

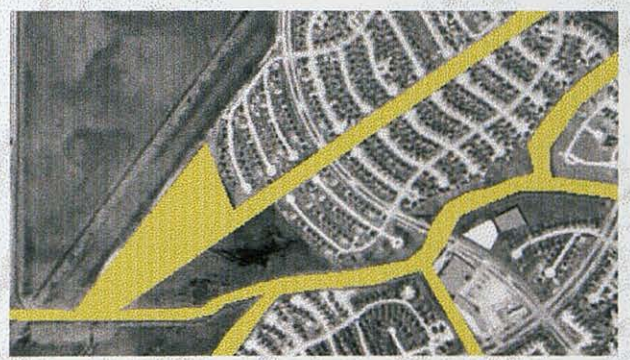
Site Expansion

The site was originally defined by several edge conditions such as major roads, residential subdivisions, drainage bayous and gas line corridors. However, since the overriding urban issue of the program was dealing with connection, juxtaposition, and projection (see pages 42-45), it was felt that the shape of the site should reflect this.

Therefore, the site was redrawn to include all of the adjacent bayous radiating from the site and the gas line easement which came from the subdivisions northeast of the site. The land between this gas line easement and the next pipeline corridor was also absorbed.



Original Site



Added Parts

The 'new land' is undeveloped like its neighbor except for a water reclamation site which consists only of a depression in the earth.

These newly acquired 'appendages' were seen as opportunities to allow the future design to connect, juxtapose, and project identities of the project well beyond the 'body' of the site.

Program Expansion

In addition to the previously discussed cemetery (pages 31 and 83), an accompanying park was conceived to lead visitors in and out of the cemetery as well as provide and additional amenity to the project's users.

The park program was to include a community center with a pool, café, and amphitheater as well as a bike ramble and playing fields.

'Urban Scale' Action

The preceding program included an 'Action' segment which described different issues to be addressed at three different, nested scales. These were: urban, nodal, and sub-nodal.

'New' Site

The first and the largest scale, urban scale, dealt with the over-riding theory issue of program (page 8) and how it would be required to connect, juxtapose, and project the design. The program called for a large scale interventional plan which would encompass all of Clear Lake City and the six studied nodes (page 2). This plan would outline how connection, juxtaposition, and projection would take place.

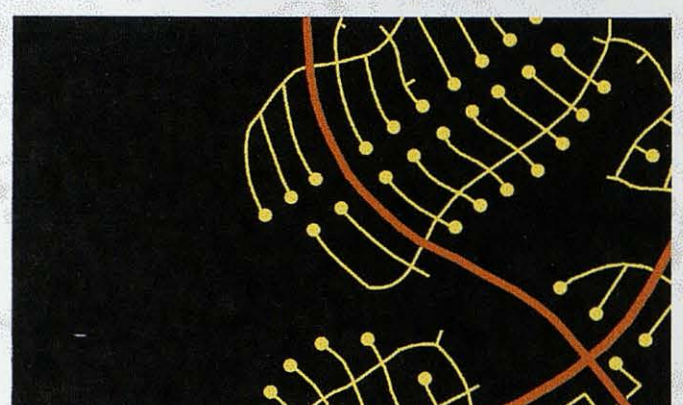
Due to time constraints, such a plan was not devised. Instead, it was thought that the project could embody the ideas of the urban scale at nodal and sub-nodal scales, thereby reconceiving the urban scale as a conceptual 'big picture' in which the nodal and sub-nodal components would fit into.

Process

The overall design process followed a kind of yo-yo pattern in which design either looked at the overall master plan of the site (nodal scale) or at specific areas of the site (sub-nodal/ architectural). Therefore, the process can best described in the following movements: analysis, overall framing, node concentration, park concentration, overall, and node fit.

Analysis

A reexamination of the site and the surrounding context was done in order to better conceive a site hierarchy which could inform a design. Analysis focused on existing systems such as land use, street patterns, bayous, and pipeline corridors.



Streets

Land Use: Yellow= gas line easement
Blue= drainage bayou
Gray= residential

'Suburban Grid' of connected streets

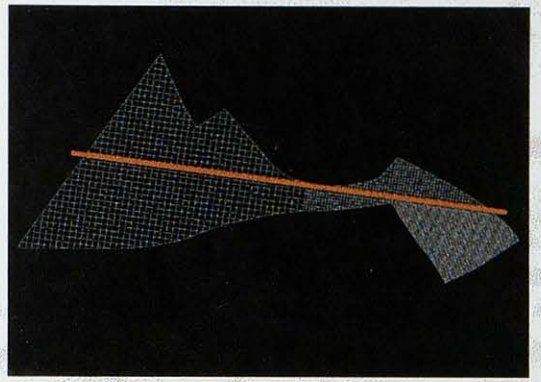
Site Framing

Analysis exposed the disconnection of the context and began to inspire ways of establishing connection both internally within the site and externally with the surrounding context.

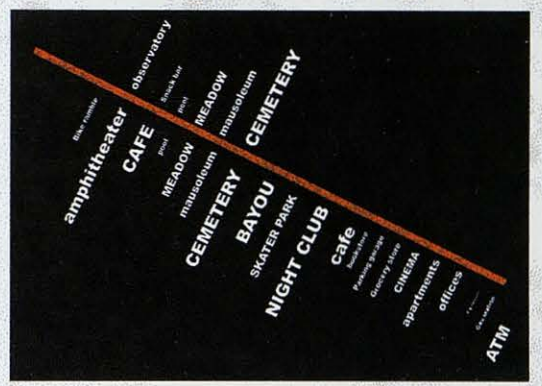
The simplest way of internal connection was to unite the strangely shaped site with a straight line—an axis from one end to the other. What this axis might be could not yet be determined, but the drawing of such a line began to help me see the site in three distinct parts: Park, Thread, and Node.

Perceiving the site in these parts began to inspire the placement of the various programs and suggest the experiences that could take place there. The overall design began to take on an image and a—albeit abstract—form.

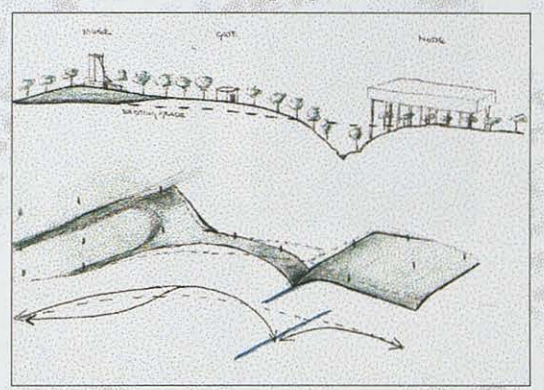
I began to consider the qualities that would make these areas unique to themselves and complementary to the whole design. I was directed to see the project both architecturally and in terms of landscape. Landscape would be the constant feature and more architectural elements would punctuate and highlight different parts of this landscape.



Axis as the three defined zones



Axis and programs



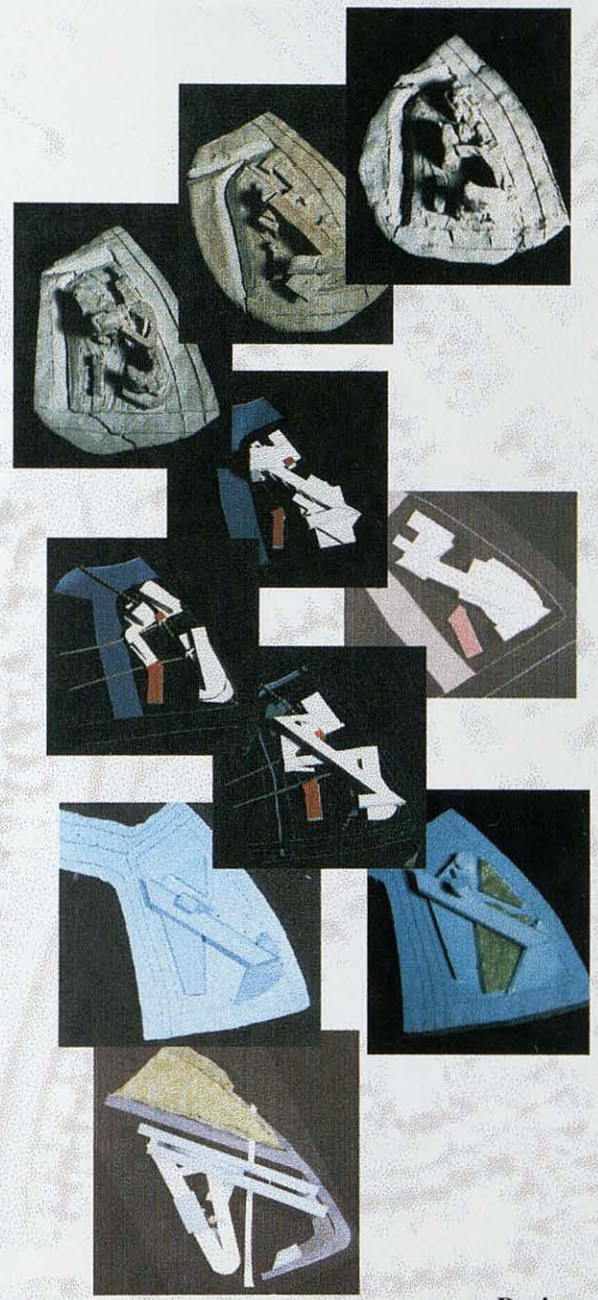
Site landscape and significant features

Node Concentration

The first part of the design to be addressed was the node. The final program of the node was: grocery store, filler retail, movie cinema, book/record store, 3-4 restaurants, dance club, live/ work facilities, gas station, branch bank, and parking facilities.

The spatial layout and architectural design of the node were influenced by five issues: parking (750 spaces), circulation (vehicular and pedestrian) , interaction, image, and privacy (pages 52-69). Each of these were explored and evaluated in eight schemes before a final was realized.

The first seven proposals made attempts at integrating the new design with the existing shopping center on the site, all work afterward discarded the existing structures after it was believed that keeping them would only hold back design opportunities. However important themes and concepts were discovered in many of these exercises. These ideas became the seeds of the final design. The most important of these ideas revolved around space and from hierarchy and layering/weaving of systems and program.



Space and Form Hierarchy

Throughout the eight schemes a constant concern was how to differentiate pedestrian and vehicular circulation and spaces. It was conceived that in there should be a zone that was totally pedestrian, like a street where all the cafes and restaurants and stores could be. This way of thinking produced a car zone for parking and a car free zone for pedestrians.

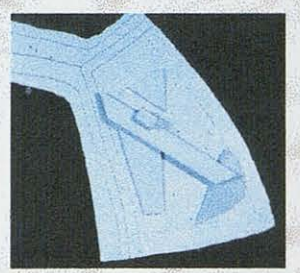
This consistently produced a front space for cars next to all the programs that were car and convenience oriented (grocery store, gas station, bank, etc.) and a back space near the bayou for the pedestrian oriented programs (cafes and stores).

However this way, while perfectly functional, seemed too divided. The only element linking these two realms was the live/work 'bar' floating overhead. There needed to be less segregation.

One factor influencing this division was the previously mentioned axis. The axis manifested itself as structure, usually as the live/work bar. Instead of creating a linkage the structure was creating a barrier.

Program divided between corner and back

Ground program still divided, but design is linked by overhead bar.



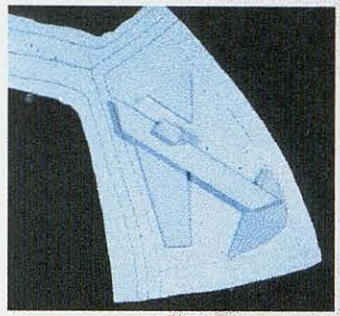
Ground program is concentrated ot one part of the site.

What was needed was concentration, the program needed to be focused on one part of the site. The last set of schemes began to do just this.

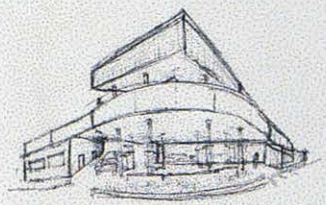
The live/work bar was moved parallel to the axis opening it up once again to be a linkage to the park and thread and allow the axis itself to become a transition to a park-like part of the node site. This began to let the necessary juxtapositions and connections take place thus focusing users to one part of the site from which they could be directed to other parts.

In addition to organizing significant zones and spaces, forms also had to be addressed with regard to hierarchy. This began by considering which programs should be expressed as significant and which parts of the site should be addressed as significant.

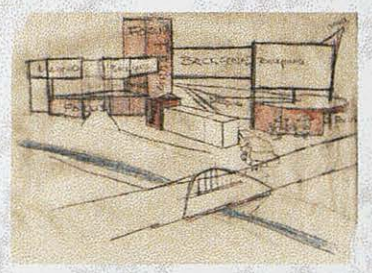
Programs thought to have the greatest potential for punctuating the design were the dance club, movie cinema, and gas station. Meanwhile the site's corner and newly created axis were determined to be significant locations for some of these programs.



The open axis directs users to the park

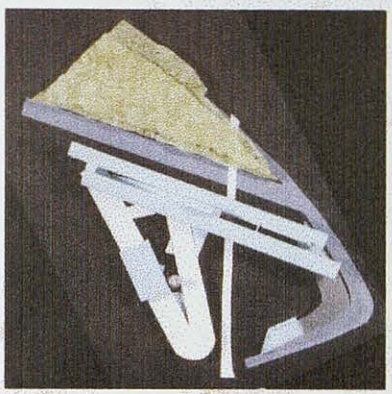


The corner of the node site was an early point of interest.



An early sketch exploring potential landmarks.

After further experimentation with spatial and form layout and addressing the requirements of the issues regarding parking, circulation, interaction, image, and privacy, a final scheme was produced.



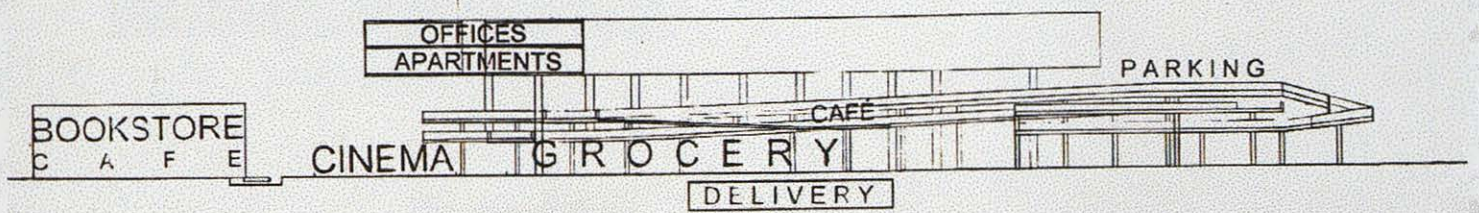
Final Scheme

Layering and Weaving of Programs

After a general layout had been established, specific program placement could be investigated. The largest program/issue was parking. It was decided early on that not all parking should be contained on ground level, but should be integrated with roofs and other aboveground surfaces of various programs. Instead of being segregated from other programs and their forms, it could be *integrated* and *form giving*.

This relationship could result in a parking facility that is part of a café or pedestrian street. Such juxtapositions could make the parking facility less oppressive and more enjoyable.

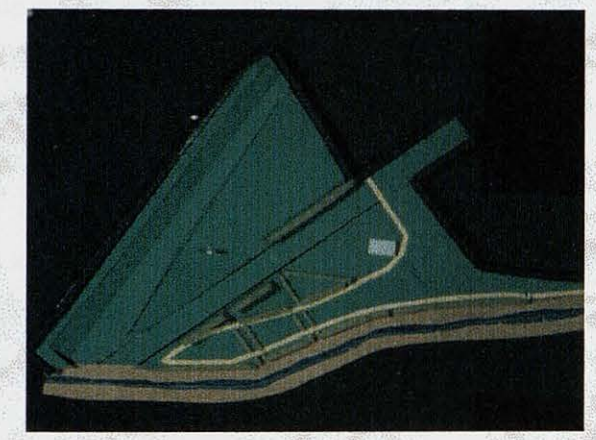
Café in a Parking Garage



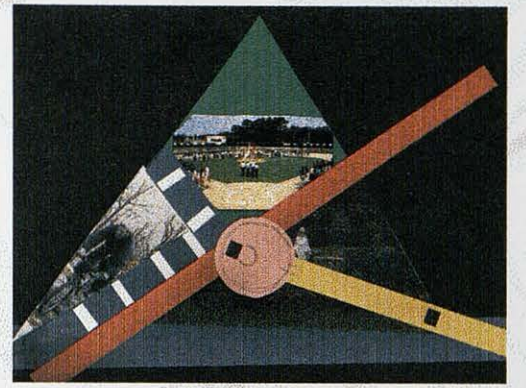
Early section showing the layering of program.

Park Concentration

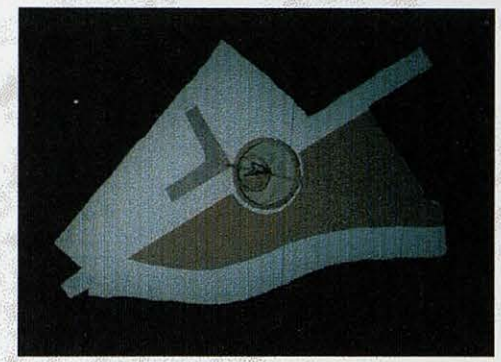
The park started as being just a formless, ill defined cemetery, but as program was added to help expand it into an actual park its design came into focus. The framing of the park was controlled by the connecting axis and a 'discovered' suburban grid. An additional system was an 'imposed' grid which worked off the connecting axis. Each of these systems helped define a significant aspect of the park's final design.



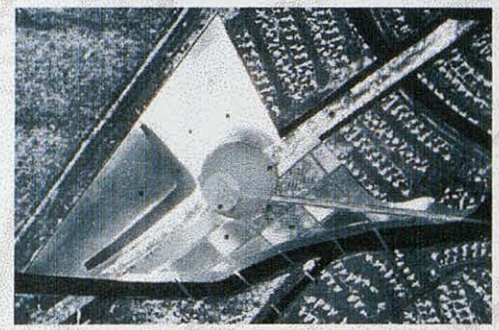
The spineless plan



Concept



Study model showing cemetery, and central meadow.



Final design

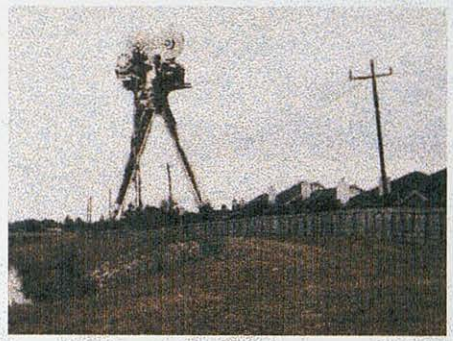
In addition to the park's expanded program, another function was added to the list. Early in the project a tower was conceived in conjunction with the cemetery to serve as a landmark. As the design of the park began to take shape, so too did the purpose of the tower.

The tower itself was to be an urban observatory, a place where visitors could look out and see the Houston skyline, ship channel, chemical plants, freeway interchanges, a nearby airport, and suburbia.

Since the tower was perceived as a tool of observation, the concept of the tower's form was a camera's tripod. Keeping in this theme, the observation room on top was designed to be a giant camera obscura.

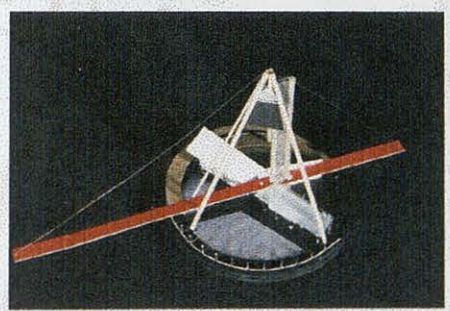
The tower became a giant anchor which terminated the connecting axis. The axis itself departs from the ground to meet the tower and pass through it becoming a bridge.

Located at the tower's base is the community center with its pool, café, and amphitheater.



Camera concept

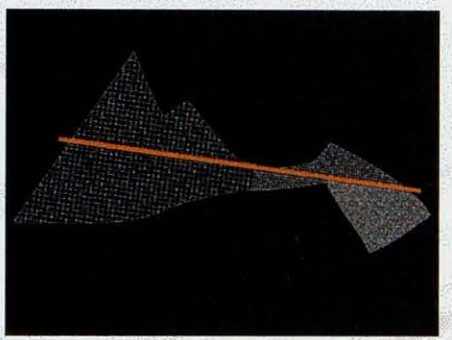
Tower and Bridge



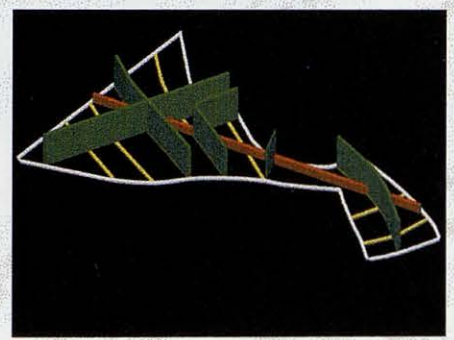
Tower and ground program

Overall

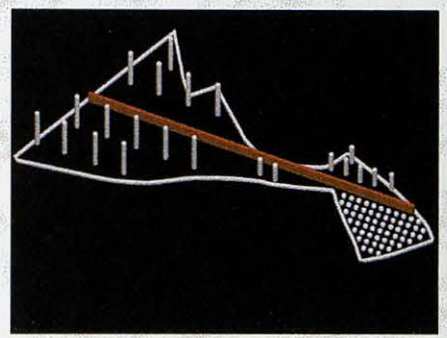
As the park and node came into focus so did the overall scheme which was governed by three significant systems: Axis, Grid, and Suburban Grid.



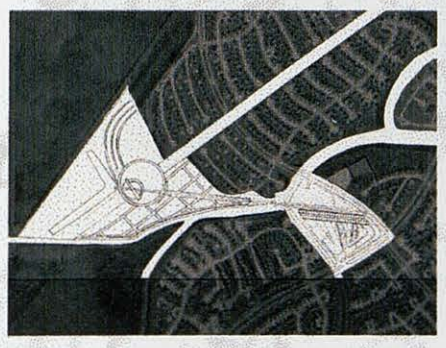
Axis and Grid



Extruded Suburban Grid



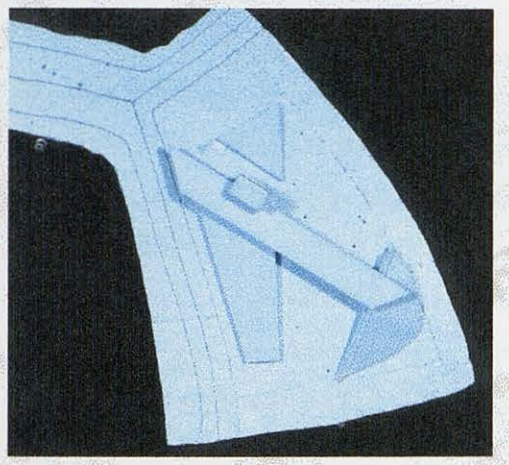
Light Grid



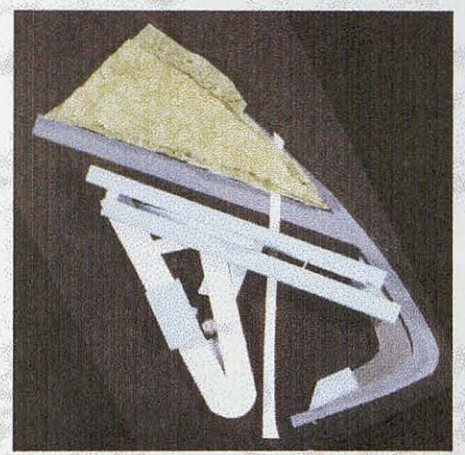
Final Plan

Node Fit

After the overall scheme was finalized, it was decided that some touching up needed to be done to the node. Main concerns were the massing of the structures and the connection to the rest of the project.



The first scheme was too massive...



...the final scheme opened up the mass for better connection.

Final

Overview

It is the contention of this thesis that the suburban realm is void of diversity both in its physical and social make-up and that this condition can be altered in an intervention that connects fragments, juxtaposes functions and projects new and existing identities beyond this realm.

The development of commonground is the intervention. Commonground is a condition found between private realms in which people actively engage each other and their environment via different programs and activities. It is not a crowded freeway or chat room but a physical realm which people pass through, arrive at, depart from, look at, and think about in the company of friends and strangers all at once.

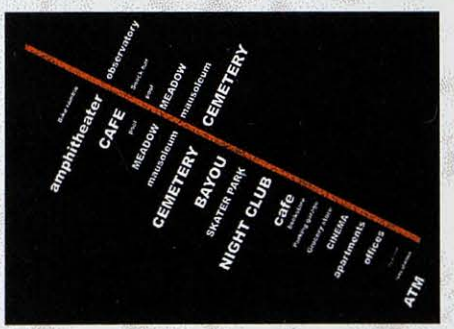
'Suburbia', or in the case of this project master-planned communities, lack such a realm. This design response attempts to fill in the blanks left by metropolitan sprawl.

Response to Theory

The thesis statement proposes that *existing nodes within master-planned communities can be diversified by interventionaly concentrating and overlapping programs. In this way, 'commonground'—the space between private and public realms can be developed to connect, not separate private and public* (page 1).

Accordingly, program was the overriding issue for this project. *Juxtapose a diverse range of programs; some related some not. These new programs should overlap into existing ones, especially between private and program types and more public ones* (page 8).

Such a range of programs were introduced into the suburban setting. From apartments and offices to a cemetery and grocery store; public and private were mixed, new and existing program were juxtaposed. The result is a spectrum of activities which begin to characterize this in-between space as place of action.



The spectrum of programs

Response to 'Action'

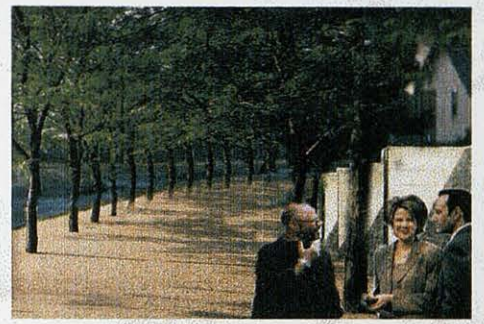
The aim of the action portion was to *reconfigure existing suburban nodes with in a master-planned community to be conducive to supporting a commonground...* (page 40). The issues that drove the reconfiguration were: circulation, parking, image, interaction, and privacy.

Circulation

All program should be service with access for both vehicles and pedestrians in a way that pedestrians are not subordinated to vehicular needs (page 52). Pedestrian and vehicular access is provide to all programs via a complementary and shared circulation system, between pedestrians and vehicles.

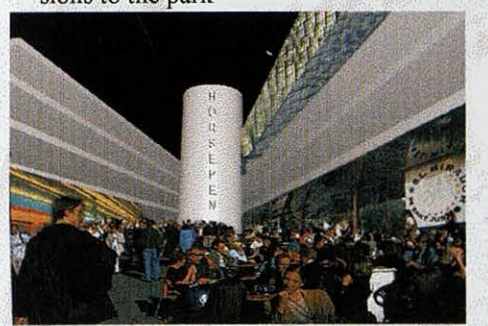
Pedestrian circulation to the site is primarily concentrated along landscaped drainage bayous and pipeline easements.

Within the site, pedestrians use spaces which link nearby program together such as in the nodes interior street.



Bayou promenades link home to the public realm.

Gas line corridors thread subdivisions to the park



Public spaces between programs offer a point of linage and circulation.

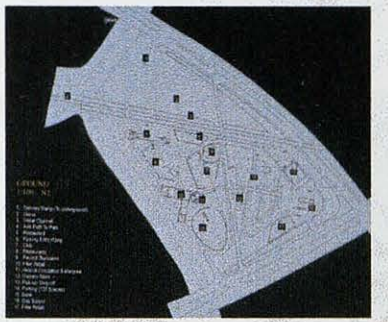
Moving vehicles in the node have their own distinct part of the site which flows to the side or over pedestrian areas.

In the park, circulation paths are shared. Most of the time only pedestrians will use them but vehicular access is allowed so that funeral processions may access the park.

Parking

Allow the parking facility to become a unifying and organizational element (page 57).

All parking facilities are fully integrated into the design in conjunction with other programs. To result in a dynamic relationship between programs, parking, and users.



Vehicles are kept to the front

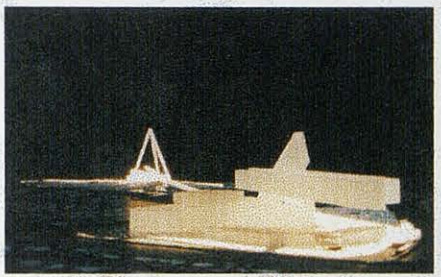
Axis links all three parts together.

The interior street is framed by parking and program.

Image

Let the node have its own physical and mental identity separate from its surroundings so that it is recognized as a landmark.

The resulting design looks nothing like its ranch home neighbors making it stand out as a landmark.



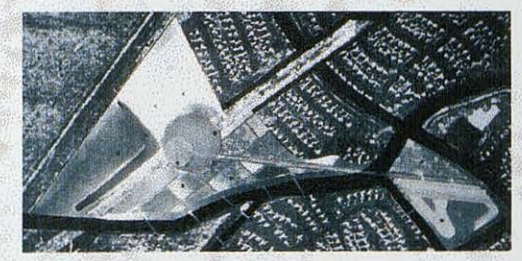
This ain't suburbia.

Interaction

Create a node whose physical arrangement of program is conducive to causal interaction among people (page 64).

In the node, open public spaces are formed by surrounding program.

In the overall plan, paths between programs become spaces of causal interaction.

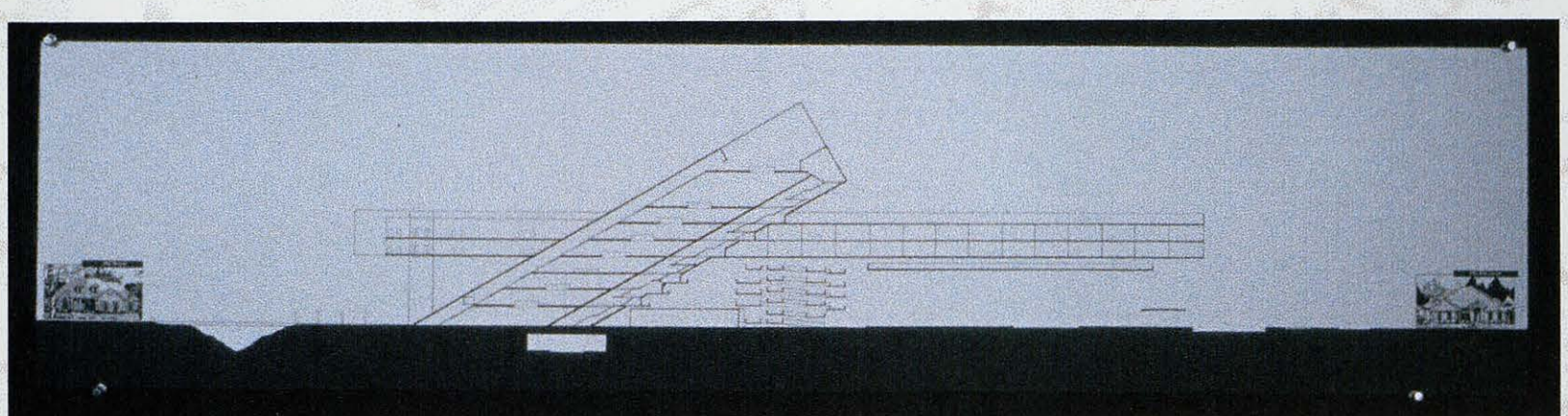


Axis links all three parts together allowing for interaction.

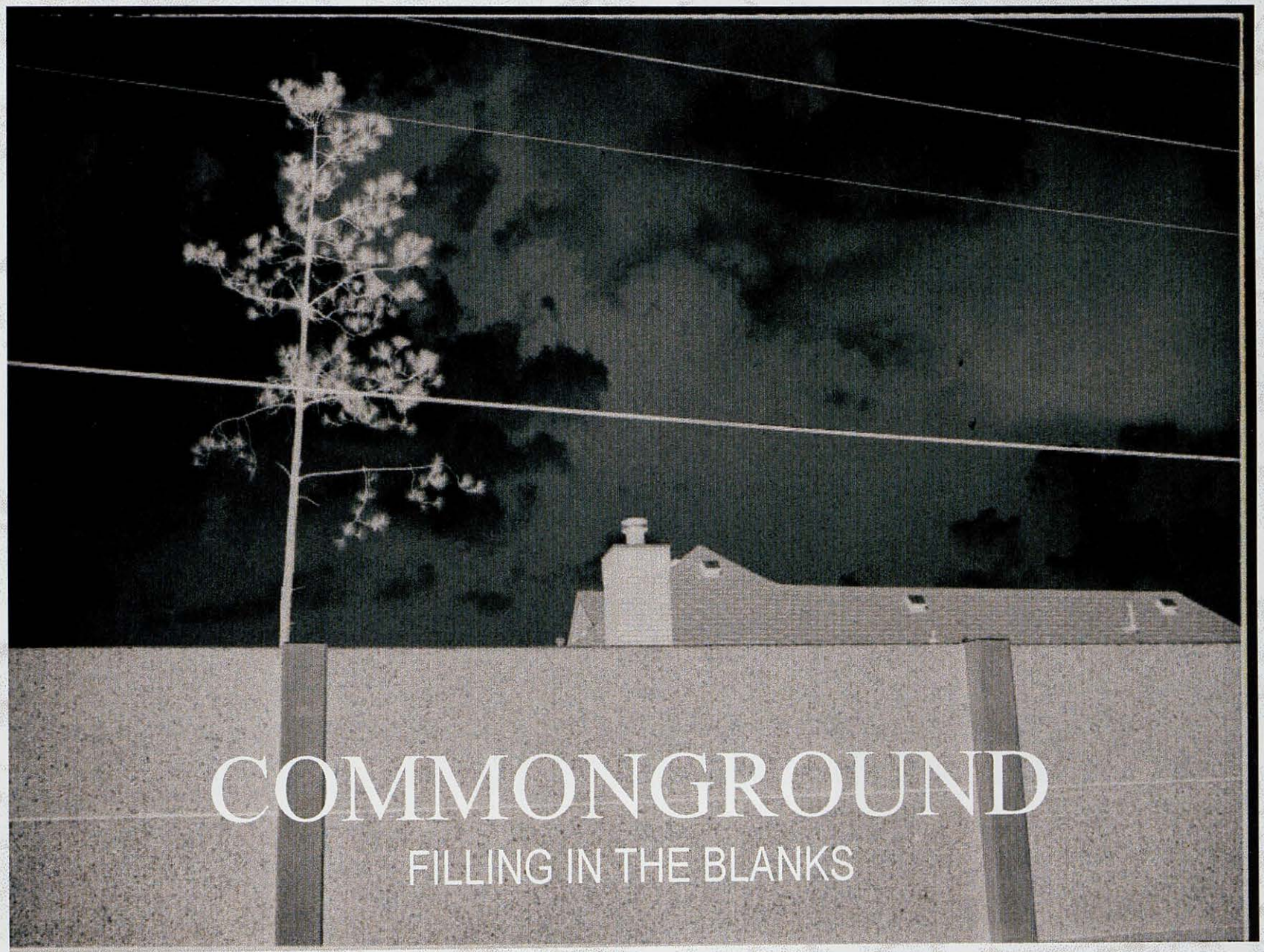
Privacy

Create an environment that allows programs which are more private in nature to be limited in contact with more public programs (page 67).

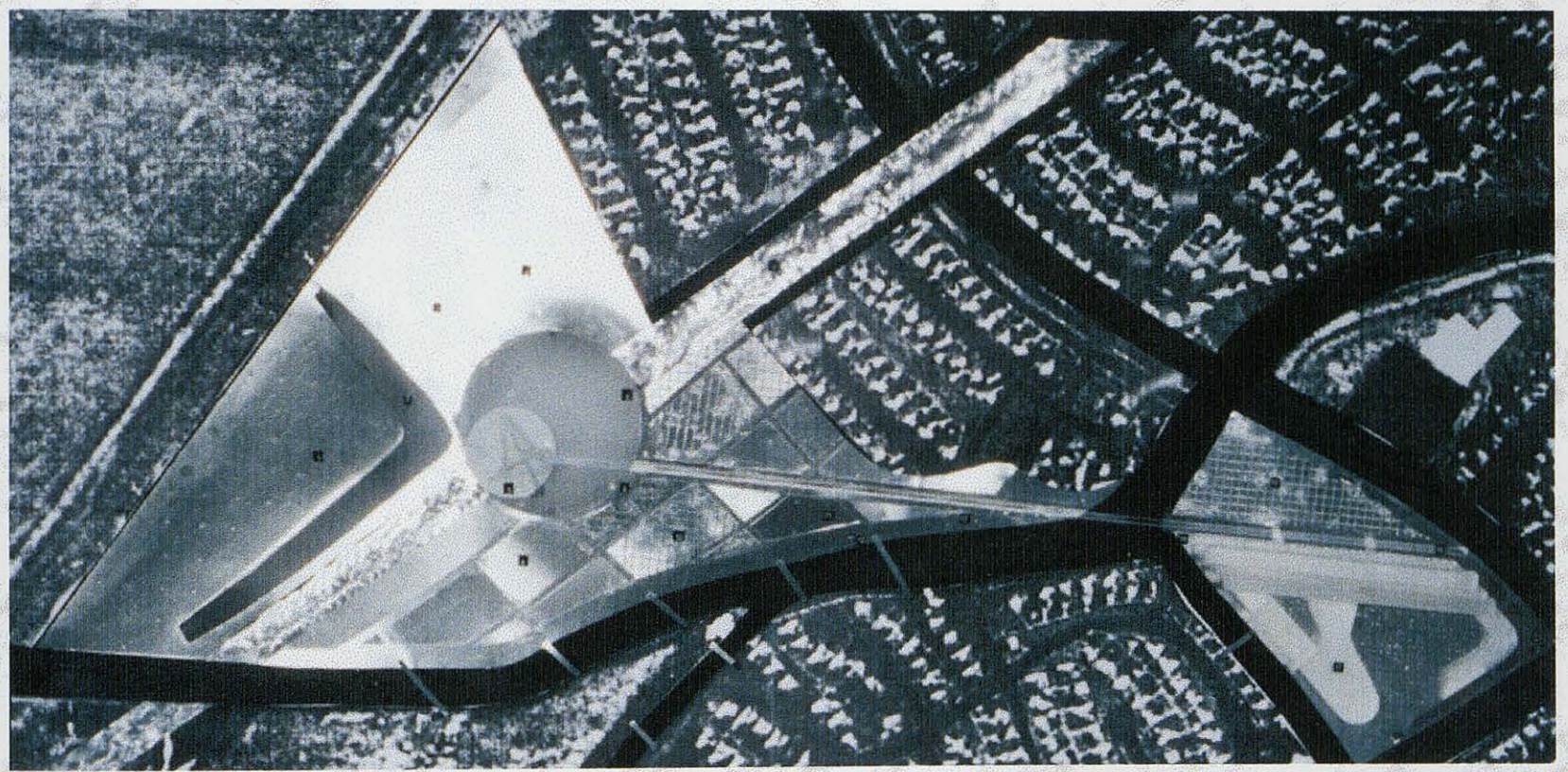
The private programs of housing and office space are kept out of the intensely public spaces by having them occupy the space overhead.



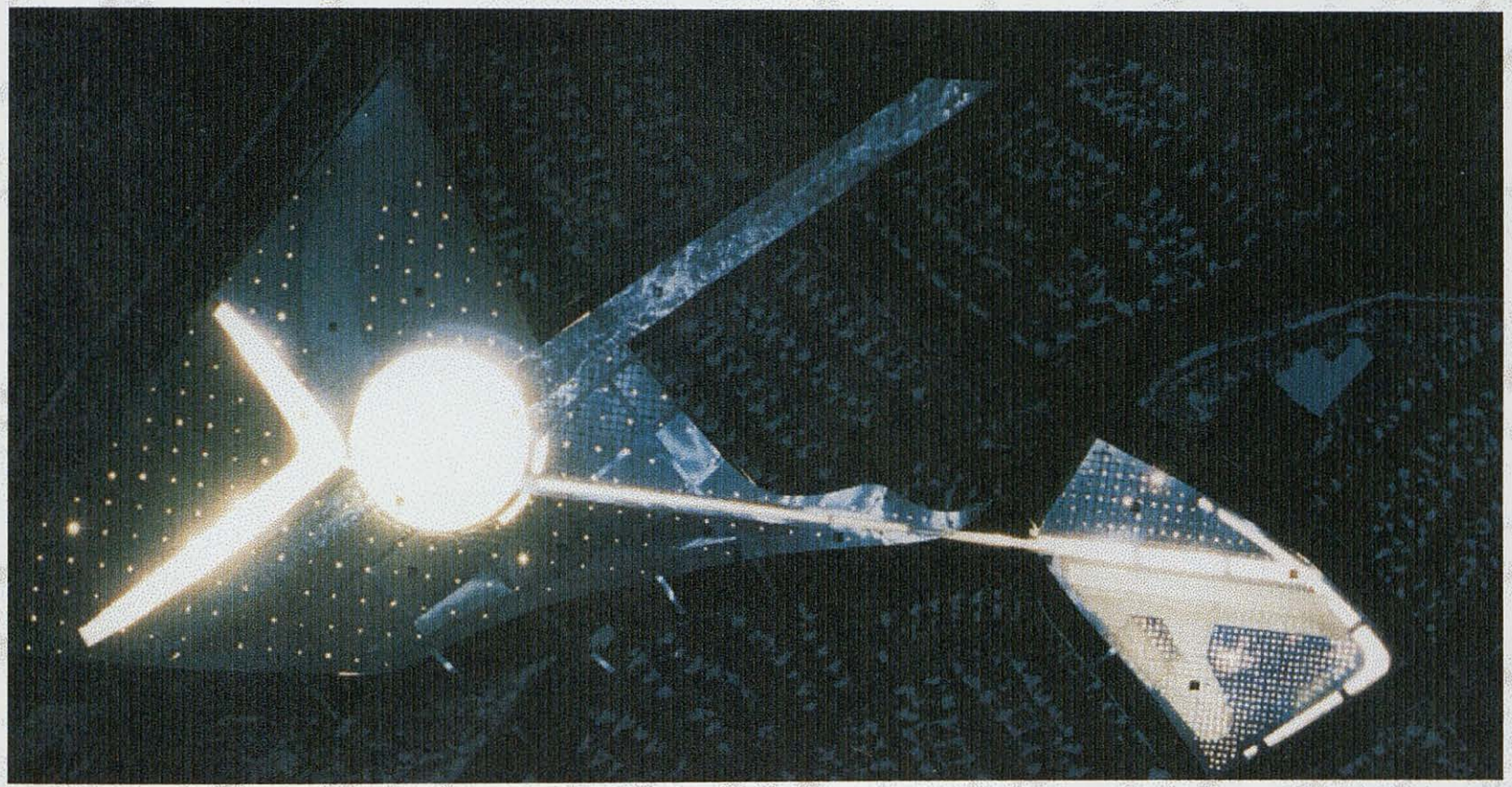
Private functions are kept above public ones.



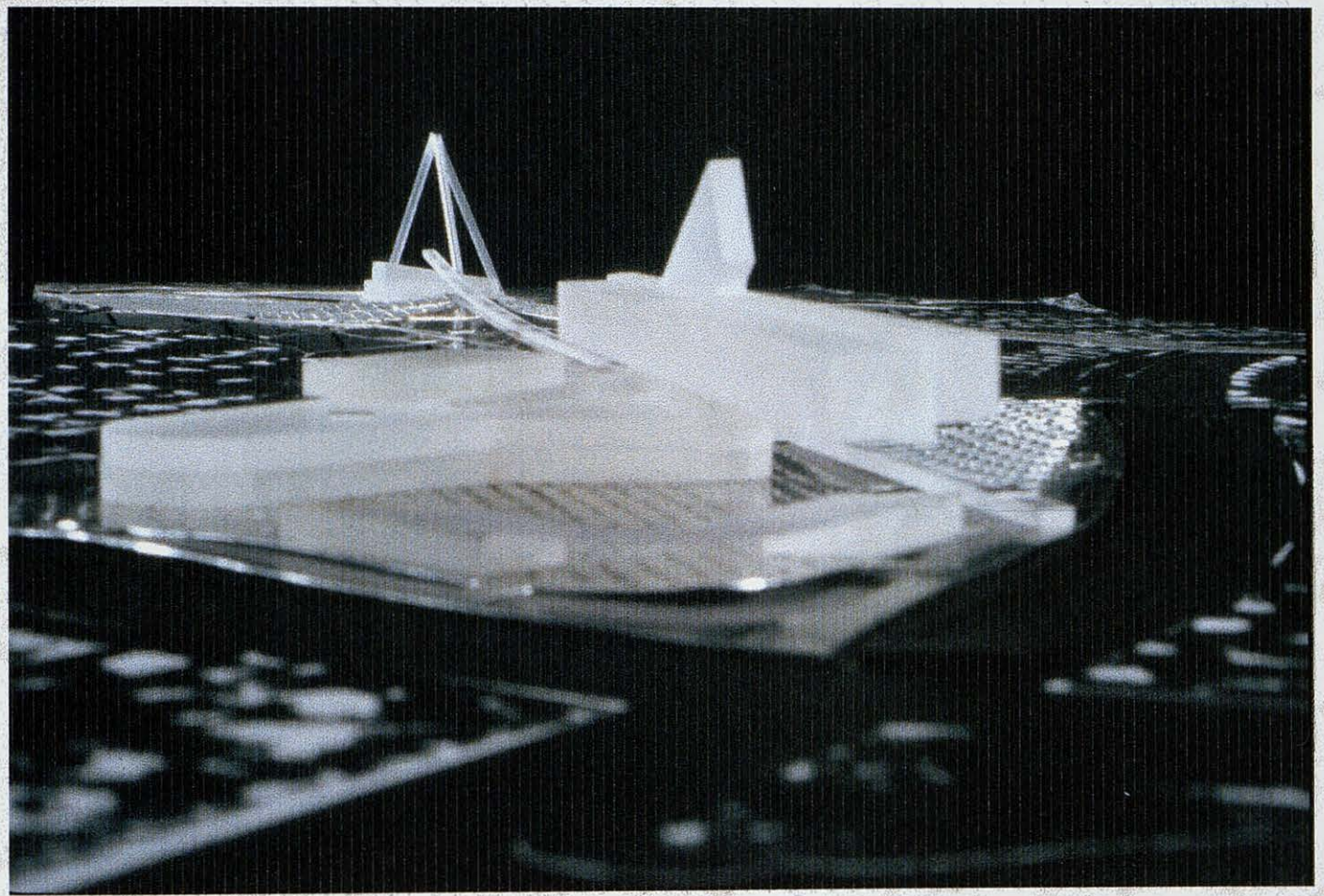
Title panel.



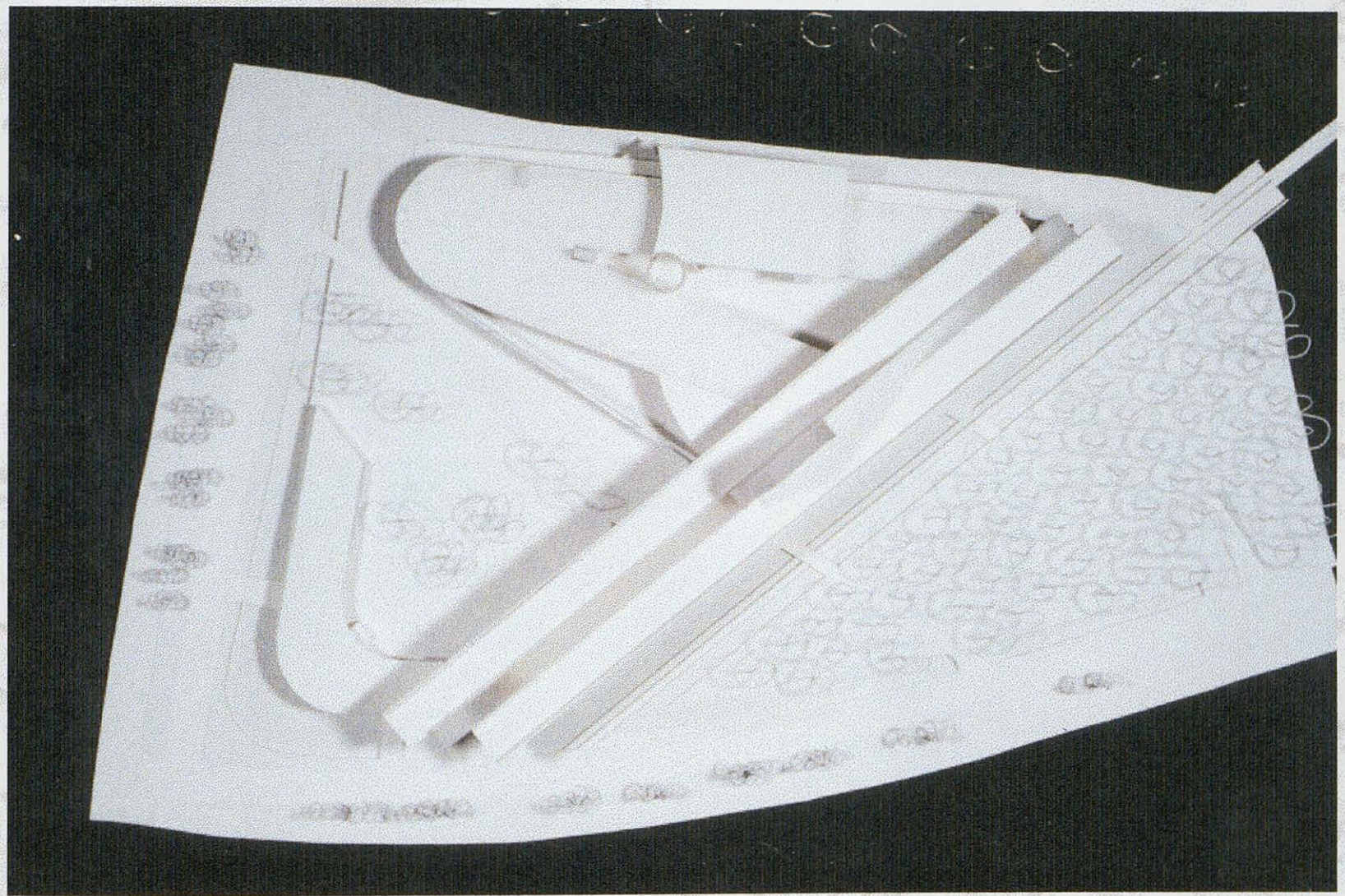
Model of entire site



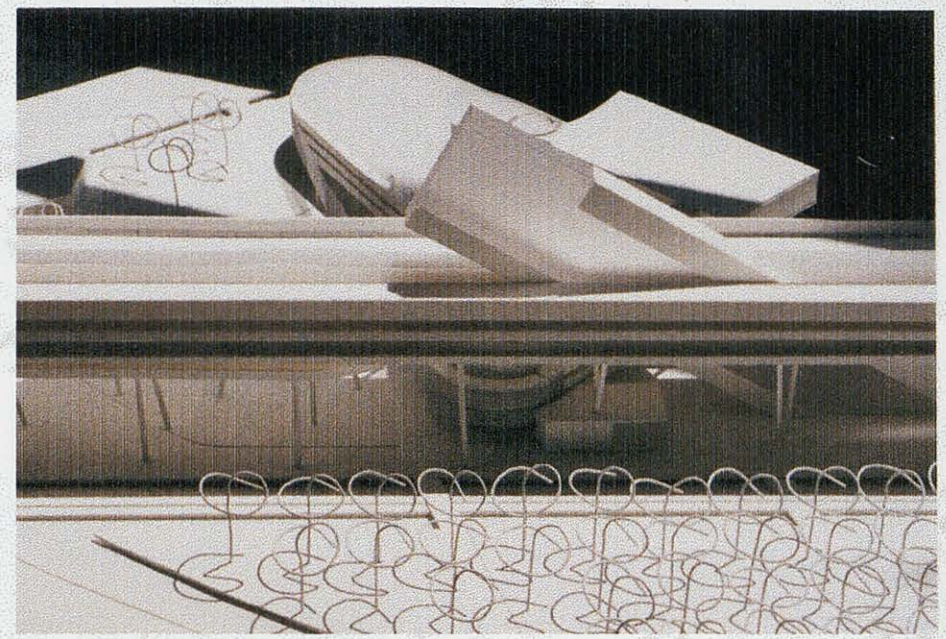
Site at night



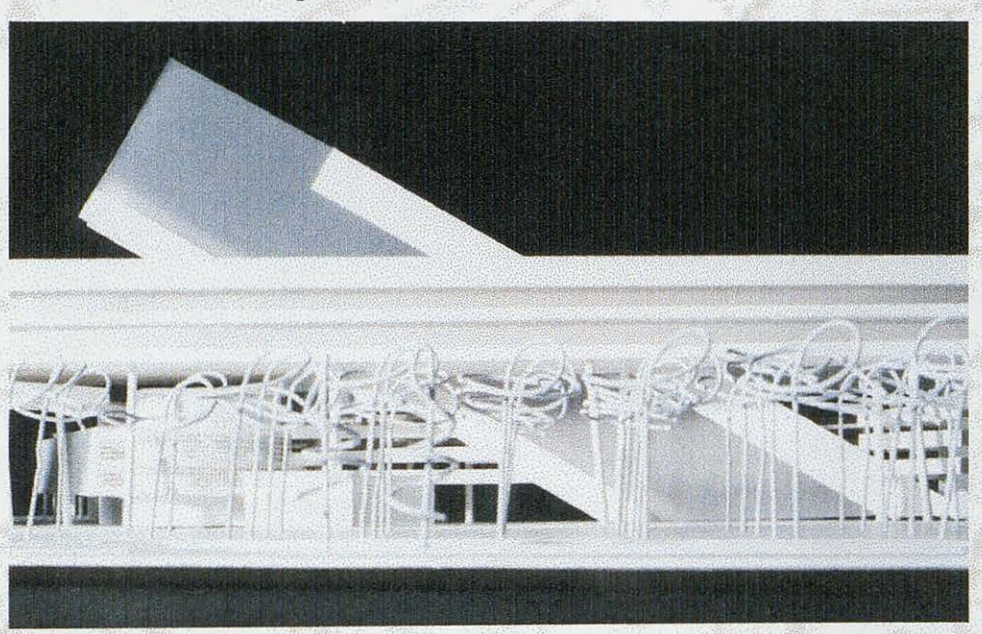
View of Model

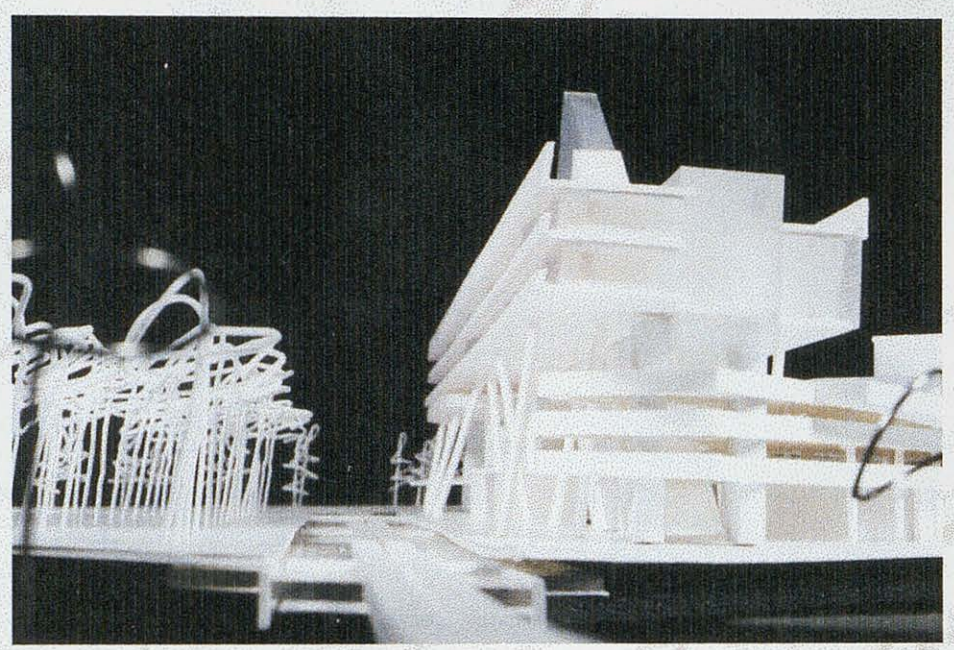


Plan view of node model

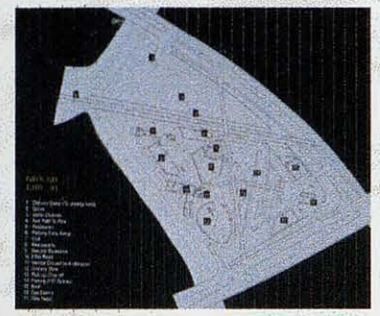


View s of node club and grove

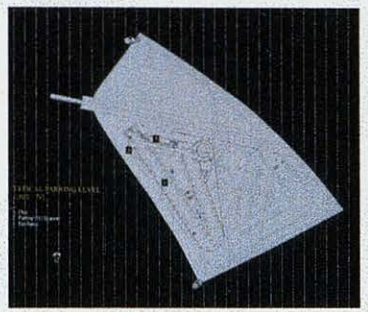




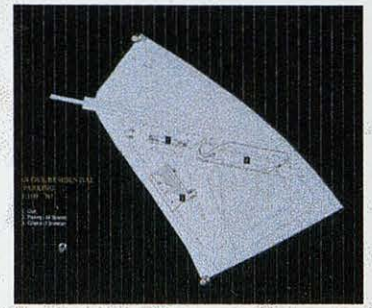
Views of node model from axis and Clear Lake City Blvd



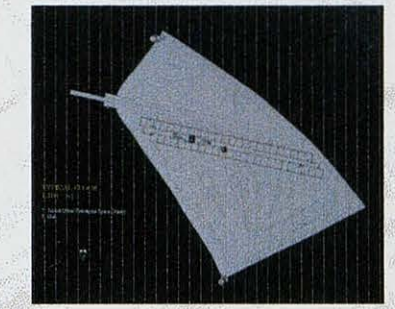
Ground Plan



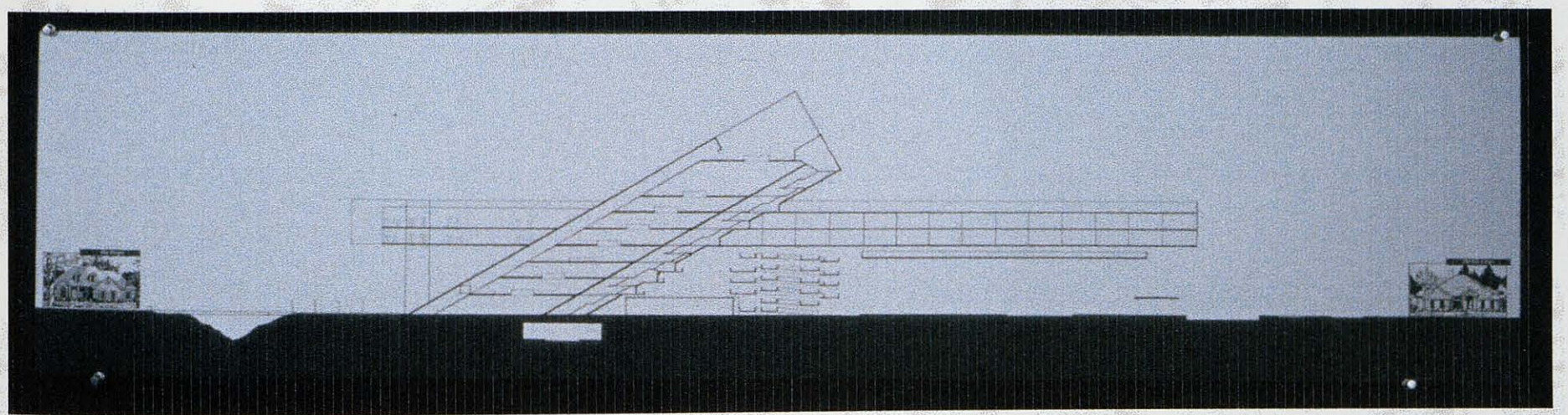
Typical Garage Level



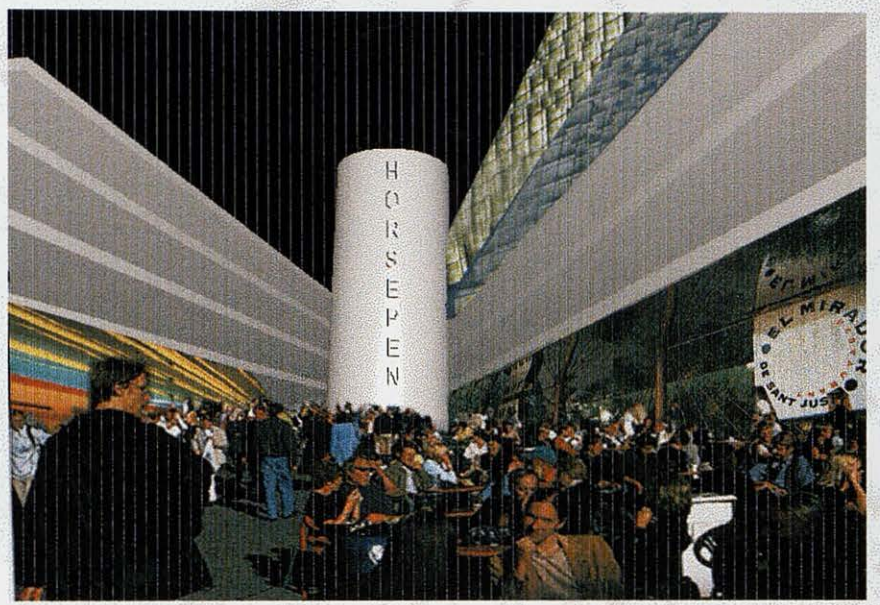
Live/Work Parking Level



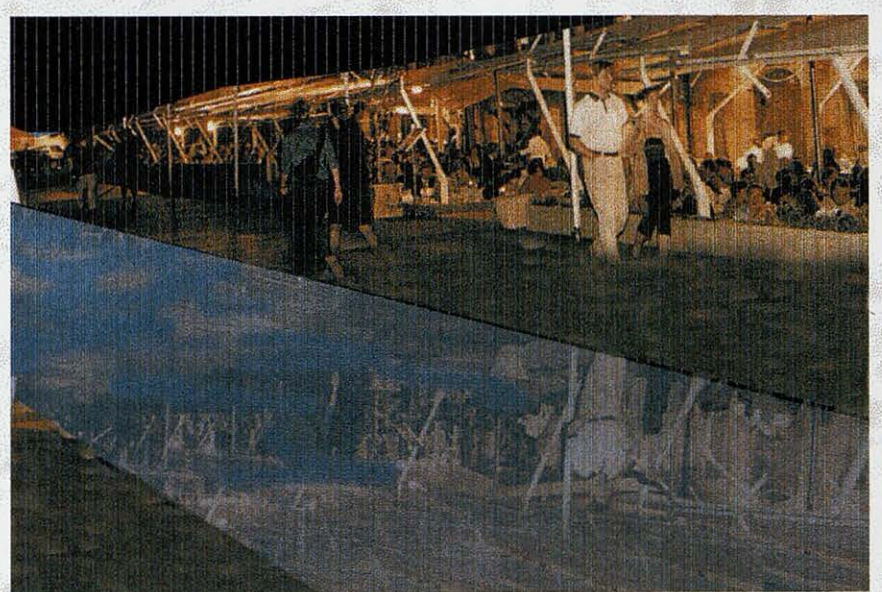
Typical Live/Work Level



Node section



Interior Street

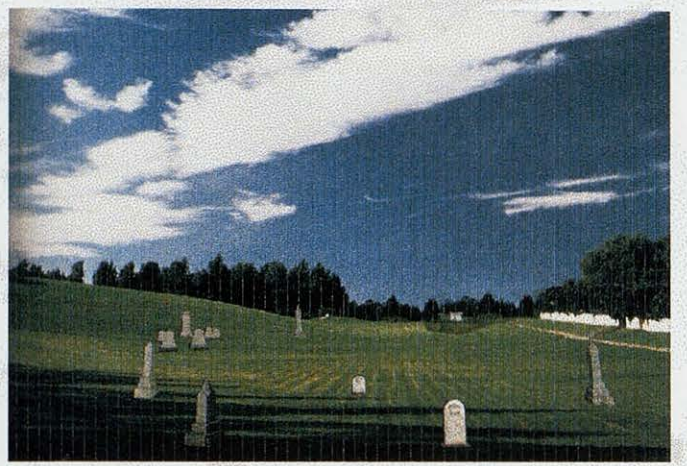


Water Channel

Bayou Bridges

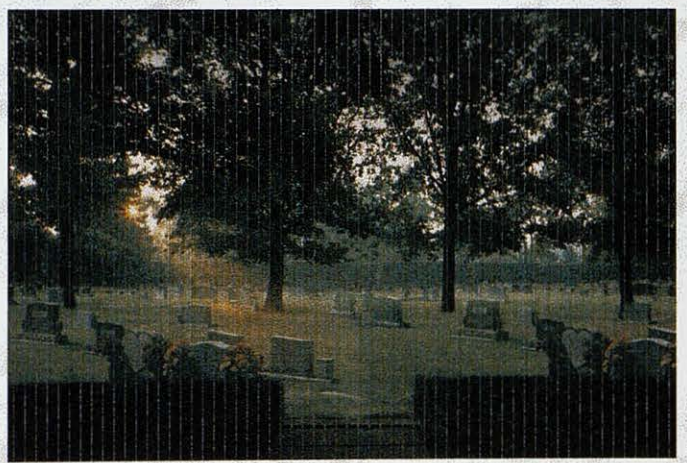
Bayou Promenade

Skater Park



Cemetery Meadow

Cemetery Grove



Cemetery Garden

Bike Ramble

Gas Easement

Playing Fields

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Ian Mac Burnie, Advisor
Michael Peters, Chairman
Tim Baird, Honorary Advisor

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Zaera, Alegordro ed. *El Croquis 53* "Zeebrugge Sea Terminal".

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Figure 1. "Group of Slumless, Smokless, Cities," by Ebenezer Howard, Garden Cities of To-morrow: 1898 Rpt. in Jonathan Barnett, The Elusive City: Five Centuries of Design, Ambition, and Miscalculation. New York: Harper and Row, 1986. p92.

Figure 2. Rowe, Peter G. Making a Middle Landscape. Cambridge, MA: MIT Press, 1991. p29. (Photo appears courtesy of the Astrocard Company Inc. Houston, Texas)

Figure 3. Photograph by James Lemass. Appeared in: Boston: 1994/95 Official Guidebook. Greater Boston Convention and Visitors Bureau. p14.

Figure 4. Hopper, Edward. Skyline Near Washington Square. Museum of Art, Utica New York. Edward Hopper. By Maria Costantino. New York: Barnes and Nobles Books, 1995. p29.

Figures 5-7, 16-22 Taken from: www.Terra Server.com, Clear Lake City, Texas, USA

Figures 8,9 Tschumi, Bernard. Event Cities. Cambridge,MA: MIT Press, 1994. p50,51.

Figure 10. "Community Map" Friendswood Development Company. December 1993.

Figure 11. Photograph by Bernard Hoffman. *Life Magazine*. Rpt in Rowe, Ibid., 52.

Figures 12-15 Clear Lake, Texas: Area Map Clear Lake Area Economic Development Foundation.

Figure 23. Libeskind, Daniel. "Traces of the Unborn." 1995 Raoul Wallenberg Lecture. University of Michigan: College of Architecture and Planning.

Figures 24-27,34 All photographers are unknown, work is rpt in A Pattern Language. By Christopher Alexander, et al. New York: Oxford Univ. Press, 1977. Pages 174, 315, 488, and 436 respectively.

Figure 28. Photograph by Bernard Rudofsky. Rpt in Alexander, Ibid., 168.

Figure 29. Barnett, Ibid. 46.

Figures 30,31

Longstreth, Richard. "River Oaks Shopping Center." *Cite* Winter, 1996. p9-10.

Figures 32,33

"Zeebrugge Sea Terminal" *El Croquis 53* ed. Alejordro Zaera.