



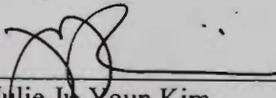
UNIVERSITY OF DETROIT MERCY
GRADUATE SCHOOL
MASTER'S PROJECT

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARCHITECTURE

TITLE: **Detroit: Urban Housing [re]Considered**

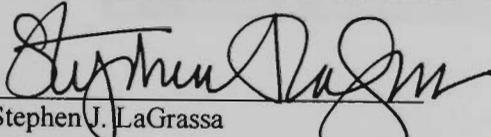
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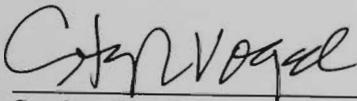
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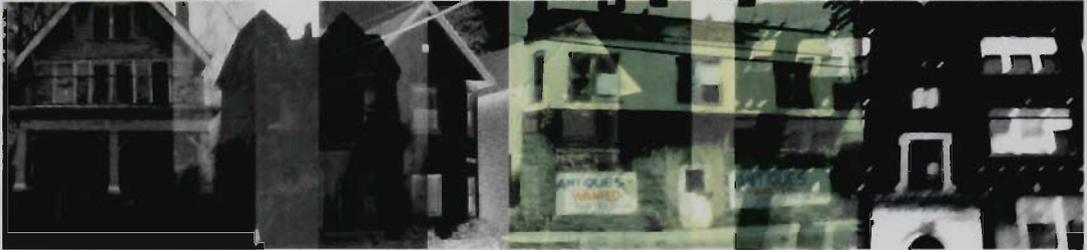
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detroit: urban housing [re]considered



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detroit: urban housing [re]considered



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detroit: urban housing (re)considered



Detroit's urban landscape transcends all inherent notions of what an urban landscape should resemble. It is within the framework of Detroit's tattered urban fabric that this investigation takes place. The concept of hard edges defining streets, sidewalks and buildings is not predominant in Detroit, nor is the traditional concept of urban density. How can one re-introduce a form of density to Detroit that isn't merely "filling the gaps" but that truly responds to the fragmented and abandoned landscape? How does it respond to a city that continues to lose residents at a rate of 1,500 a month?

What needs to happen is a reintroduction of density to Detroit that is rooted in the spatial arrangements associated with the built as well as the landscaped environments. These spatial arrangements – the individual, the collective, and the in-between – are all associated with the urban environment and are uniquely present in Detroit today. How can a housing project reintroduce spatial configurations based on the three mentioned spaces while still responding to Detroit's unique urban characteristics? How can the traditional functions associated with these spaces be introduced into a new housing development in Detroit? These spatial arrangements, however, are not only limited to the built form (individual housing units and apartments), but need to be equally expressed within the landscaped environment. Understanding the surrounding landscape is as equally important as knowing the built environment. It is through a sensitive understanding of how the landscape functions within a site and how it relates to its surrounding context as well as to the surrounding buildings that encompass a large portion of this thesis investigation.

detroit: urban housing [re]considered



project summary

The condition of Detroit's urban landscape transcends all traditional and inherent notions of what an urban landscape should resemble. The concept of hard edges defining streets, sidewalks, and buildings is not predominant in Detroit. Nor is Detroit a city with a traditional concept of density. Density, in its basic urban scheme, is customarily associated with an abundance of people and (built) places within close proximity to one another. However, one only needs to drive through some of Detroit's more tattered areas to realize that this concept is no where to be found. Even in the central business district where the built still exists in form (somewhat), it's only after a few short minutes does one realize that the buildings and the streetscape lack people and, in a sense, function.

What needs to happen is a reintroduction of density into Detroit's landscape. However, this does not simply mean "filling the gaps" with new housing/retail, as that would imply a sense of re-growth. The design of the "fill" needs to focus on spatial issues. These spatial issues deal with examining the traditional urbanist approach to housing and reinterpreting the way the spaces within a unit work together to provide a connection with the surrounding urban context. These spaces – the individual, the collective and the in-between – are the backbone to the design of the project. Equally as important is how these spaces function within the urban landscape of the site and how these spaces then relate to the new built form as well as the surrounding urban context.

The intent is to create a housing development that, through these urban spaces, continues to extend into the surrounding communities – weaving their way into the surrounding urban fabric, allowing a greater bond to be created between the project and its surroundings. The focus of the development is not primarily on the internal arrangements of the home, but on the spatial configuration of the landscape which surround the units. Furthermore, the project also places an emphasis on how the built environment interacts and works together with landscape to create a more humane architectural landscape.

historical urban housing preservation



the history of housing preservation in the city of detroit is a story of struggle and triumph. it is a story of the city's rich architectural heritage and the challenges of maintaining it in the face of urban decay and economic hardship. the city's historic neighborhoods, such as the west village and the east village, are a testament to the city's past and its potential for a more vibrant future.

detroit: urban housing [re]considered



thesis paper

the history of housing preservation in the city of detroit is a story of struggle and triumph. it is a story of the city's rich architectural heritage and the challenges of maintaining it in the face of urban decay and economic hardship. the city's historic neighborhoods, such as the west village and the east village, are a testament to the city's past and its potential for a more vibrant future.

It is within the historical and present day framework of abandonment in Detroit that my thesis investigation begins to take root. The architectural profession is based on the notion of creation and growth and it is precisely these ideas which the city of Detroit has failed to embody in the last 30 years. The city's acknowledgement of disinvestment has created a design problem like nothing else experienced by the architectural and planning disciplines. It seems like the most logical solution to Detroit's hemorrhaging population and overall lack of density would be to simply reintroduce density in the traditional urban form of housing and retail – "filling the gaps". However, because Detroit's population is still declining the reintroduction of density cannot be carried out in the traditional, urbanistic approach. It is not a matter of just "filling the gaps", as this would imply an increase in population and re-growth – both concepts which Detroit has not yet achieved.

In order to properly hypothesize my investigation, I have asked myself a few questions to better structure the framework of my thesis. For instance, what kind of architectural solution can incorporate the idea of vacant land and help foster a reintroduction of the built form in a more sensitive, sustainable way, in turn re-connecting the land to the greater urban fabric? How can architecture construct a built environment that stays true to Detroit's historical urban fabric but takes the spatial elements of a vacant parcel and harbor a new sense of connectivity with the city? What I am attempting to achieve with my investigation is a reinterpretation of urban housing by reworking the traditional concepts into a new form of urban living. My investigation will consist of an historical overview of Detroit's abandonment and the concepts of Fordism and the 20th century industrial city. These historical concepts will be clarified as they are important in formulating a design solution. Furthermore, an investigation into housing in urban areas and various urban typologies will be undertaken. I will also explore the notion of critical regionalism and the sense of place, nature, history and craft that critical regionalism embodies and its importance to Detroit. My focus, however, will primarily be on the design aspects of urban housing. By re-interpreting spatial and tectonic arrangements in the built form and placing an emphasis on the individual and collective spaces both inside and outside of the housing unit, I will create an urban housing development that takes advantage of Detroit's unique urban state, connects

itself with its surrounding urban context, and offers a place of habitation that promotes a sense of place within Detroit, offering up a new form of urbanism.

Detroit is a city unlike any other in the United States or in the western hemisphere. It is a city that, throughout its history, has laid claim to many accomplishments and accolades. However, these innovations and experiences have been neatly tucked away and housed in historical museums, textbooks and the memories of aging Detroiters. Present day Detroit resembles little of its grandiose past and has more in common with Berlin after World War II than it does its one time slogan, "The Paris of the Midwest".¹

What makes Detroit so unique is not the exodus of white Americans to the suburbs in the 1950's, 60's and 70's. It's not its history of racial tensions and race riots (although it is the only city in the U.S. that has been occupied three times by federal troops²). It's not the creation of billion dollar highways zigzagging the landscape and "connecting" suburb and city, only to expedite urban flight to the suburbs. And no, it's not the cities lack of any meaningful public transportation or regional light rail system. All these sociological and urban experiences/concepts of the last half of the 20th century were experienced in just about every major American city. All the horrors and anti-urban concepts such as red lining, blockbusting, racism, suburban tax incentives and highway construction have also occurred in New York City, Chicago and Cleveland (admittedly, though, with a bit more ferocity in Detroit). However, these cities have been able to weather the storm and retain the majority of their population base and building stock. Detroit, however, has not. It is the overwhelming amount of disinvestment and abandonment of the built form that has left Detroit in its present day unique state. No other city has seen the amount of abandonment and decay that Detroit's neighborhoods and once powerful cultural institutions have. No other city has seen such a complete disregard and neglect by one-time citizens as Detroit has. And no other city has seen the reversal of fortune and image both nationally and internationally as the city of Detroit.

Since 1978, 108,000 buildings in Detroit have been demolished, while only 9,000 building permits have been issued³. This is an astounding statistic in a city of close to one million inhabitants. In 1990, the city planning commission called for the de-commissioning and abandonment of the most vacant areas of what had been the fourth largest city in the U.S.⁴ In other words, the city's planners were suggesting that the most blighted parts of the city should be closed down. This idea is historically unprecedented and is essentially the culmination of years of neglect, abandonment and disinvestment which led the city to

propose abandoning the abandoned. The extreme nature of Detroit's abandonment has led to the creation of the urban prairie – an idea which is truly unique to the city of Detroit. The urban prairie consists of large tracts of vacant land, once densely inhabited by the built form, which, through demolition and massive population hemorrhaging, have relegated entire city blocks into urban grasslands, populated by foxes and pheasants rather than families. In a sense, the land has been returned to its original state.

In order to better understand the roots of Detroit's abandonment, one only needs to look at the impact that Henry Ford's revolution of mass production had upon the city of Detroit, for no other city has so successfully carried out Henry Ford's vision. His idea, known as Fordism, is rooted in the concept that a society consumes the products of its own labor while consistently creating a surplus of demand ensuring a nomadic, operational and ceaselessly reiterated model of ex-urban arrangement.⁵ Because of this new form of living, suited to mass industrial production and the mobility of capital, it is no wonder that Detroit decentralized and abandoned itself. The development of Detroit, and other American cities for that matter, can be understood as a temporary, ad hoc arrangement based on the momentary optimization of industrial production.⁶ The more rapid the pace of technological change, the more rapid and temporary the sense of place becomes. If one is to understand Detroit's abandonment through a Fordist lens, then Detroit is a city of unprecedented success. It was exactly Detroit's ability to carry out Fordism exactly as planned that led to its inevitable downfall.

Detroit's abandonment has also led to a shortage of affordable housing within the city. Because of Detroit's wealthy history, Detroiters were able to live in detached, single family homes as opposed to the tenement style, high density housing of other industrial cities. This has allowed Detroiters to lay claim to the highest number of home ownership per capita in the U.S. Architecturally, Detroit's urban fabric consists mainly of single family, detached structures within various neighborhoods. Each neighborhood in Detroit had their own identity and characteristics which were seen politically and socio-economically as loose connections of micro-cities functioning within the greater urban construct of Detroit. While residents of these neighborhoods all claimed to be Detroiters, their neighborhoods harbored a feeling of community and kinship that sometimes ran thicker than their love of the city. This concept, although not as prominent, still exists today.

The majority of new housing in urban areas today tends to follow along traditional urban planning, and tries to resurrect some of the more positive aspects of urban living

such as proximity to retail and parks, viable mass transit, and higher density housing which contribute to the neighborhood feel. This form of traditional town planning has been dubbed New Urbanism. However, if one steps back and analyzes the fundamental principals of New Urbanism – high density units, public green space, walk-able communities – one finds that these ideas have been rooted in town planning for thousands of years. So, what is so new about New Urbanism? It's not to say that this isn't a positive movement. It promotes a sustainable society which is sensitive to its surrounding environment and is generally healthier than an ad hoc, placeless arrangement. The problem, however, is that there isn't anything new about this. American society tends to embrace "newness" in cultural or economic spheres but is usually turned off by "newness" when it is applied to cities.⁷ We often over romanticize cities of old and the building stock within them. If we are truly going to advance the way we live in urban areas than we need to acknowledge past successes, not resurrect them, and attempt to forge new and innovative ways of designing and/or revitalizing urban areas.

In order to advance this notion of innovative design, one must study and acknowledge the various forms of building typology in urban areas. Building typology in urban areas tends to have a smaller range of types than in the suburbs or rural areas. Usually function is relative to form, so, a police station looks like a police station and not a church or library. They should be distinct buildings that can be universally recognized. This is not to say that their design cannot be challenged and improved upon, but instead the traditional typology for a building should still be apparent. As Douglas Kelbaugh states, "an architectural type that has stood the test of time . . . must be doing something right in terms of responding to climate, social and cultural needs, tradition and economy."⁸ Certain building types have become universal symbols for their function and will continue to do so. However, what has been happening to urban housing, particularly in Detroit, is the incorporation of the suburban home model into the urban area without any consideration of place and context. This is not to say that some of the characteristics of the suburban home, such as spacious yards or front entry garage cannot be utilized in an urban context. The problem occurs when this model is forced into an area that is not structured to handle a thoughtless, placeless design. Building typology also translates into neighborhood design and creating neighborhoods that have distinct forms which are recognizable by its residents. The most memorable and architecturally successful neighborhoods are usually ones where there are many buildings of similar architectural type, style, and materials.⁹ For instance, some of Detroit's more successful and enduring neighborhoods such as

Indian Village and Rosedale Park, all have significant architectural distinctions that help to differentiate themselves from their surrounding contexts. However, too much repetition can also be negative. There needs to be a balance between diversity and design. The cities and neighborhoods that follow a more typological consistency are the more successful ones. One can look at some of Detroit's inner-ring suburbs such as Royal Oak, Ferndale and Birmingham for examples of how recognizable, consistent building typologies are used successfully.

For good design to happen at the micro level, attention needs to also be paid to what happens at the macro level. The most important macro-scale area of Detroit is the entire metropolitan region, from downtown Detroit to its fringe suburbs. In order to gain a better understanding of this macro-scale area and to be able to advance design at the micro-level, one must explore the notion of critical regionalism. Critical regionalism is the concept that an area architecturally celebrates and maintains its similarities as well as its differences. In other words, it's an attitude that celebrates what is different about a place and is ultimately a reaction against standardization and the universality of modernization. Like much of contemporary culture, architectural design has been commodified for the marketplace.¹⁰ This notion has trivialized and commercialized architecture leaving it with a relatively poor understanding of place. It is precisely this notion that critical regionalism is attempting to remedy. There are five tenets of critical regionalism. These five points explain how critical regionalism is rooted within a region. The five points are a sense of place, sense of nature, sense of history, sense of craft and sense of limits. It's not necessarily important to my investigation to dive into each of the five tenets, describing and analyzing each one. It is through these five points, however, that a region's design can be dictated, creating and harboring a sense of community and identity that has been lost in the placeless, temporary design of the suburbs. A region is successful if an individual has a feeling for one of these senses. It is through architecture that regional differences are embodied and expressed. It is one of the remaining items in our culture that isn't entirely mass-produced or mass marketed. The idea that architecture is a unique and irreplaceable way of looking at the world¹¹ is also apparent in critical regionalism. One may visit a city or region having no prior knowledge of it and still gather some information about the place solely by observing the architecture (or lack thereof in the case of Detroit). This is a very powerful idea and one that maintains critical regionalism's prominence in dictating urban design. The communicative strengths of architecture should be apparent in the urban form if the design is successful.

Once attention has been paid to the macro-level, and one has an understanding of how design is influenced at this level, then attention can shift to design at the micro-level. The program that I will investigate and, ultimately serves as a design tool for exploring the following concepts and ideas, is a mixed-use housing development in the city of Detroit. At the forefront of the project are 20 single-family detached homes, 150 apartments and 60 row-houses. There also exists a retail aspect to my project providing basic amenities and services for the residential portion as well as to the surrounding area. However, the retail aspect of my program merely satisfies an economic need and is not heavily emphasized in any of the design process.

To begin with, one of the fundamental concepts that has shaped my thesis investigation and ultimately driven the design of my project is the notion of individual and collective spaces. These spaces operate two fold in my investigation; one, inside the housing unit and, two, in relationship to the site and immediate surrounding context. What has driven my understanding of these spaces is how they function together to provide an outlet for interaction between individuals and groups. Furthermore, I also intend to investigate ways to reinterpret their traditional functions and finding an alternative way in which these spaces can be developed within an urban context.

An important precedent study I undertook which expanded my understanding of these spaces and how they function in a residential, urban setting was the Borneo/Sporenburg Housing project in Amsterdam. What was important about the project was the way in which the architects incorporated individual spaces within each housing unit to be doubled as a shared, collective space. This was accomplished through project guidelines requiring each unit to have a 30-50% void space. This allowed a visual connection to the public space and also allowed for a private outdoor patio, fulfilling the residents need for public and private interaction. The reasoning for this had a lot to do with the tight sight restrictions (the project is located on a series of canals). However, these principles can also be applied to an urban setting like Detroit. Each housing unit can embrace some form of void space, whether it serves as a private garden or even a transitory space from inside to outside. Furthermore, these spaces can be located between units and used to harbor a sense of collectiveness between neighbors providing an outlet to the surrounding context.

Traditionally, the individual (private) space has functioned solely as a space that is typically opaque and sheltered from any form of unwanted interaction. An individual space within a unit could be a bathroom or a bedroom. The entire unit may also serve as an individual space. Collective (public) spaces have functioned usually in the form of

parks or squares, but can also be as basic as a sidewalk or street. Green spaces are usually considered collective spaces. Both of these spaces, however, have usually had clear and discernable edges and borders. One knows when they are entering a private space and one has certain behavioral tendencies in each of these spaces. In my project I am attempting to blur the edges between public and private and unite these spaces so that one has the opportunity to be in a private space and still have the possibility to interact in a collective realm. Traditionally, porches and patios have served this function rather successfully. The porch, although visible from the street is viewed as a private, individualistic entity. By combining a patio space in a unit that has a connection to a public square or street, a connection is made between the two spaces, harboring a stronger social and physical bond between individual and collective and with the surrounding context.

Detroit's housing fabric has traditionally consisted of the detached, single family home. By expanding upon the notion of detached housing and studying the space that occurs between each unit, there is an opportunity to create a shared space between two neighbors that can function as a collective or private space. From this investigation, emerged a third type of spatial consideration: the in-between space. This space functions between each housing unit, not just at the ground level, but from the ground to the sky and within every exterior and interior space. The in-between space is the most inherently urban space of the three. Traditionally, these spaces have functioned as semi-private/public spaces in urban areas. It is here that one has a direct connection to one's neighbor. It is these spaces that permeates Detroit's urban landscape, both past and present, hence the abundance of detached, single-family homes. Furthermore, instead of having the conventional private backyard, there is the opportunity to have collective green spaces utilized by 2 or more units. The private space may be moved to an indoor void space, between units or may even be incorporated as a rooftop patio. Multiple levels of shared space, not necessarily outdoors, can also provide an opportunity for the individual and collective to co-exist together between two units while embodying the in-between.

Also important to this investigation of urban spaces is how to frame and enclose these spaces so as to provide their desired function but also to facilitate the unity of these spaces. The obvious way of framing urban space is through enclosures of some sort; however, complete enclosure hinders trying to achieve any sort of transparency between spaces. Enclosures are not the only forms that claim space.¹² Columns, free standing objects or free standing roofs may give us a different sense of space than a full enclosure and may also aid as a transient device between two different functions such as retail and

residential. Also important is the fact that not only humans, but objects and nature also claim space. Promoting interaction between the three is integral in having a successful project. This idea is ever apparent in my thesis program, which requires the sensitive interaction between all three of the aforementioned bodies within a contained site.

Also of relevance is how structures in the urban environment engage each other. Central to this idea and a notion that has been at the forefront of the New Urbanism movement is the idea of the urban block. It is the function of the city block to provide continuity.¹³ The city block is an integral part of the urban fabric and provides the most prominent aspect of being in an urban environment. The city block almost always contains sidewalks as buffers between buildings and street and can be considered the backbone of the urban context. However, the traditional notion of the city block can also be challenged and reworked. It makes obvious sense to place the retail function of a project on a continuous city block fronting a major road. The way the block engages the streetscape, however, doesn't necessarily have to follow a continuous form. There may be void spaces within the block which invite pedestrians to engage the site. The slippage of planes horizontally can also serve as circulation devices as well as unique storefronts for people passing by. In terms of a residential housing block, the tendency is for entrances to be facing the street and for minimal distance between the block and the sidewalk. However, one can add some variances to this notion to facilitate a better engagement with pedestrians and residents. For instance, one can offset the entrance back and underneath the unit opening up the space underneath and providing visual corridors from the street to the interior of the program site. Furthermore, the incorporation of openings within the monotony of the block can also provide alleyway and pedestrian access while still maintaining the privacy of the residents.

All of these concepts can also be applied to the retail aspect of my program. While the emphasis of my investigation is primarily in housing, having a strong concept for retail, both in sharing the spirit and ideas that have driven the housing portion will yield a stronger overall concept and solidify the projects connection to the surrounding urban context.

It seems the most logical route for retail is to follow the New Urbanist principles for retail layout which consist of storefronts at the street level with entrances facing the street, street level parking and the possibility of incorporating the apartment aspect of my program above the retail thus creating your typical live-work layout. While there is nothing inherently wrong with this arrangement, in order to keep in the spirit of my investigation there will need to be a different approach involved. For instance, circulation corridors that break up the

retail block can provide circulation outlets to and from the site and provide the opportunity to address retail away from the street and turn it inward towards the site allowing for a greater connection between site and context. Furthermore, there is the opportunity to provide retail at the second story instead of its traditional location at the street level. By switching the traditional placement of these functions one can begin to manipulate how a traditional urban block operates.

The final part of my investigation deals with the internal functions of the housing unit and how the traditional spatial layouts can be reworked to provide a new setting for urban living. In order to re-interpret the urban home, I have focused on certain architectural concepts such as materiality and tectonics, as well as spatial constructs. In order to gain a better understanding of the way a housing unit is laid out, one needs to focus on the spatial constructs. The space within a dwelling unit is comprised of distinct rooms, each with their own function. Traditionally these rooms have also had distinct borders, not necessarily a physical border, but a conceptual threshold that an individual is aware of when they pass through. By overlapping spaces, both vertically and horizontally thus creating a slippage of volumes, one can begin to restructure the habitable space within a unit and challenge its traditional layout. For instance, a kitchen can transcend the “boundary” of the living room and incorporate many of its characteristics into the living room space. This would create a tension within the in-between area allowing a new type of function to occur in the space. The traditional activities associated with each space can still occur, however there is now a new neutral space created whose activities have yet to be determined. Furthermore, one can take the concept of the window. Conventionally it is an open volume within a building façade that allows for a direct connection between inside and outside allowing for the passage of natural light. However, by reconfiguring how the window is placed within the building envelope one can begin to approach the window not as just an opening but also as a tool for framing views from inside to outside as well as becoming its own habitable space. The window is also a key component in beginning to understand the workings of the individual, collective and in-between.

This idea of reconfiguration can further be expanded upon by the concept of materiality and tectonics. Both of these architectural concepts exist within the traditional home. However, by reconfiguring them one can also achieve a new feeling within a space. The opaqueness and density of a building material can significantly transform the space which it occupies. Glass, for example, has a transparent quality not only allowing a direct view into the next space, whether inside or outside, but it can also change the transient

quality of a space. Furthermore, the way in which spaces are divided can also be expanded upon. Usually a wall or divider has signified the end of a room; however, by adding void spaces to a divider, or lowering the height, one can add another element to the space and change its overall quality. Moreover, by playing with the transitional aspects between floor levels as well as between inside and outside, one can also begin to blur the edges between these spaces allowing for a new type of spatial construct to emerge.

The fractured setting of Detroit has provided an urban backdrop that for some time has been associated with neglect, abandonment and urban failure. The resurgence in interest in Detroit and the development of new housing within the city has, hopefully, marked the beginning of a turn around for the cities fortunes. However, what hasn't been utilized by the cities unique state is for a new type of urbanism to emerge. One rooted in the ideas of sustainability and an intermixing of the individual, collective and in-between. There is tremendous opportunity for Detroit to emerge as a bastion for a new style of urban living unknown to any other American city. It is within this realm that my investigation has resided and has hopefully been able to contribute to formulating what this new type of Detroit Urbanism may entail. While I do not intend to repair Detroit's present state I am trying to offer a new way of attacking its unique setting and creating a new settlement pattern within the fractured urban setting of the city which could hopefully grow and import itself to other areas of the city.

detroit: urban housing [re]considered

borneo/sporenburg + 18th & arkansas + irvington place + king's cross social housing + broelberg residential complex + nexus world

precedent analysis



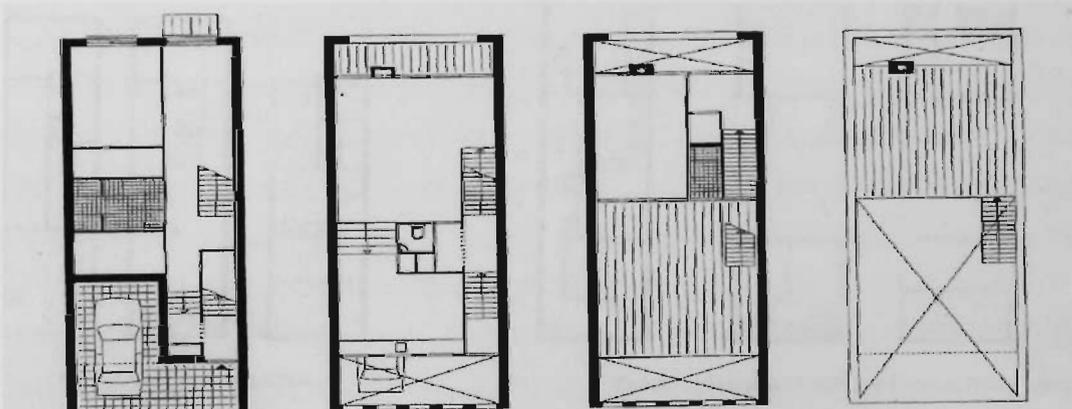
borneo/sporenburg + 18th & arkansas

This precedent study consisted of an in-depth look at Borneo Sporenburg, a spatially complex, and very dense housing development located in the Eastern Docklands of Amsterdam. Equally important was the attempt to compare Borneo Sporenburg with similar project in the United States. While no project matching Borneo's scale and publicity has yet to be achieved in U.S., there have been smaller scale urban re-development projects that deal with some of the same spatial and conceptual issues that Borneo Sporenburg tackled such as the 18th & Arkansas housing project in San Francisco



borneo/sporenburg

The design of the individual units were awarded to various Dutch and international firms. There were a few guidelines imposed by the government and West 8. These included a density of about 40 units per acre, a three story height limitation and the incorporation of a single carport. Also, and most importantly, a 30-50% void had to be designed into the units in order to form light courts and outdoor spaces. While the fundamental unit of the project was the single-family row house, the layout and design was centered around three "meteorites", or larger buildings that break up the "sea of houses" and provide a visual function similar to that of cathedrals or palaces in historic towns and also provides their occupants with spectacular views of the surrounding landscape. Public space was limited to a small park and a series of three pedestrian bridges connecting the site to the other Eastern Harbor Islands. Instead of creating one large public space, the open space is dedicated to the individual houses by the distribution of the 30-50% void throughout the parcels. This was possible because the ever-present water can be seen as the landscape, or "blue for green"!



typical floor plan for row-houses



interior void space

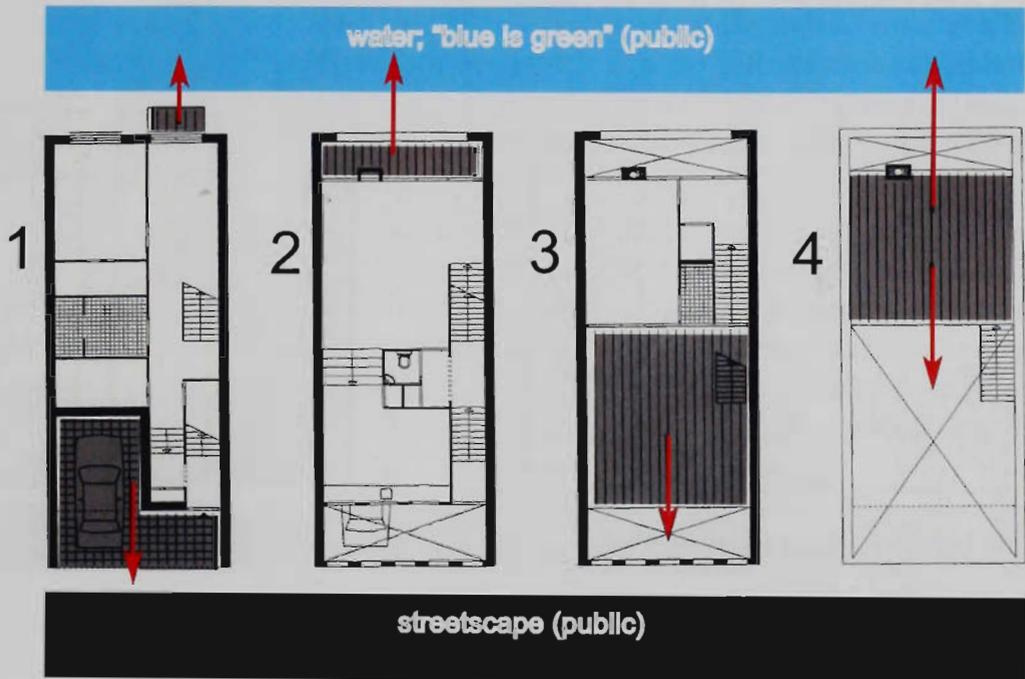
The importance of Borneo/Sporenburg lies in its ability to redefine the nature of public space in an urban context. By mandating the 30 - 50% void in the design program, West 8 was able to challenge the traditional placement of open areas and place emphasis on the individual, private space instead of the collective. I feel that this aspect of the project is most important in advancing my own project.



pedestrian foot bridge

Overall Borneo/Sporenburg succeeds in redefining what a high density urban redevelopment project can accomplish. Every aspect of the process, from the planning and selection stages to the execution of the individual units were breakthroughs in their respective realms. For example, the overall plan called for a designation of sixty parcels as free. This meant that they would be sold to individual landowners instead of developers, a radical proposition at the time which sought to give more influence to the landowners. Because of its success, free parcels have been included in almost every subsequent planned neighborhood in the Netherlands.

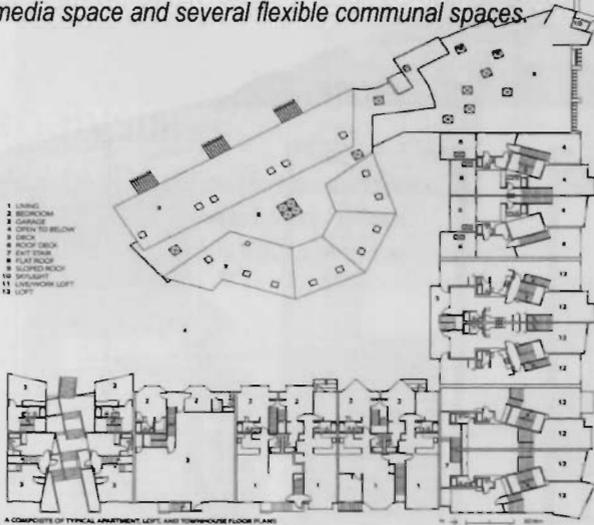
This plan view of each floor section shows the relationship of the void area to the public space. The shaded areas indicate the outdoor spaces within the unit while the arrows point in the direction of the viewing area. Furthermore, the overall openness of the plan gives the impression of a greater space. For instance, the narrowness of the stairwell constricts the individual creating a greater spatial feeling when they reach the next level. In tight urban conditions like Borneo/Sporenburg, this conveys a feeling of openness in an otherwise narrow space.



The individual outdoor spaces provided for each unit provide a connection with the overall site. This is accomplished not only because of the sweeping views permitted of the ocean, "meteorite" landmarks and the surrounding cityscape, but by devices such as semi-opaque patio screens that allow for a sense of privacy while still connecting the individual with the collective.

18th & arkansas

18th and Arkansas is a housing project located on the site of a reclaimed abandoned railroad tunnel on the residential edge of the Potero Hill neighborhood of San Francisco. Designed by David Baker, the project consists of a variety of housing options. The 94 unit development consists of flats, townhouses and live/work lofts along with a performance gallery, a multi-media space and several flexible communal spaces.



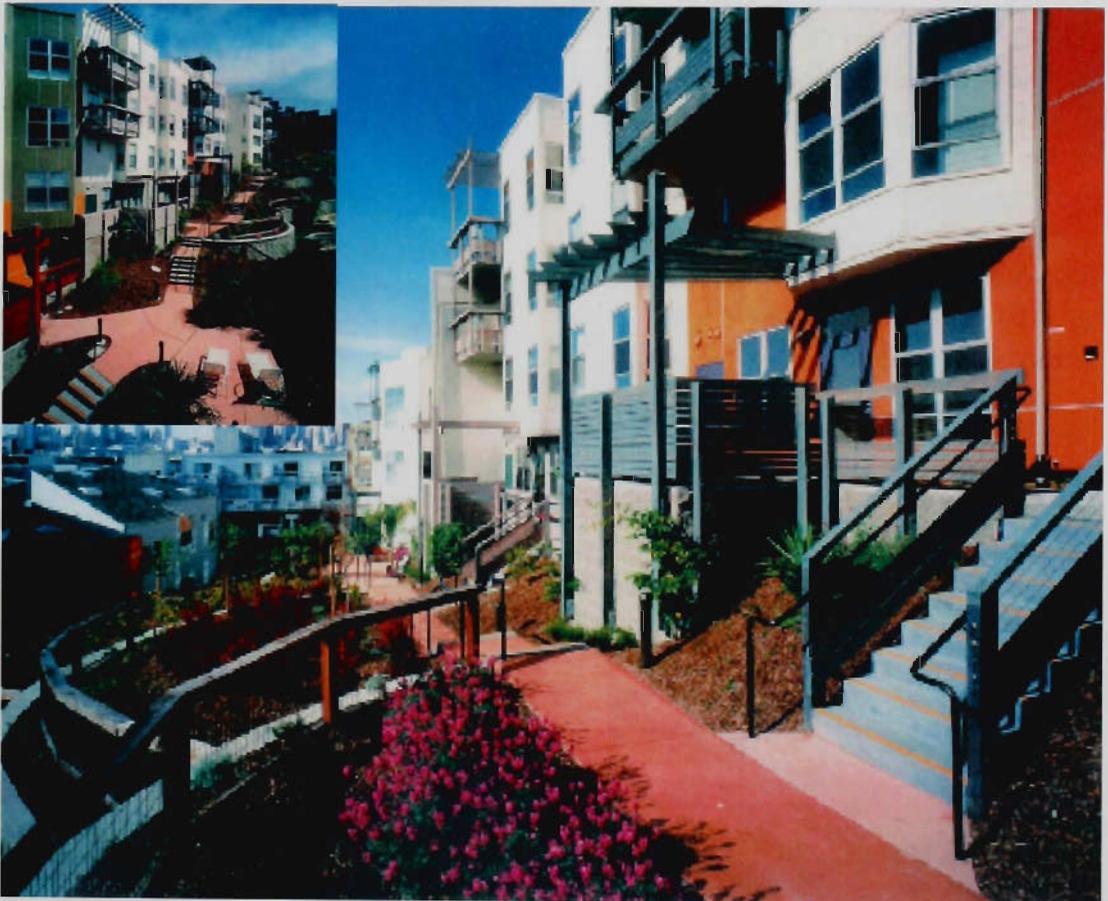
The main goal of 18th and Arkansas was to attempt to bring together a variety of city dwellers, from artists to traditional families. Baker engages the neighborhood by mixing a variety of building characters and styles along Arkansas Street. As the development turns the corner on 18th, the style mimics the industrial setting across the street by incorporating metal siding onto the façade of the live/work units. The units all include double height spaces and windows connecting the resident to the downtown and allowing a flexible living space. The building establishes a spatial organization that blurs the line between working and living. The performance gallery forms the street edge inviting public participation. This lifestyle concept is culminated by the internal courtyard where the buildings form a backdrop for the interaction of the residents.³

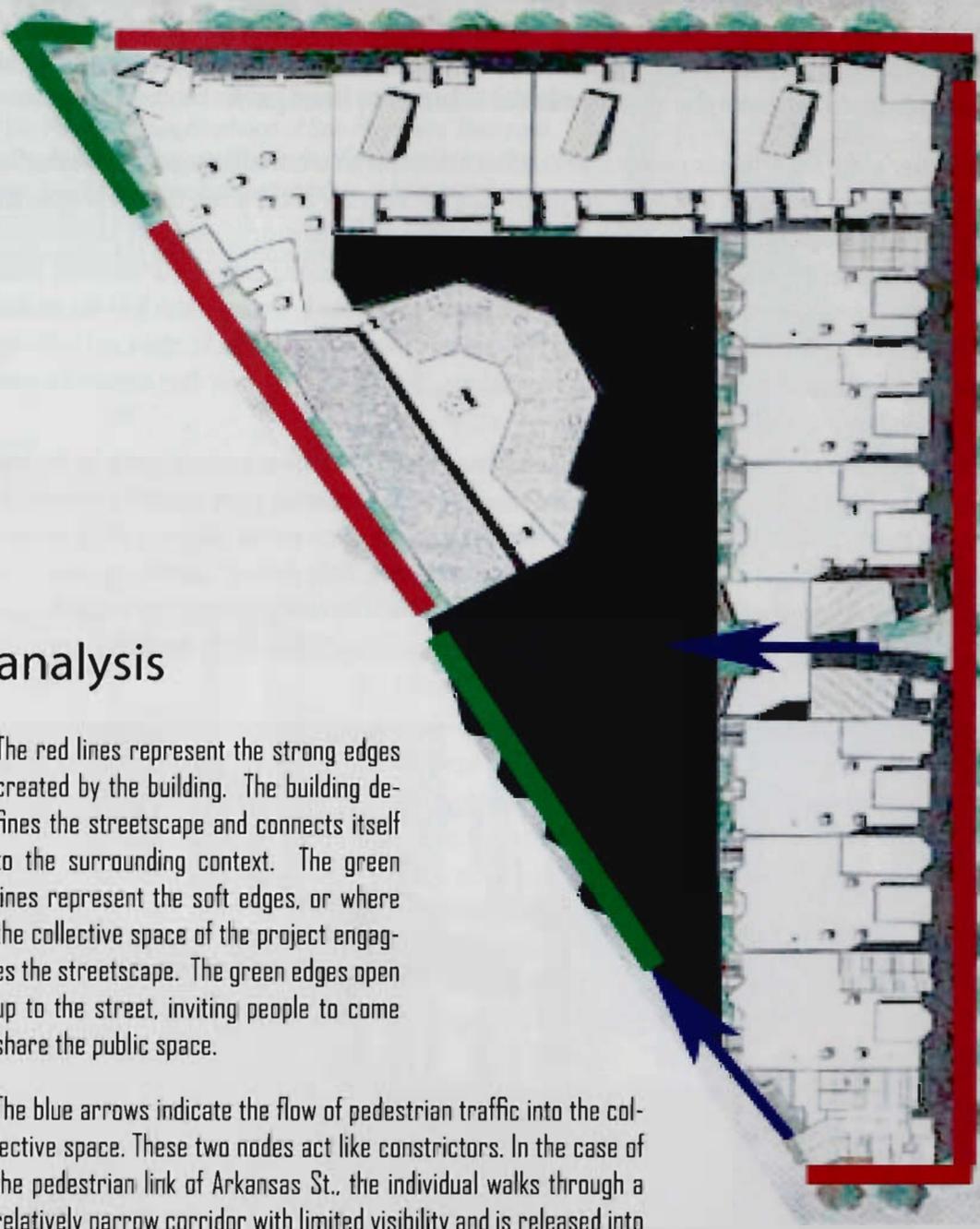


The importance of 18th and Arkansas lies in its ability to emphasize a collective, public space while still retaining a sense of privacy for the individual. For my analysis, this is a particularly important goal in trying to develop a similar program in the city of Detroit. Baker's incorporation of New Urbanist principles within a modernist context of design also offers possibilities to further my investigation

David Baker's 18th and Arkansas project is an excellent example of an urban infill project that emphasizes the collective. The building is successful in representing the diversity of the urban context in scale and program and through its integration within the city. The strong street edge strengthens the neighborhood fabric and engages the building beyond the street and into the surrounding context. Furthermore, Baker reflects the sloping site context by creating an amphitheater out of the landscape which links the families and live/workers with the artists in the building. His layering of the site through decks, stairs and landscaping forms a piazza which again connects all of the residents. 18th and Arkansas truly does capture the spirit of the collective

While his emphasis on the collective is strong, the building does little to provide a private realm for the residents. Where Borneo/Sporenburg focused on the individual with a connection to the collective, 18th and Arkansas is strictly collective. The only form that resembles a private space are the balconies, which, because of their openness, doesn't create a truly individual outdoor space. While Borneo/Sporenburg constricted then freed the individual within the unit, 18th and Arkansas follows this concept through the outdoor, public spaces and succeeds in engaging everyone in the neighborhood by creating a true sense of place within the community.



An architectural site plan showing a building complex. The plan is overlaid with thick red lines and thick green lines. The red lines form a rectangular boundary around the main building mass and a diagonal line along the left side. The green lines follow the diagonal left edge and the bottom edge of the building. Two blue arrows point from the right side of the building towards the diagonal green line, indicating pedestrian flow.

analysis

The red lines represent the strong edges created by the building. The building defines the streetscape and connects itself to the surrounding context. The green lines represent the soft edges, or where the collective space of the project engages the streetscape. The green edges open up to the street, inviting people to come share the public space.

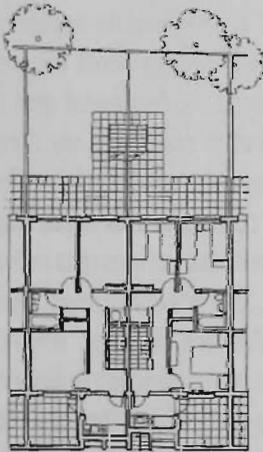
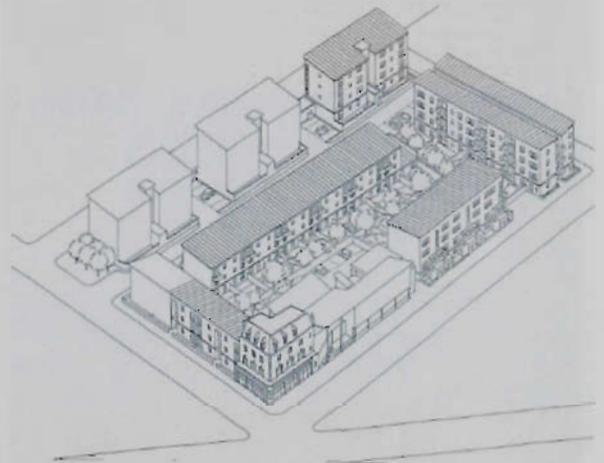
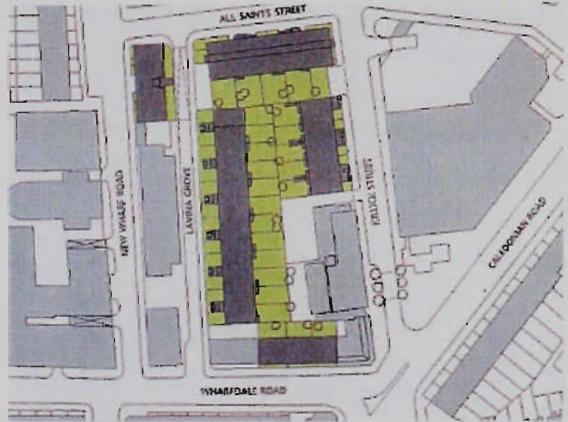
The blue arrows indicate the flow of pedestrian traffic into the collective space. These two nodes act like constrictors. In the case of the pedestrian link of Arkansas St., the individual walks through a relatively narrow corridor with limited visibility and is released into the collective space. In regards to the other node, the hard edge of the building acts as a constrictor of space until the individual reaches the public space.

king's cross housing + irvington place

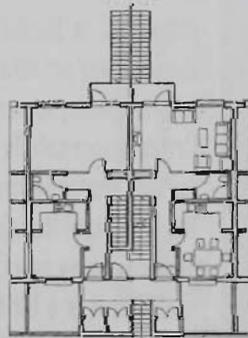
The following precedent study attempts to compare two types of housing projects in two different urban contexts. While their desired goals may have been different, both have similar spatial arrangements that can be utilized in order to advance my own study of urban housing

king's cross housing

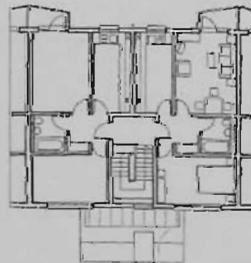
The project is located in an area of London which has seen its share of social problems (prostitution, drug dealing, and homelessness) in recent years. The project by Avanti Architects attempted to begin reconstructing this fractured urban realm. The first item that Avanti tackled was reconfiguring the street pattern. Lavina Grove was originally a cul-de-sac which subsequently made it a harbinger for drug dealing and other anti-social behavior. By transforming it into a through street Avanti eliminated the anti-social behavior and created a rectangular site in which to place their housing scheme. The new housing was placed around the edges with a central courtyard divided into private gardens for the first floor units. There are 16 family maisonettes and 48 flats, plus a block of 9 flats financed by the governments Rough Sleepers Initiative to house homeless people.



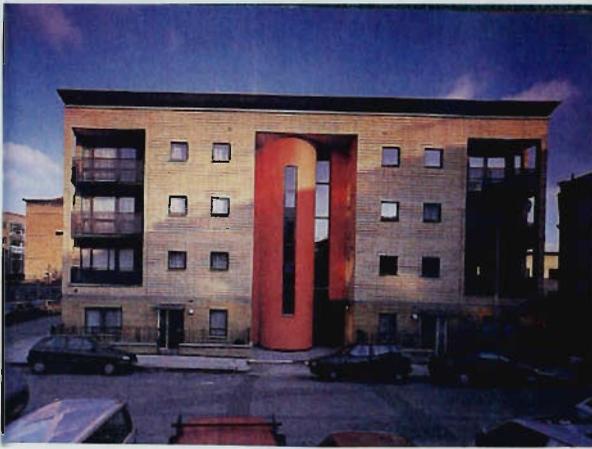
Killick Street. lower ground floor plan



upper ground floor plan



typical upper floor plan



King's Cross offers a handful of opportunities to elaborate upon for my own investigation into urban housing. The similarities between the King's Cross district and Detroit, more specifically my site, are quite keen. Both have an above average rate of anti-social behavior and both lack adequate social housing. Avanti's manipulation of the street pattern may offer some ideas as to how to arrange a possible street pattern within my site. Furthermore, the concept of a courtyard divided into private gardens is an idea that can be further expanded upon within my project. Also, Avanti was sensitive to the surrounding context which consisted mainly of Georgian terraces. Their sensitivity to the surrounding context is something that will be implemented and expanded upon within my specific context. Lastly, the overall arrangements of the units and the inclusion of the Rough Sleepers Initiative offers me opportunities and ideas in attempting to produce a project that implements all types of socio-economic backgrounds and various housing types under one successful context.

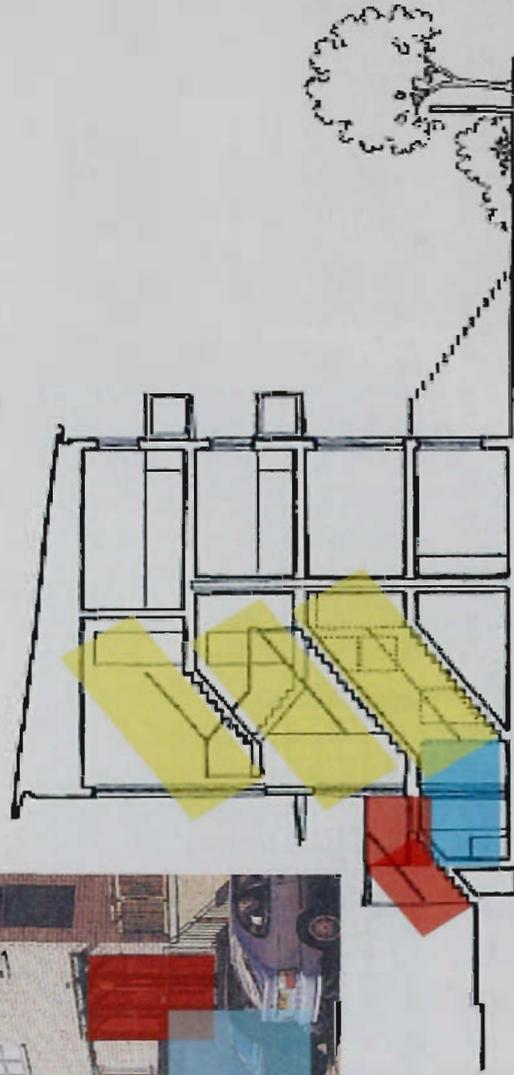
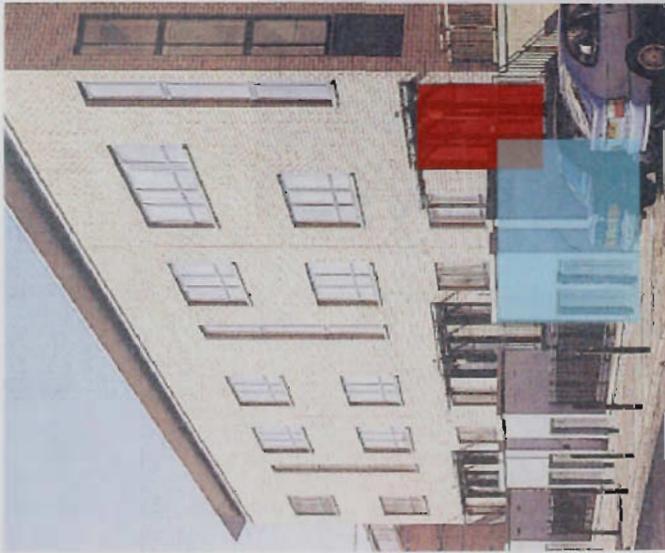


Overall, I feel that the King's Cross Housing project is a very successful urban housing scheme. Its sensitivity to the surrounding context and architecture along with its ability to tackle social problems offers up many opportunities in my own investigation into the subject and its application in Detroit. What is also striking about the project is its ability to merge the communal with the individual, a theme that is central to my thesis. By offering private gardens and balconies along with planning around communal stairwells, King's Cross successfully mediates between the individual and the collective. One drawback might be the fairly radical Rough Sleepers Initiative. While the program may warrant some success in Britain, I feel that it is a bit too progressive for the United States and may not go over well with prospective middle-class residents.

To the right is the layout for the Rough Sleepers Initiative social housing block. The units are fixed to a cross shaped circulation space (blue) which allows easy access from the street to the individual units. Each unit has access to an outdoor courtyard.



Wharfdale Road: typical floor plan



cross section

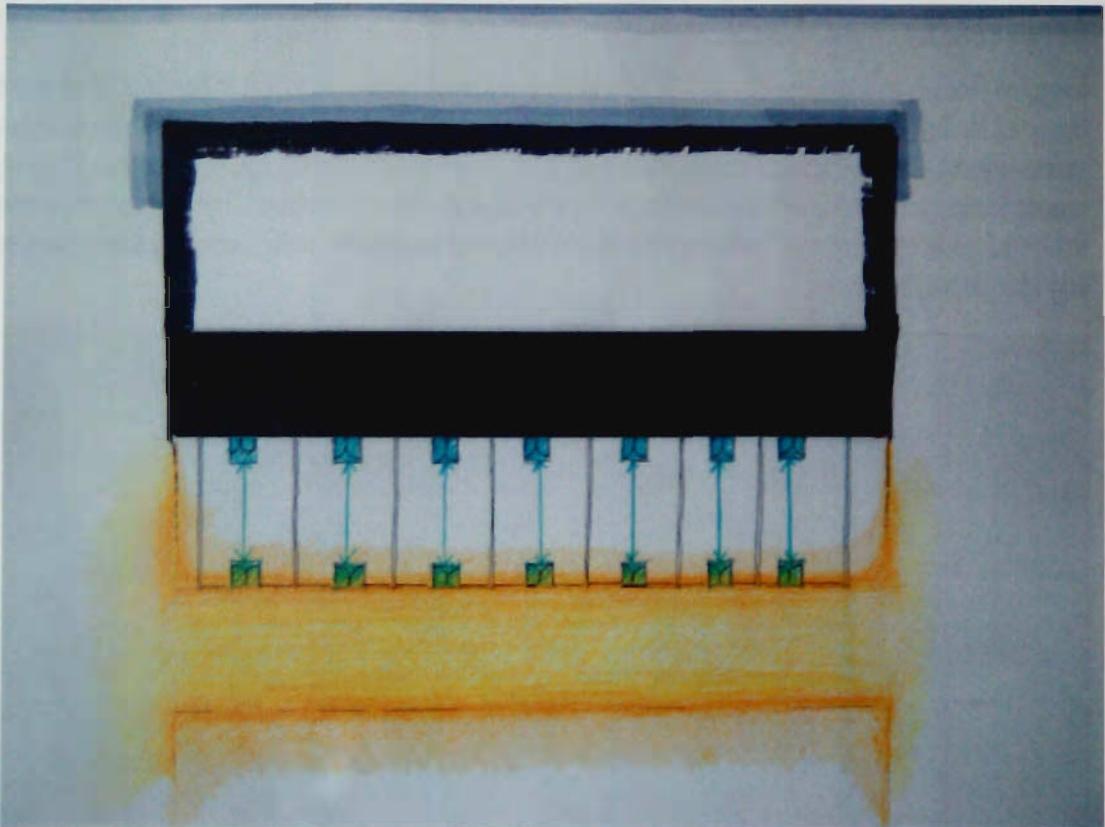
this section + elevation show the relationship of the communal rubbish collection space (light blue), the private terraces (red) and the stairwells (yellow). Since space was limited, the communal rubbish bins underneath private terraces offer the opportunity to mix the communal with the individual

irvington place

Irvington Place is a mixed-use development located on a densely populated street in Portland, Oregon and designed by Seattle based Sienna Architects. Consisting of 57 market rate units (one and two bedroom condominiums and seven town houses), 16,100 sq. ft. of retail and 25 parking spaces, Irvington Place attempts to increase density without sacrificing the character of the neighborhood. The program separates the larger scale condominium/retail portion on Broadway and the smaller scale, two-story town homes by way of a parking courtyard.



There are two aspects of Irvington Place that correlate with my project. The most important aspect is their sensitivity to the surrounding context. The unique characteristic of the surrounding area (a busy commercial strip and a historic residential neighborhood) required Sienna Architects to create a sensitive connection between the seven town homes and the surrounding historic district. This was accomplished primarily by keeping the scale of the town homes at a similar level as the surrounding neighborhood scale. Secondly, the mixed-use nature of the development is also relevant to my project. The way Sienna combined the larger scale retail/condominium portion and the smaller scale town homes by use of sloped roof lines visually ties the two building types together, creating a dialogue.



The most interesting aspect of Irvington Plaza is its ability to mesh both a retail and residential program onto a tight, urban site. The spatial arrangements of the town homes offer features which create a greater sense of space and depth for the 1,200 sq. ft. units. A private entrance from both street level and the courtyard create a sense of privacy and reinforces the individuality of the site while creating a truly urban experience.

Spatially, the ability to convert a mezzanine space into a small office or extra storage adds an element of adaptability to the program. However, if there is one aspect of the project that seems to fall short of its goal, it would be their attempt to create diversity. The only diversity present here is social and even then, with its inability to offer family style units, the project falls short. Furthermore, its inability to offer any type of subsidized units to low and moderate income residents robs Irvington Place of achieving a true, urban housing scheme.

broelberg residential complex + nexus world

The following precedent study focuses on the tectonic aspects of architecture. The projects selected are the housing block of the Nexus World Complex by Rem Koolhaas and the Broelberg residential complex by Annette Gigon & Mike Guyer. Both selections have important spatial arrangements which have helped me to further understand my own thesis project.

broelberg residential complex

The Broelberg residential complex designed by Annette Gigon & Mike Guyer was completed between 1990 and 1996. Located just outside of Zurich, Switzerland the project is surrounded by a 57,000 sq. m. park.



Three buildings form a volumetric complex, linked by way of a one story podium with space underneath for parking. The podium functions as a raised courtyard with access to the buildings. Furthermore, the courtyard is subdivided into semi-private outdoor spaces for each of the units. It is this concept - the raised podium - that I feel contributed immensely to the understanding of my own project. By incorporating a raised courtyard the architects were able to provide parking beneath the project. This bears considerable importance in my project since I am trying to minimize surface parking on my site. Furthermore, it allows my multi-family structures to share in their own semi-public space and also allow a connection to the surrounding site, thus contributing to my investigation into shared spaces.

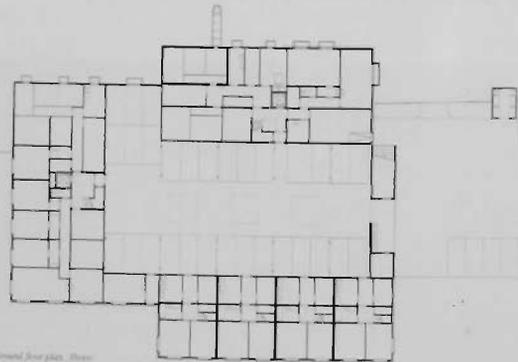
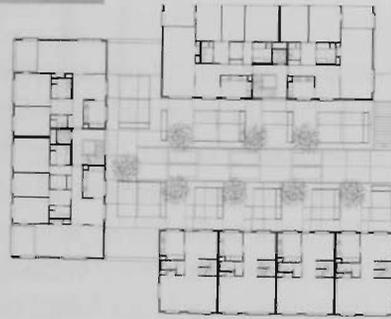
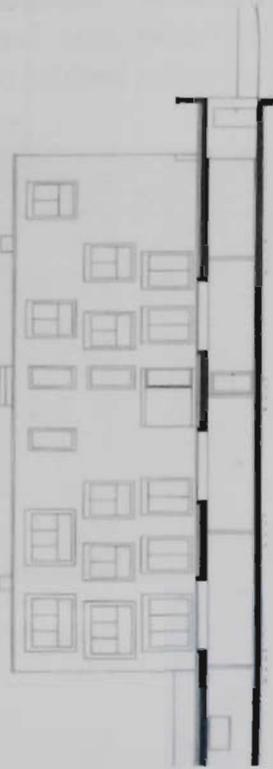


Fig. Ground floor plan. Above:
Residential plan. Opposite page:
Residential floor plan. Opposite:
Residential floor plan. Scale:
1:400



The project, spatially, is laid out in a very sensitive and innovative manner. The architects paid great attention to not disrupting the surrounding park-like setting and created a project that does not disturb, but enhances its surrounding context. However, the raised podium which is supposed to serve as both a semi-private and collective space seems to fall short in its collective goals. The spaces that are deemed collective seem too merely be the leftover space from the semi-private space and does not seem to have been designed. Also, the architects never break the plane of the building with any form of balcony access from the units. This technique would have helped strengthened the architects goals of connecting the building with the surrounding environment.



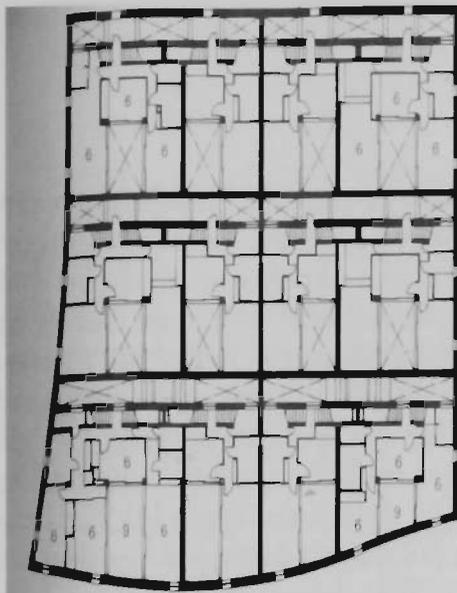


nexus world

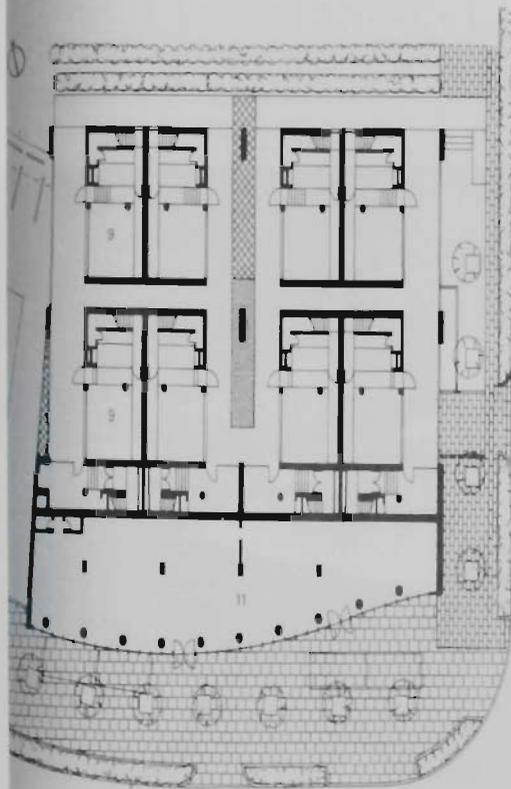
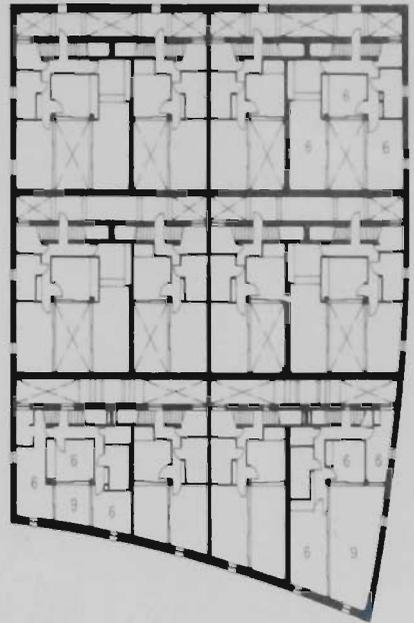
Rem Koolhaas' residential block in the Nexus World housing complex is a series of 24 residential homes located above ground level retail space in Fukuoka, Japan. Completed in 1991, Koolhaas' housing scheme is part of a greater residential housing development consisting of six apartment buildings each designed by different architects.



One of the more interesting aspects of Koolhaas' design is how the vertically rising units surround an inner courtyard which allows both light and breezes into the space. In such a constricted site, the architect was able to still allow for private void spaces and outdoor access. Some of his techniques can be applied to my single family home layouts since they are similar in size and volume. Furthermore, his contrast of materials helps define the space – something that can be utilized in my own design. The way the building reads vertically, from a semi-transparent ground floor to the massive, opaque horizontal volume up to the open private balconies all seem to work together and address the street conditions below. These various elements should be kept in mind when designing my single family units.



Second floor.



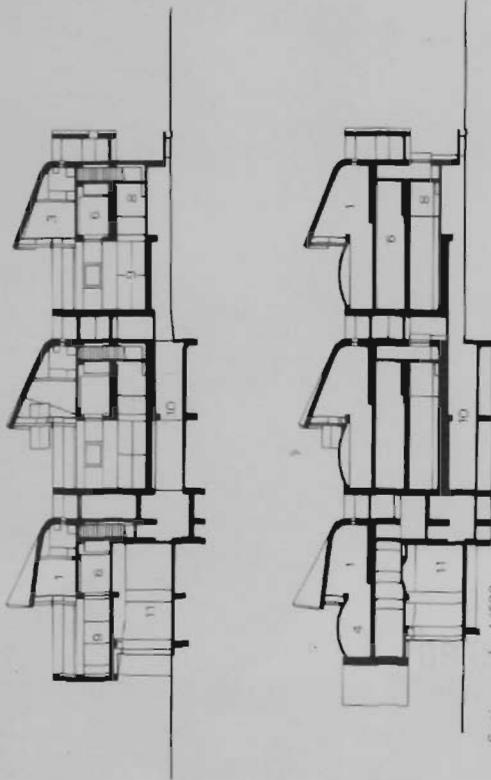
First floor, scale: 1/500.





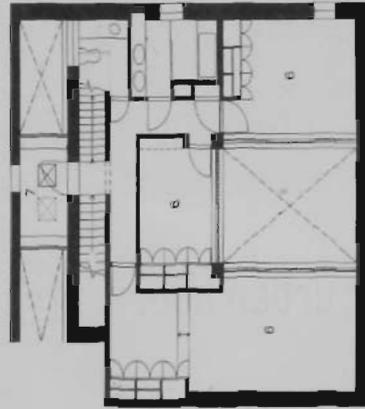
Spatially and materially I feel that the housing block is very successful. The use of four different types of glass . . . make a virtual collage of third-level windows" which adds to the diversity and richness of the project. Furthermore, the layout of the units and the spaces within the unit – each with their own three story void space – brings a sense of openness into an otherwise constricted site. The only problem I have is with the massive horizontal concrete dividing wall. The sheer size of it and its curvilinear nature does not seem to fit the flat, rectilinear qualities of the rest of the program.



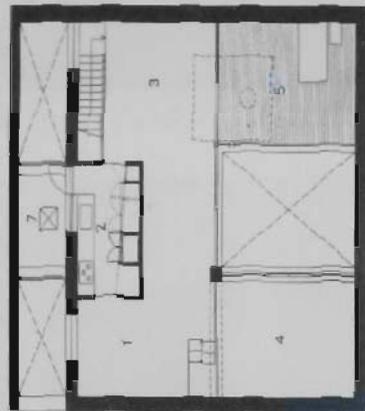


Sections: scale: 1/500.

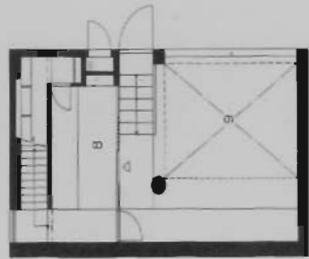
- 1 DINING ROOM
- 2 KITCHEN
- 3 STUDY ROOM
- 4 STUDY ROOM
- 5 ROOF TERRACE
- 6 BALCONY
- 7 BALCONY
- 8 ENTRANCE
- 9 HALL
- 10 PARKING COURT
- 11 SHOP



Second floor.



Third floor.
Maisonette type; scale: 1/200.



First floor.

detroit: urban housing [re]considered



rear window [re]interpereted

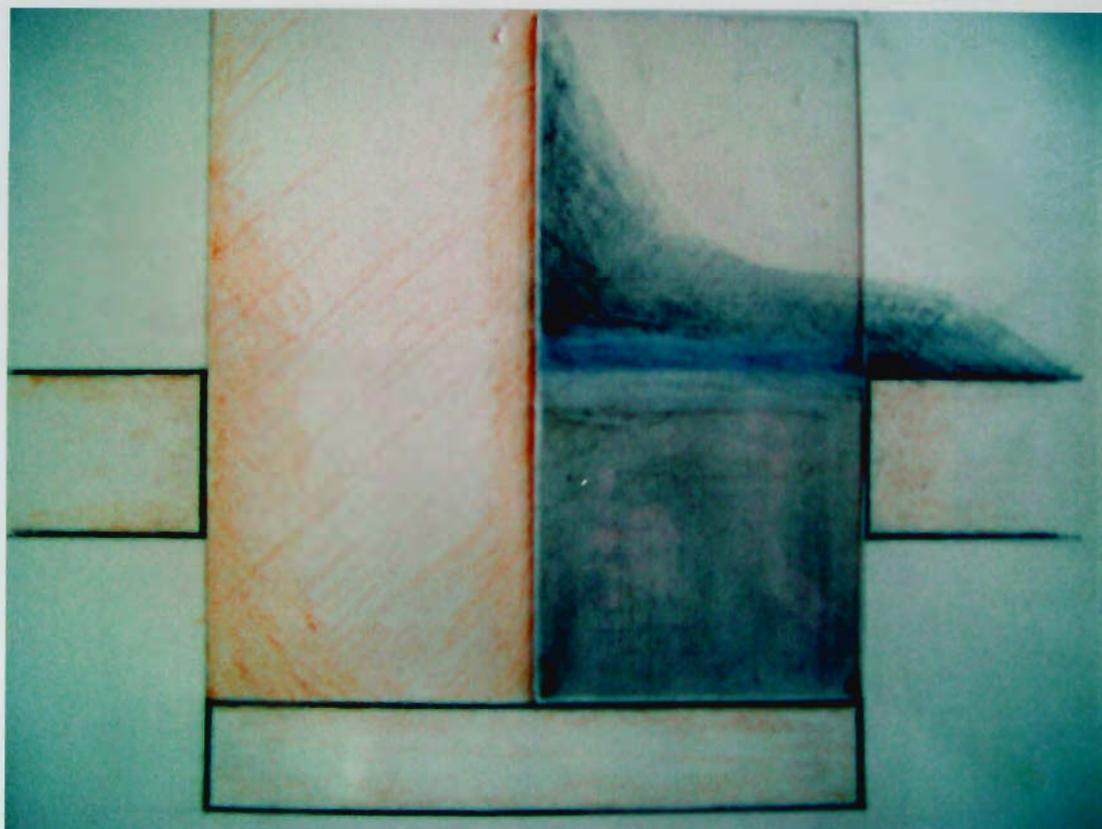
sketch problem



My sketch problem was based on the Alfred Hitchcock film, *Rear Window*. From analyzing this film, I began to notice some architecturally relevant concepts which furthered my thesis investigation. The main concept was the idea of framing views and the distortion of perception that can occur when one looks into or out of a window. Windows are connectors between spaces, however, we only observe what is happening on the other side based on what we can gather from the framed view of the window. This, of course, impacts the way we perceive things since, if we cannot see the entire view, our minds elaborate on what we cannot see. This is the premise behind *Rear Window* and the architectural concept that can help one better understand the transcendental qualities of something as simple item as a window
In order to investigate

In order to investigate this concept further, I created a "box" with a series of images within it. The user can interact with the box by picking it up and observing the pictures through various distortions cause by the materiality of the "box". Images are distorted and re-framed giving the viewer a skewed sense of reality





w i n d o w s . o f . p e r c e p t i o n

Windows are a tool of perception. They are mediators between space, framing fragments of life before our eyes and leaving the negative, unknown spaces beyond them to our imagination. They can be positive, as in gazing out towards an open landscape, or they can be negative, by becoming ways of unwanted entry. Windows can be deceiving. We may see what happens through their transparency, but their physical boundaries limit our understanding. In social terms, a closed window can create a mental and emotional separation between observer and the observed. Social interaction becomes completely removed. One may be watching another without their consent. But regardless of their intent, they ultimately function as a connection between inside and outside - and between the individual and the collective.

detroit: urban housing [re]considered

grand river + rosa parks + canfield + forest

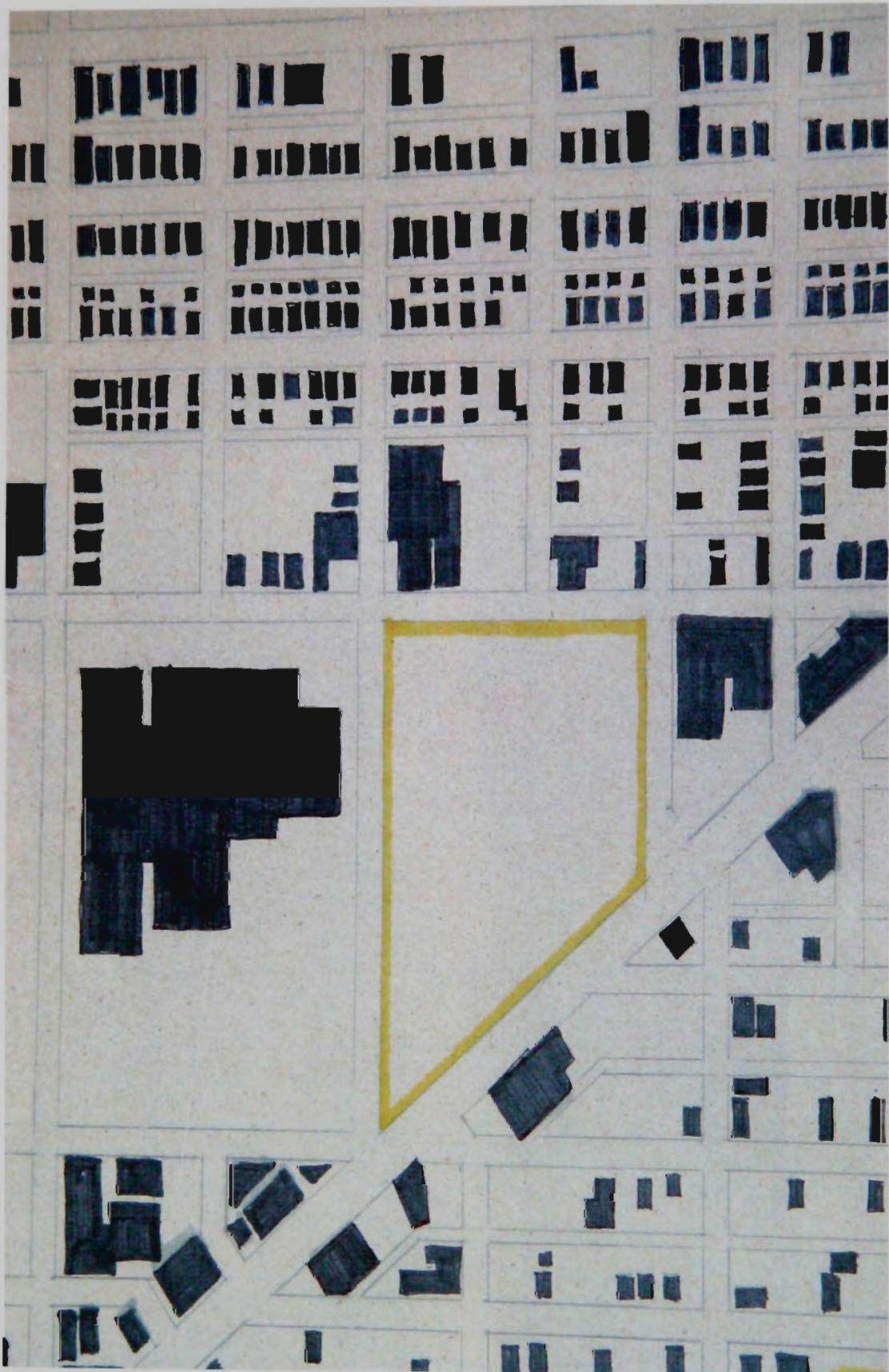


site analysis

The initial site selection process included two other potential site locations, one in Brush Park and another in Mexicantown. However, it was the site located off of Grand River that was best suited for my investigation.



There were several characteristics of the Grand River site that led to me to choose it as my final site. First and foremost is its large size. This would allow me to freely pursue my spatial investigation and provide me with the space to comfortably fit my program. Secondly is its unique location between the stable and historic Woodbridge neighborhood to the east and the run down, blighted area directly west. Its proximity to Woodbridge allows me an outlet for my site to grow and eventually weave its way into the neighborhood fabric. Furthermore, its proximity to Grand River would provide a major transportation outlet that would provide an outlet for some of the retail aspects of my program. And lastly, the previous existence of a street grid through the site gives me the opportunity to reintroduce a previously existing edge and create a stronger connection to Woodbridge.





north



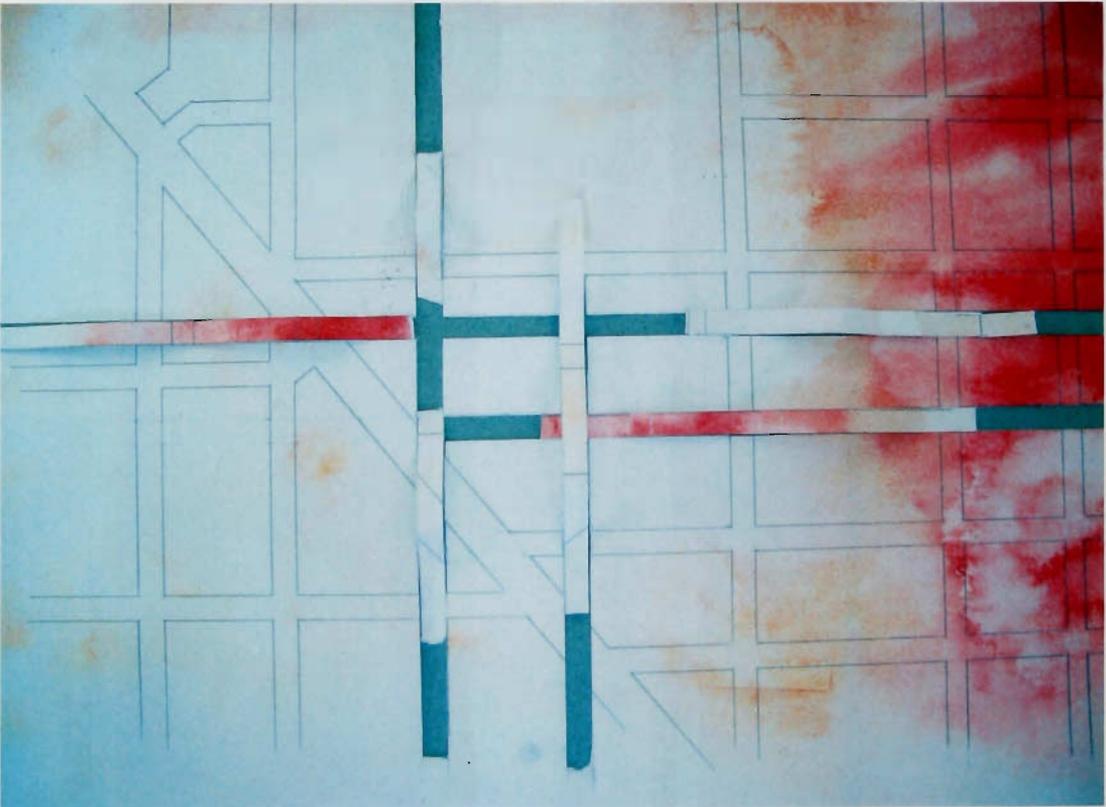
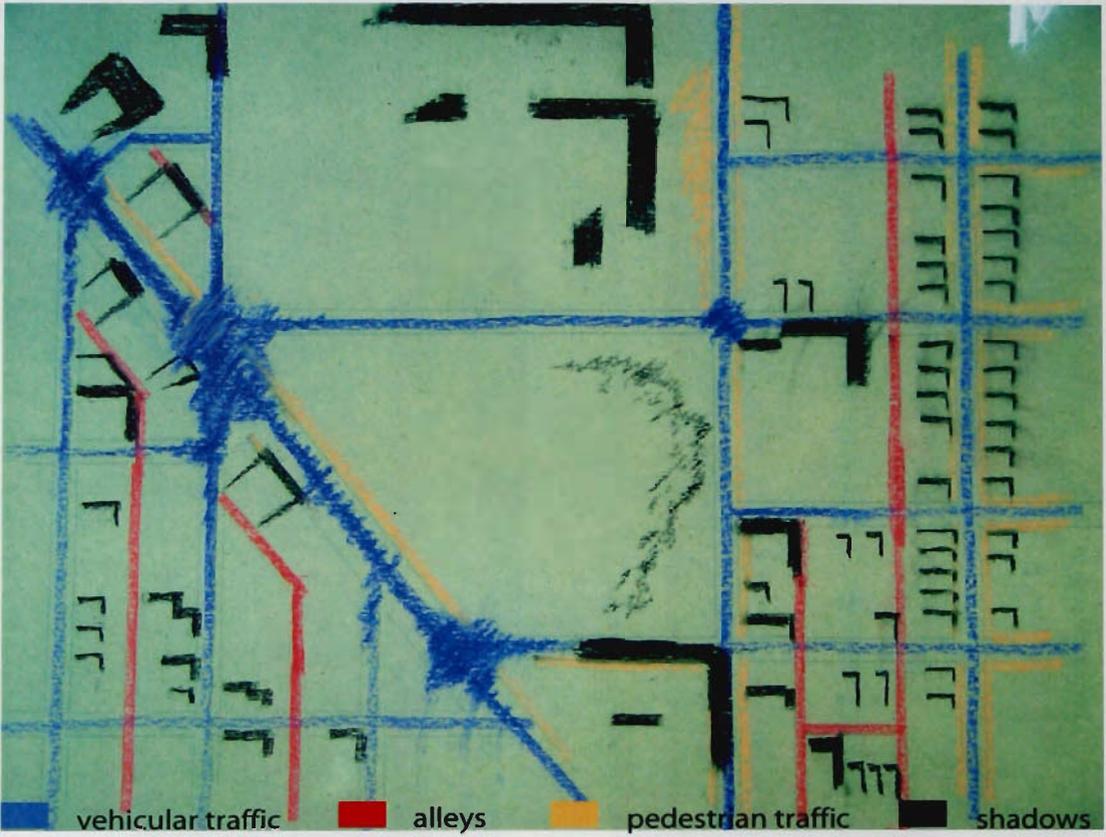
south

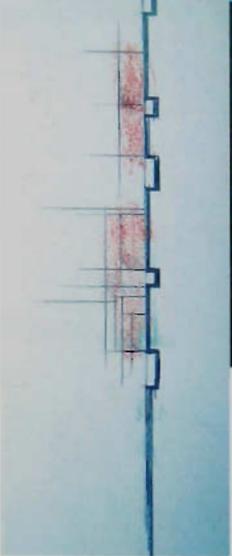
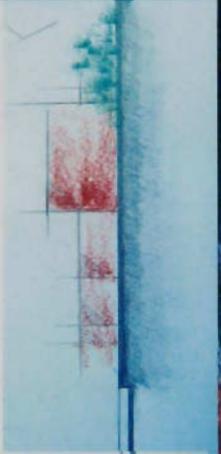
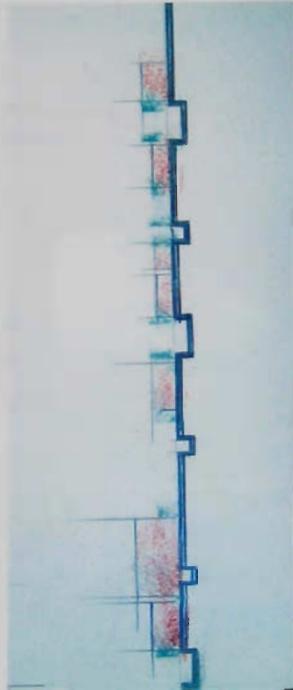


east



west







preliminary abstract perspective looking east on Forest



detroit: urban housing (re)considered

program statement + quantitative statement + space detail



program

Project Identification

The goal of this project is to create a mixed-use housing development consisting of housing and retail, green space or other outdoor spaces within an existing urban context. Housing will be the main focus of the project, with an emphasis on the individual, collective and in-between spaces that encompass the housing unit both on the interior and in its surrounding landscape. The challenge will be to question the traditional notions of a mixed-use urban housing project focusing on successfully integrating the various urban spaces at the same time integrating itself with the surrounding context.

Articulation of Intent

The building type will engage the street edge and create a dialogue with its surrounding context. The existing neighborhood structure and fabric will also be integral components considered in the design process. At its basic level the project will contain housing, retail and green space, sensitively integrated into the surrounding neighborhood through the dialogue of individual, collective and in-between spaces. This project is an attempt to re-define the traditional urban housing project. While it may draw on some of the more successful principles of New Urbanism, it will not simply copy every element of the doctrine. Instead its challenge will be in creating a new type of urban housing that communicates with its immediate urban context and to the overall city and mindset of Detroit. Furthermore, this new housing type will cater to all walks of life and will be a way of better integrating residents of the surrounding neighborhoods and new tenants. Central to this challenge will be the rethinking of traditional individual and collective spaces and how they can be more successfully woven into the urban fabric.

Finally, in its final form, the projects success will be based on a number of criteria. Aside from the impossible measurement of occupancy (since it's not being built), other criteria will determine its success. Its ability to create an urban space that allows the individual, collective and in-between spaces to harmonize with one another will be its ultimate goal. The spaces need to be able to work together and not seem as though they are separate entities. Secondly, the degree in which the building fits into the surrounding context architecturally will be of importance. While its design will not simply be a facsimile of the surrounding building stock, it will still need to explore some of the more successful concepts of the neighboring buildings and utilize these ideas into the design. The project needs to be sustainable to the city. The hope is to have a project that expands into the surrounding areas, entrenching itself into the surrounding context. And lastly, I hope to be able to create a truly urban experience within the city of Detroit. One that doesn't draw on suburban typologies, but rather on the context and experience of the city in order to achieve a livable area that truly feels like you are part of Detroit.

Enumeration of Actions

"Sleeping"

In a bed or couch; on the floor; with someone or alone; with blankets/sheets or without; clothed or naked; short nap or for the entire night; dreaming
Usually a dark room with very little light; very little sound; some level of physical comfort; sensitive to extreme temperatures: it's easier to get warmer than it is to get cooler without the use of air conditioning or heat.

"Talking"

To oneself; to someone else or a group; loud or soft; brief conversations (no long speeches)
Outdoors or indoors; can create an echo; many people talking creates noise; a form of communication between people; weather affects where people talk and for how long

"Walking"

Slow or fast; to a destination or a casual stroll; usually a public, collective experience
May involve talking with someone; only form of transportation we all possess; collective experience can be dependent on the weather; "green" activity; walking outdoors exposes us to the sensory elements around us such as color, sound and smell

"Eating"

Food; fast or slow; healthy or junk; indoor or outdoor; weather and seasons affect food selection and where eating is done; can be done individually or with family; also can be a collective experience; prepared by oneself or for one's family or at a restaurant where it is prepared by someone else; restaurant experience engages the individual to the collective and exposes them to many sensory elements - usually a very public experience

"Jogging"

Sweat; increased heart rate; exercise; no destination - instead there is usually a route or familiar area; outdoor activity, but not necessarily collective- individual experience in what can be a collective setting; usually "cut-off" from outside world through walkman; sometimes used as a form of "escape" from one's life; different from walking b/c of the limited social interactions that can happen; weather usually only affects clothing - many people jog regardless of weather; many avoid jogging at night - usually a daytime activity

"Driving"

In an automobile; concentration on the road; isolates one from the surrounding context; usually an individual experience (driving from work) but can also have collective characteristics (car pooling); usually a fairly quiet experience unless there are passengers; radio, conversation; doesn't mix well with walking and jogging; weather affects speed and caution

"Shopping"

Consumerism; money; goods; necessity (food) or luxury (television); can be an addictive activity; window shopping - an element that goes together well with walking and sometimes even with jogging; truly collective experience, although interaction with others other than a shopkeeper/employee is rare; purpose; quality of light is very good; colors and sounds (music) are used as advertising devices; big box or "mom and pop"; parking

Quantitative Program Study

Mixed-Use Housing Development

Site: Grand River/Forest/Canfield

Approximate. Sq. footage: 610, 312sf

HOUSING

Housing Type A (1 bedroom, market rate)

Kitchen/dining	100sf
Living space	200sf
Bedroom	150sf
Bath	50sf
Closet/storage	50sf
	550sf
	+ 150sf of private outdoor space
	700sf
	x 30 units
	21000sf of living space

Housing Type B (1 bedroom, low-income)

Kitchen/dining	90sf
Living Space	200sf
Bedroom	150sf
Bath	50sf
Closet/Storage	40sf
	530sf
	+150sf of private outdoor space
	680sf
	X 30 units
	20400sf of living space

Housing Type C (2 bedroom, market rate)

Kitchen/Dining	150sf
Living Space	250sf
Bedroom 1	150sf
Bedroom 2	125sf
Bath 1	50sf
Bath 2	50sf
Study	125sf
Closet/Storage	80sf
	980sf

+200sf of private outdoor space

1180sf

X 30 units

35400sf of living space

Housing Type D (2 bedroom, low income)

Kitchen/Dining 100sf

Living Space 200sf

Bedroom 1 150sf

Bedroom 2 125sf

Bath 100sf

Study 100sf

Closet/Storage 70sf

845sf

+200sf of private outdoor space

1045sf

x 30 units

31350sf of living space

Housing Type E (single family flat, market rate)

Kitchen 150sf

Dining 100sf

Living Space 250sf

Bedroom 1 200sf

Bedroom 2 150sf

Bedroom 3 150sf

Bath 1 75sf

Bath 2 50sf

Bath 3 40sf

Study 150sf

Closet/Storage 100sf

Laundry 50sf

Garage 100sf

1565sf

+400sf of private outdoor space

1965sf

X 15 units

29475sf of living space

Housing Type F (Single family flat, low-income)

Kitchen/Dining	100sf
Living Space	200sf
Bedroom 1	175sf
Bedroom 2	125sf
Bedroom 3	125sf
Bath 1	60sf
Bath 2	40sf
Study	100sf
Closet/Storage	90sf
Laundry	50sf
Garage	100sf

1165sf

+400sf of private outdoor space

1565sf

X 15 units

23475sf of living space

Housing Type G (single family row houses w/home office)

Kitchen/dining	150sf
Living Space	200sf
Bedroom 1	190sf
Bedroom 2	125sf
Bath 1	60sf
Bath 2	40sf
Laundry	50sf
Closet/storage	90sf
Garage	100sf
Office	200sf

1205sf

+400sf of private outdoor space

1605sf

X50 units

80250sf of living space

PARKING

70sf per space @ 2 spaces per unit (multi-family housing)

240 spaces @ 70sf per space 16800sf

70sf per space of public parking

200 spaces @ 70sf per space 14000sf

Total **30800sf**

Sub-total 272150sf

Circulation/structure @ 20% 54430sf

Gross square footage 326580sf

It is the intent of the housing portion of the project to challenge the traditional uses of the various functions within each housing type. While I am not setting out to change for example, the kitchen, I will be attempting to look at the kitchen – its functions, its various activities – in a new light and hopefully re-invent the way the kitchen can be designed and used by the people who occupy the units. Furthermore, this approach will attempt to create a greater understanding between shared and private spaces both within the units, between each unit, the site and the surrounding context.

RETAIL

Grocery

Food 10000sf

Meats 750sf

Cart area 200sf

Check Out 300sf

Offices 500sf

Restrooms 100sf

Inventory/Storage 750

13450sf

Pharmacy/Drug Store

Prescriptions 1000sf

Household items 5000sf

Check Out 200sf

Restrooms 50sf

Storage/inventory 400sf

6650sf

Salon

Cutting Area 900sf

Reception/Waiting 100sf

Restrooms 30sf

Storage 70sf

1100sf

Café

Prep Area	500sf
Cashier	10sf
Seating	1000sf
Outdoor seating	250sf
Restrooms	50sf
	1560sf

Video Rental

Cashier	20sf
Movie Shelves	1500sf
Storage	70sf
	1590sf

Pizza Parlor

Prep area	500sf
Seating	750sf
Restrooms	60sf
Outdoor seating	200sf
	1510sf

Bank

Customer area	1500sf
Lending services	2000sf
Teller area	1000sf
Safe/storage	100sf
	3500sf

Hardware

Merchandise area	8000sf
Inventory/storage	750sf
Offices	300sf
Cashier area	200sf
Restrooms	60sf
	9310sf

Sub-Total 38670sf

Circulation @ 25% 9668sf

Gross square footage 48338sf

The retail aspect of my program is not the main focus of my design. It is my intent to provide space for retail to occur at the ground floor of my multi-unit buildings. The list above is simply to give an example of the types of retail that may occur in the development. The retail aspect of my project has not been considered in the design of the individual, collective and in-between spaces. The main focus of the project is on the dwelling unit.

OTHER FUNCTIONS

Parking for retail/guests	14000sf
Mechanical area	500sf
Trash Pick up	900sf

Sub-Total	15300sf
Circulation @ 20%	3060sf
Gross square footage	18360sf

Total sf of site	610,312sf
Total sf of built space	344,940sf
Remaining space	265,372sf

Space Detail Sheet

Space Name	Capacity	No. Units	NSF/Unit	Total Net Area
Kitchen	1-5	160	150-250	24000-40000

Purposes/Functions

The kitchen's primary function is the preparation and storage of food. It is a place that is open to all that inhabit the unit and any invited guests. Traditionally the kitchen is a transient space, where one enters to get or prepare food which is then taken elsewhere to be eaten.

Activities

The primary activity within the kitchen is the preparation of food. It is here that meals are prepared whether for an individual or an entire group. Typically, larger meals are prepared during times of low natural light (dinner – evening/night). Eating is generally not done in the kitchen, although small snacks and beverages are sometimes consumed within the space of the kitchen.

Spatial Relationships

Traditionally views to the exterior in the kitchen are generally limited and typically consist of small, eye level openings. The possibility of extended exterior views can serve twofold in making a greater connection to the outside and by providing more natural light. The kitchen generally sits adjacent to an eating area or dining room. Sometimes this eating space is integrated within the kitchen. Either way, the kitchen should be in close proximity to an eating area. Usually kitchens are placed in an area of a dwelling unit that has little through traffic, making it a destination spot in the unit. This notion may be expanded upon in attempting to redefine the kitchen, possibly allowing for a more social space.

Special Considerations

The kitchen needs to be able to accommodate for some of the larger home appliances such as stoves and refrigerators. Kitchens tend to be very compact and layered. There are usually 2-3 levels of cabinet/storage space with stoves and refrigerators incorporated within them. Countertops and food preparation areas are of equal importance and are also generally incorporated within the layering of cabinets, although the use of islands have allowed for more countertop space. Sanitation is also an important feature that needs to be addressed as the preparation and storage of food requires a clean, bacteria free environment.

Equipment/Furnishings

Kitchens need to accommodate for large appliances including stoves, refrigerators, microwaves, and dishwashers. Along with these large appliances, storage space is an integral part of kitchen design which is generally accomplished through cabinets attached to the wall.

Behavioral Considerations

Generally the kitchen is a not a social gathering space. Conversation is usually directed to another space within the dwelling unit.

Space Name	Capacity	No. Units	NSF/Unit	Total Net Area
Main Living Space	1-?	160	200-250	32000-40000

Purposes/Functions

The general purpose of the main living space, or living room, is the gathering of the dwelling occupants for social purposes. It is in this space that the majority of interactions occur between inhabitants and guests.

Activities

The majority of activities within this space tend to be focused on group interaction, such as conversation, movies, television, and music, to name a few. It can also serve to be the basis for individual activities, such as reading or napping. This is where the majority of activities and interactions within the dwelling unit will most likely occur.

Spatial Relationships

The main living space is generally the focal point of the dwelling unit. Since it is the primary gathering space, it should be in close proximity to some of the more transient spaces, such as the kitchen and dining rooms. The main living space is generally considered to be a destination point within the unit; however it may also serve as a transient space. Another important spatial relationship is its proximity to the outside, more importantly, the private outdoor space/garden. It is through the main living space that one will most likely access the outdoor space adding to its transient quality. Furthermore, the space will be as open as possible with views extending beyond the inside, visually connecting the individual to their outdoor surroundings. The possibility to sink the main living space will add height to the space creating a sense of depth and the feeling of a larger space.

Special Considerations

Access to the outside is very important. The connection to the private outdoor space and the main living space will be directly connected. Furthermore, windows are also of importance as they allow a visual connection to the outside, but, more importantly, allow for an abundance of natural light within the unit, which aids in many of the activities that take place in the main living space.

Equipment/Furnishings

The television tends to be the most important piece of equipment within the main living space. It has become the social gathering point for most families and individuals and its effect has altered traditional modes of dwelling unit activities, such as eating and sleeping. Aside from the TV, generally furnishings tend to consist of chairs and sofas, a coffee table and various cabinets for housing electronic equipment.

Behavioral Considerations

The main living space tends to be the most social space in the house. It is where guests are entertained and where members of the unit come together for most social functions.

Space Name	Capacity	No. Units	NSF/Unit	Total Net Area
Bedroom	1-2	300	125-200	37500 - 6000

Purposes/Functions

The main purpose of the bedroom is a place where an individual(s) can sleep and have their own private space. It is where there most personal belongings such as clothes, jewelry and other items are stored. The bedroom is a very private, individualized space and most guests are forbidden to enter without permission.

Activities

Sleeping is the main activity that happens in the bedroom. Aside from this necessary human function, the bedroom is also utilized as a private changing area for the individual, as it is where ones clothes are stored. The bedroom is also the place where the majority of private activities occur and usually doubles as a sanctuary or a place of escape for the owner of the bedroom.

Spatial Relationships

Generally the bedrooms are located away from the main living spaces and tend to be solely destination spaces. One does not inadvertently pass through someone’s bedroom uninvited. It is important for the bedroom to have some form of access to the outside or public realms. Because of their very private nature, it provides a needed balance to allow a connection to the public realm. This is generally accomplished through windows or other openings; however one can go a step farther with the implementation of balconies. Spatially, bedrooms do not need to be very large as they are not used very frequently. In multiple bedroom units there is a tendency to have a master bedroom, which is predominately larger than the others and usually has access to a private bath.

Special Considerations

Bedrooms do not need to be very large spaces. The only special consideration would be access to a natural light source and the possibility of access to the outside via balcony in some units. Privacy is another concern which would explain their generally far proximity from the more social spaces of the unit.

Equipment/Furniture

The most important piece of furniture in a bedroom is the bed. This is the largest piece and is usually the focal point of the room. Furthermore, bedrooms usually have a dresser and some form of closet space for the storage of ones clothes.

Behavioral Considerations

Bedrooms are generally quiet spaces. Socializing is fairly infrequent and is usually saved for other spaces in the unit.

Space Name	Capacity	No. Units	NSF/Unit	Total Net Area
Bathroom	1	280	50-100	1400 - 2800

Purposes/Functions

The bathroom is where one goes to perform certain bodily functions. It is here that the toilet is located. The bathroom is also where the shower/bath is located and is where most personal grooming takes place. One can look at the bathroom as the one space in the unit that is dedicated solely to the health and hygiene of the individual.

Activities

Aside from the obvious bodily functions that take place in the bathroom, it is also the place where self grooming and cleansing takes place. It is here that most people generally start their days and is one of the first rooms visited after one awakes.

Spatial Consideration

The bathroom should be able to be accessed by all who enter the unit (unless it is a private bath). However, depending on the size of the unit, they are generally placed closest to the bedrooms. They tend to be compact with many functions taking place within a small space. The bathroom is the most private space in the unit and is usually only occupied by one person at a time.

Special Consideration

Generally access to the outside is limited due to the private nature of the bathroom. Ventilation and air circulation is the most important feature of a bathroom and is integral to its success. Poor ventilation in the bathroom, due to the high amount of water vapor that occurs in the space, can result in damage to the entire unit.

Equipment/Furniture

The bathroom consists of a toilet, shower/bath, and a sink/vanity. This is generally the only equipment that is located in the bathroom

Behavioral Consideration

Because of the very private nature of the bathroom, it is not a social place. Its individualistic features make it a place for self-reflection and thought for many people.

Space Name	Capacity	No. Units	NSF/Unit	Total Net Area
Closet/Storage	n/a	160	40-100	6400 - 16000

Purpose/Function

The main purpose of the closet/storage spaces is essentially a designated area for the inhabitants of each unit to store their belongings, from household cleaning items to bicycles and other larger pieces of equipment

Activities

There aren't any activities that happen inside the storage spaces, although the items stored within the space generally contribute to some form of activity.

Spatial Consideration

Usually these spaces are located in areas that are near to high volume spaces and that can be easily accessible to the individual. The space is generally dark with little to no natural light penetrating the space.

Special Consideration

The only special consideration is that the space be closed off from the remainder of the unit by either a door or other partition.

Equipment/Furniture

As for the actual space itself, there are no specific pieces of equipment or furniture other than shelf space.

Space Name	Capacity	No. Units	NSF/Unit	Total Net Area
Study/auxiliary space	1-3	100	100-15	10000-150000

Purpose/Function

The study is a space where once can go and engage in quiet, private activities. However, it is a very open ended space and by no means limited to the function of a private study. There are no real requirements as the function of the space is left entirely up to the owners of the unit.

Activities

These all depend on the end function of the space. A study is generally a quiet, private area where one goes to read or engage in quiet, controlled conversation. Generally the study doubles as an office space where a computer and other office equipment exist. Again, it is very open ended as the final function depends on the owner of the unit.

Spatial Considerations

Spatially, the study is generally open. It is located at a bit of a distance from the more social spaces of the unit and is generally considered a private space due to the nature of the items contained in it. However, because of the adaptable nature of the space, there are no stringent spatial requirements

Special Considerations

Since this space does not have a static function, it needs to be designed with flexibility in mind. Natural light should be utilized with access to windows an important feature of any space. Privacy is generally a concern in study spaces and there should be a way to maintain maximum privacy and block/contain sound within the space. Furthermore, due to the sensitive nature of some of the electronics that may be contained in the space, cleanliness is a top priority.

Equipment/Furniture

Studies generally contain plenty of shelving units and cabinets for the storage of documents and other office related items. Usually there will be a desk and a computer contained within the space. But, of course, this depends on the end function of the space.

<u>Space Name</u>	<u>Capacity</u>	<u>No. Units</u>	<u>NSF/Unit</u>	<u>Total Net Area</u>
Private outdoor space/garden	1-?	160	150-400	24000-64000

Purpose/Function

The main purpose of the private outdoor space is to make a physical connection for the individual between the indoor space and the outdoors. It is a continuation of the unit to the outdoor realm and can function in whatever manner the owner desires.

Activities

There is a various range of activities that can take place in this space from eating to exercising to simply relaxing and enjoying a nice afternoon. Furthermore, there is the opportunity for private landscaping and gardening with the ability to grow fruits and vegetables, adding an element of sustainability to the unit. It is also a space that will see various social and group activities such as barbeques and birthday parties

Spatial Consideration

The private outdoor space is located in the rear of the unit and is accessed from the unit through the main living space. There is also access to the public realm via a gate in the rear of the outdoor space. However, it is not only limited to serving as a "backyard". The space may also inhabit the rooftop of the unit or some other semi interior space. Spatially it follows the guidelines of most urban outdoor spaces as it is compact but not claustrophobic and maintains its main goal of engaging the inhabitants to the outdoors. The line of site within the space is limited as it is supposed to be a private area of use for only the inhabitants of the units.

Special Considerations

Since the space is exposed to climate fluctuation and seasonal change, it is a space that requires maintenance from the owners and a consideration for any furniture or equipment that may be stored outdoors.

Equipment/Furniture

Generally, the only permanent furniture is outdoor patio furniture which is designed to brave the seasonal changes. Other than patio furniture, the space is typically open with various equipment (grill, sports equipment) being brought out when needed

Behavioral Consideration

The outdoor space, for the most part, tends to be a social space for members of the dwelling unit and any invited guests. However, there is now a direct connection being made to the outdoors and to the surrounding neighbors. Although views are limited, sound isn't. This may become a problem during times where one is utilizing the space for entertaining guests.

detroit: urban housing [re]considered

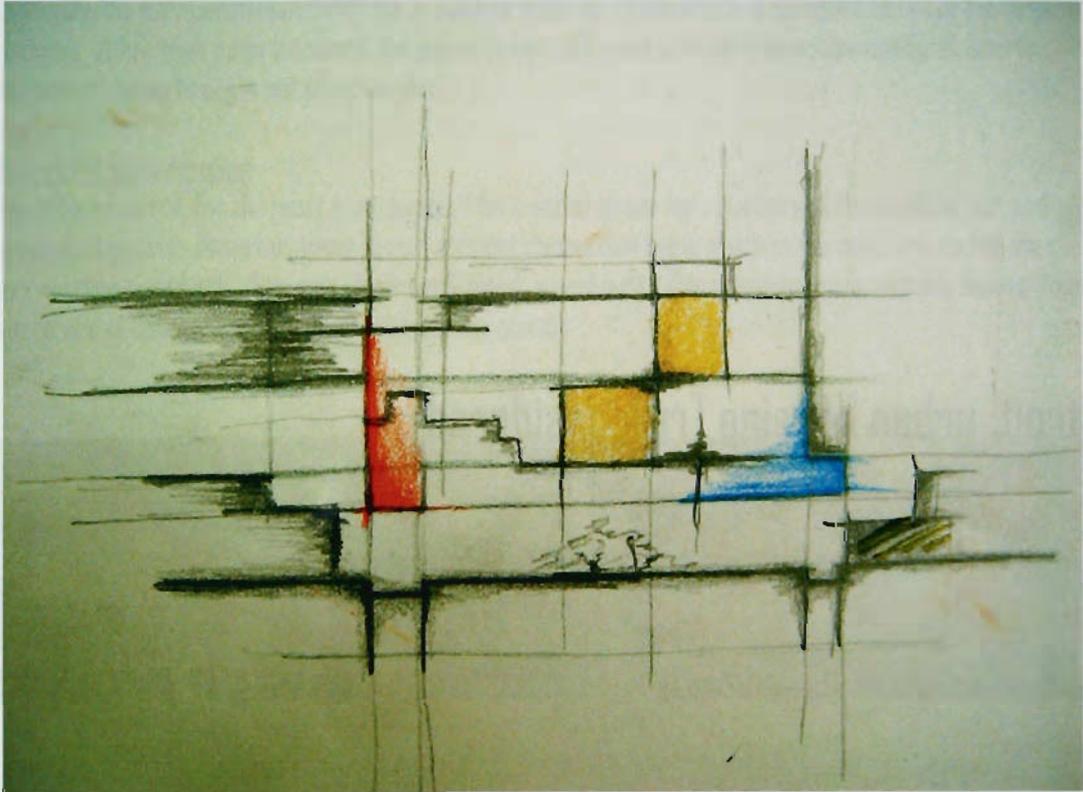
springboard + schematic design + design development

design process

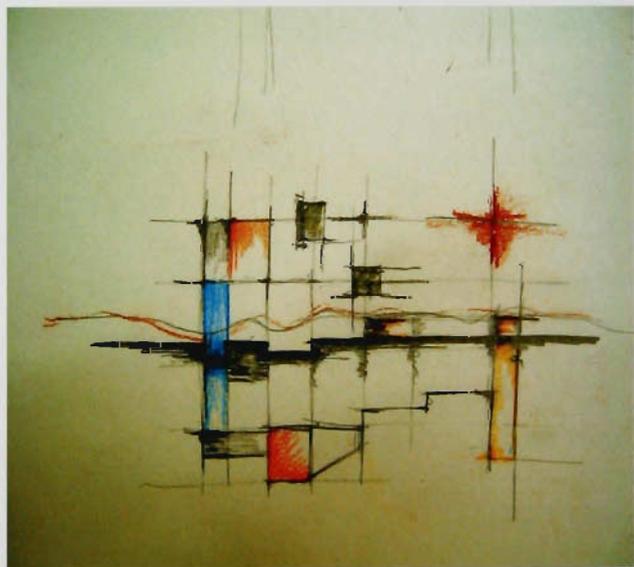


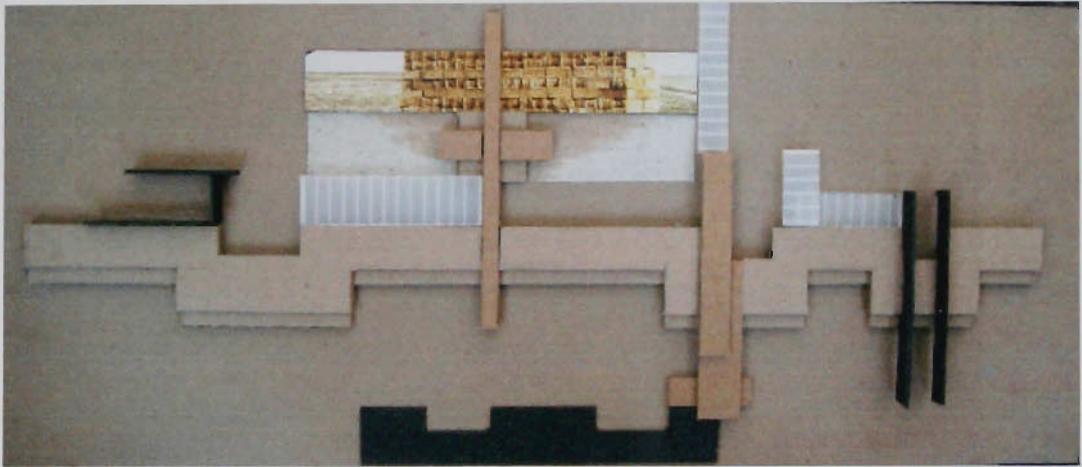
Springboard Investigation

The springboard project began with an investigation into the abstract spatial arrangements of the site. The first step was to create loose, conceptual section drawings through the site. These drawings were meant to uncover some of the hidden characteristics within the surrounding urban context and present possible opportunities that could be expanded upon. From these drawings a series of section models were created, each one elaborating on the compositional, tectonic and spatial arrangements made in the previous as they begin to re-think the urban property line and how traditional urban boundaries are formed.



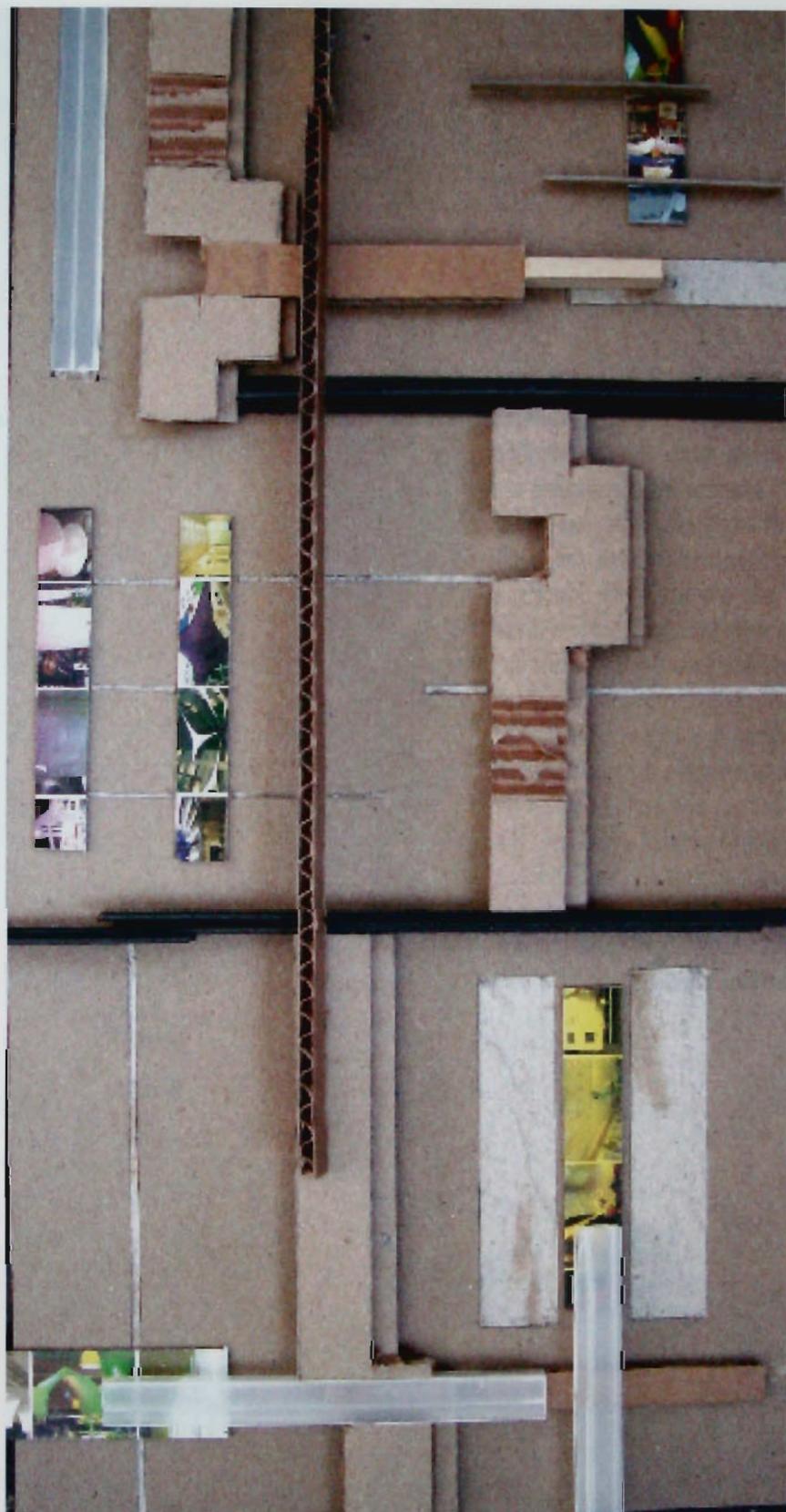
These early conceptual drawings begin to illustrate possible site configurations as well as beginning to create sense of depth on the site. The idea of "framing" views is an important aspect of my design process and these drawing begin to conceptually show this. Furthermore, the beginning of an articulated landscape is also apparent in the shifting ground plane.



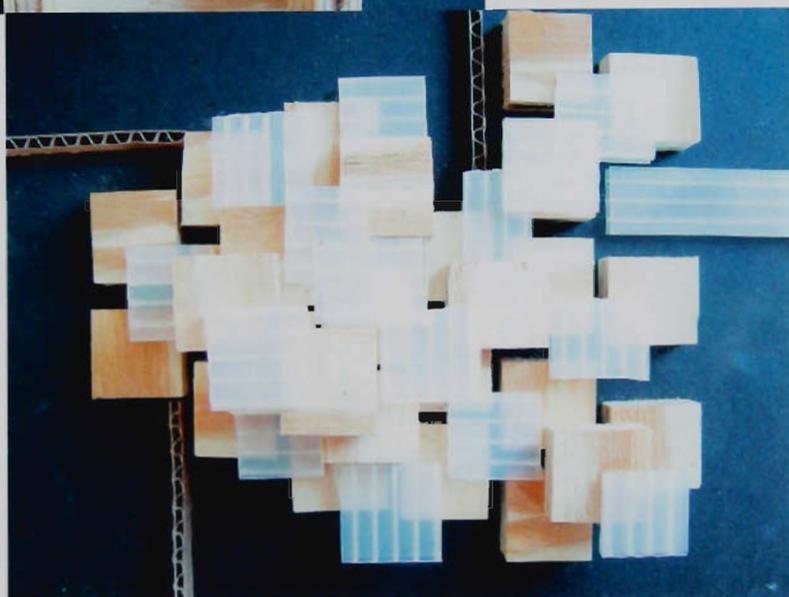
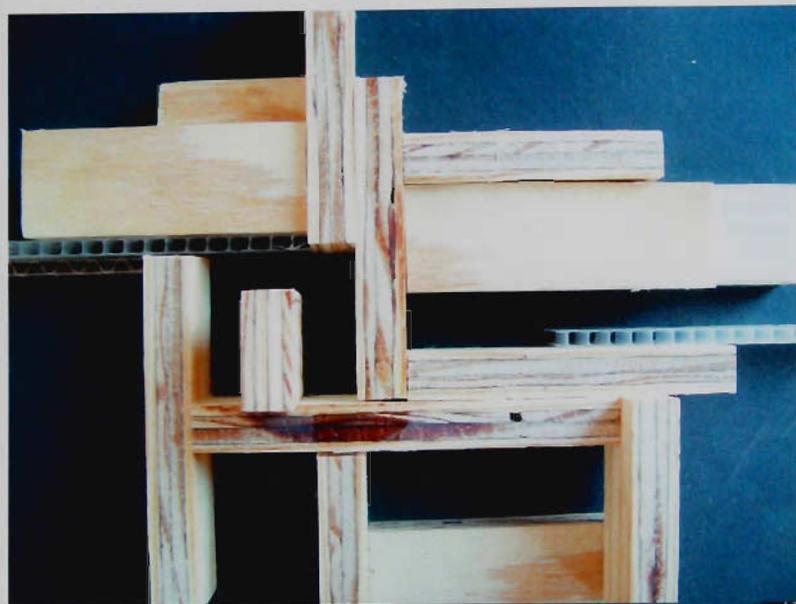


These two models along with the following page begin to examine the surrounding urban site condition. It is here that one begins to re-examine the property line, the traditional urban alleyway and other urban site conditions to begin to understand how these basic notions function and relate to one another. These models weren't just pasted together arbitrarily, but were compositionally placed so as to create a dialogue between the various findings and begin to elaborate on the previous conceptual drawings. The idea of layering, tectonics and framing views are all apparent in these studies. Each one of these studies, beginning with the top, are all extensions of the previous one.

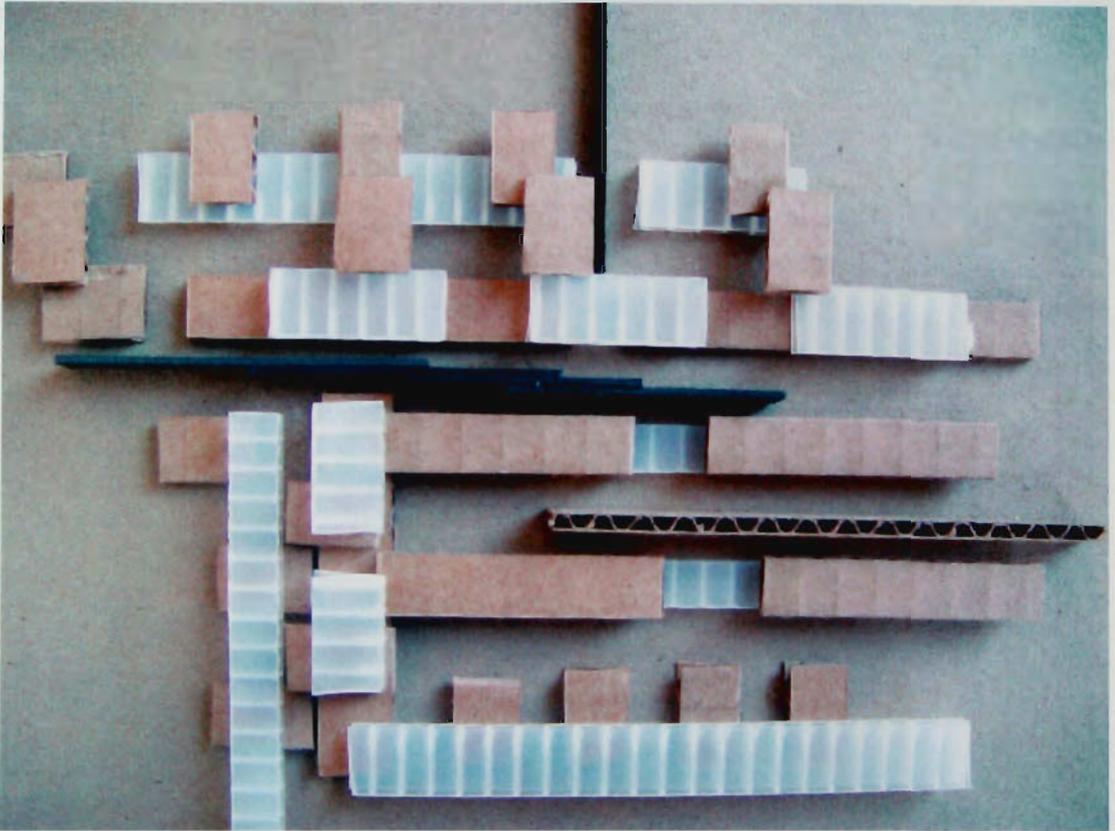




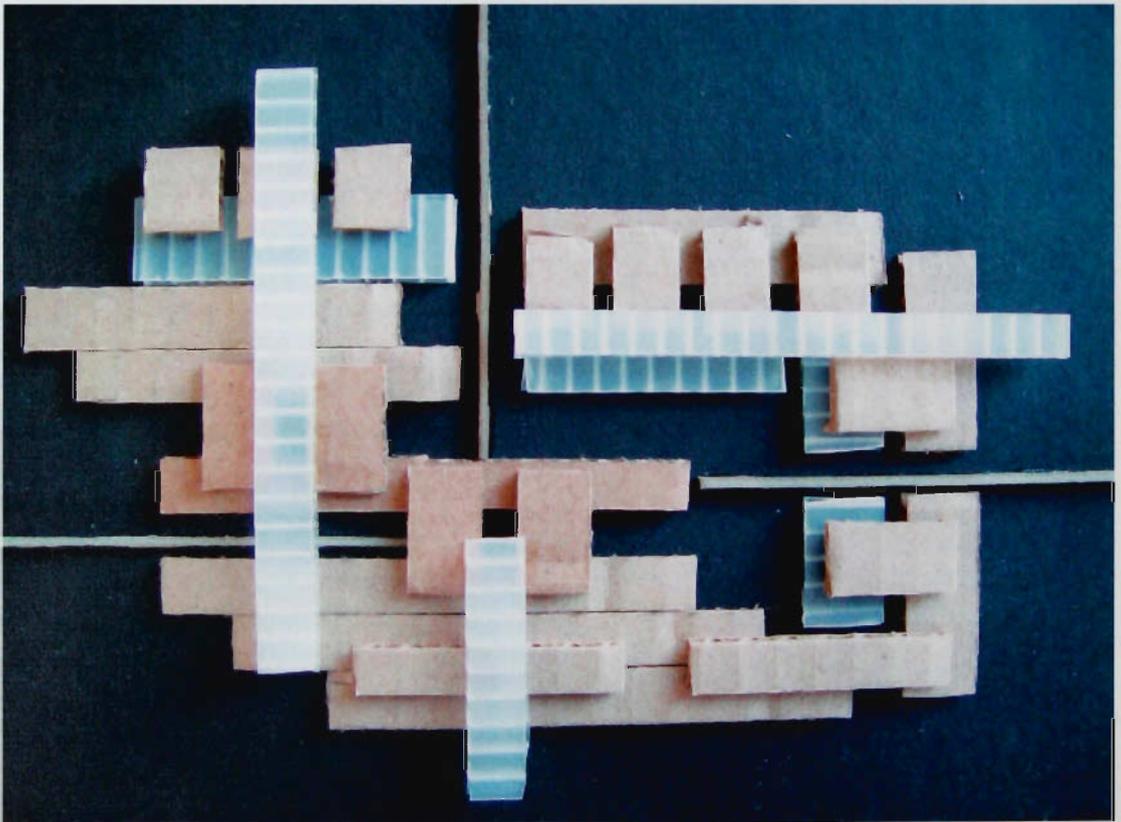
The next step was to create a series of gestural models loosely based on a conceptual idea of what might appear on our site. The first set were created without a programmatic function assigned to the material and were solely made to investigate the relationship between spaces and how these various spaces may come to exist together.



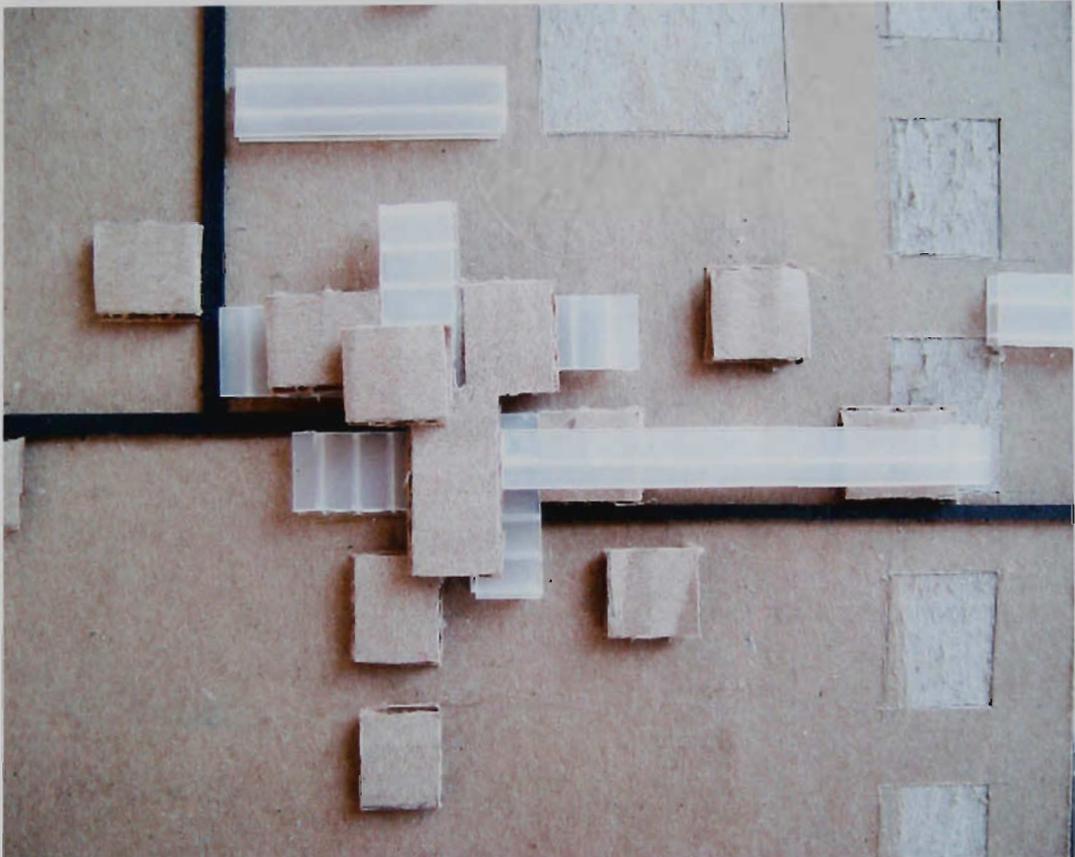
These two models were some of the earliest attempts of creating an abstract way of beginning to represent how my project might begin to engage the site and the surrounding context. While these early models had no program functions associated with materials, there is the beginning - as evidenced with the thin pieces of cardboard - of a connection being made outside the boundaries of the site.



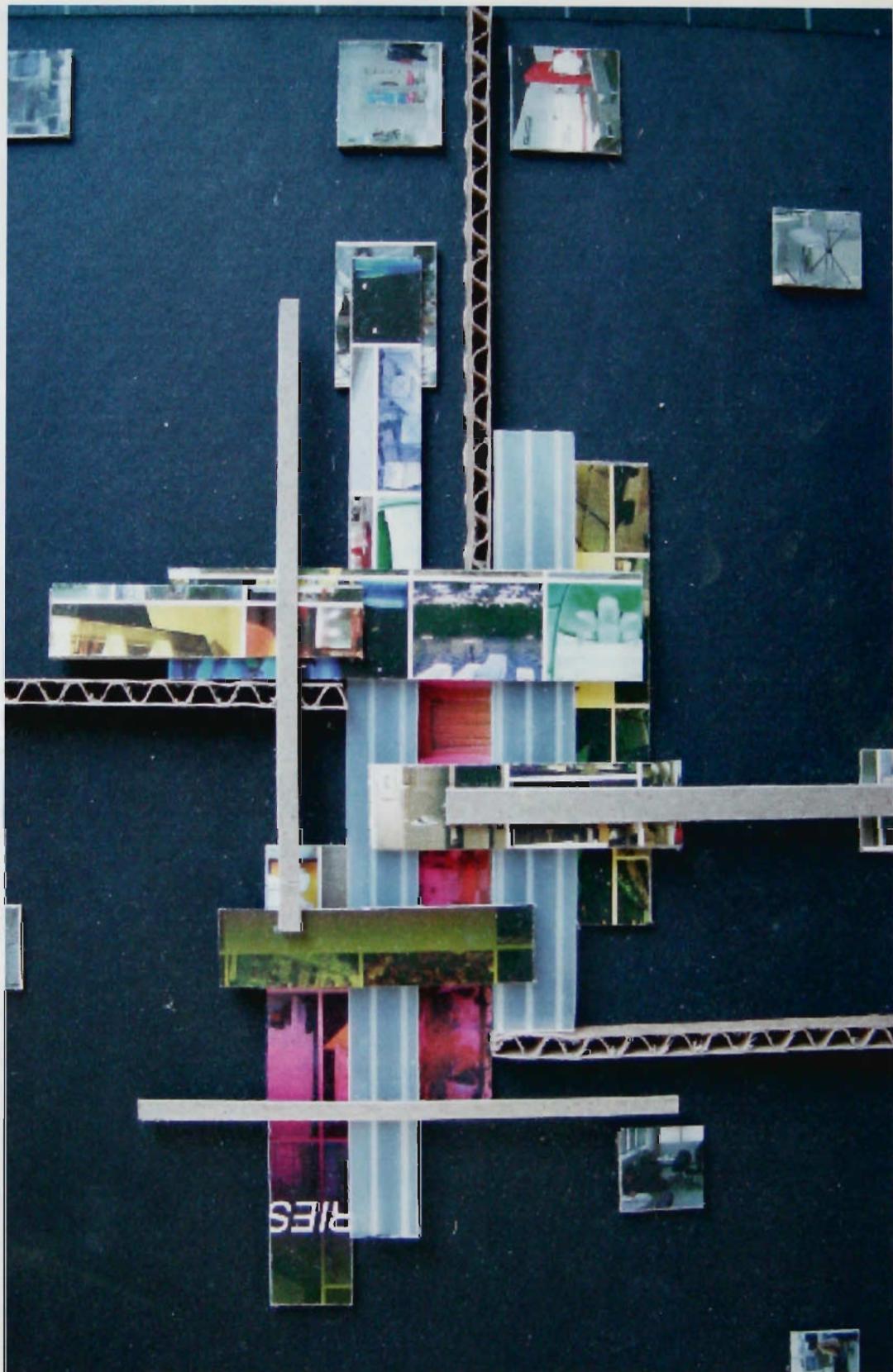
more early gestural site configurations



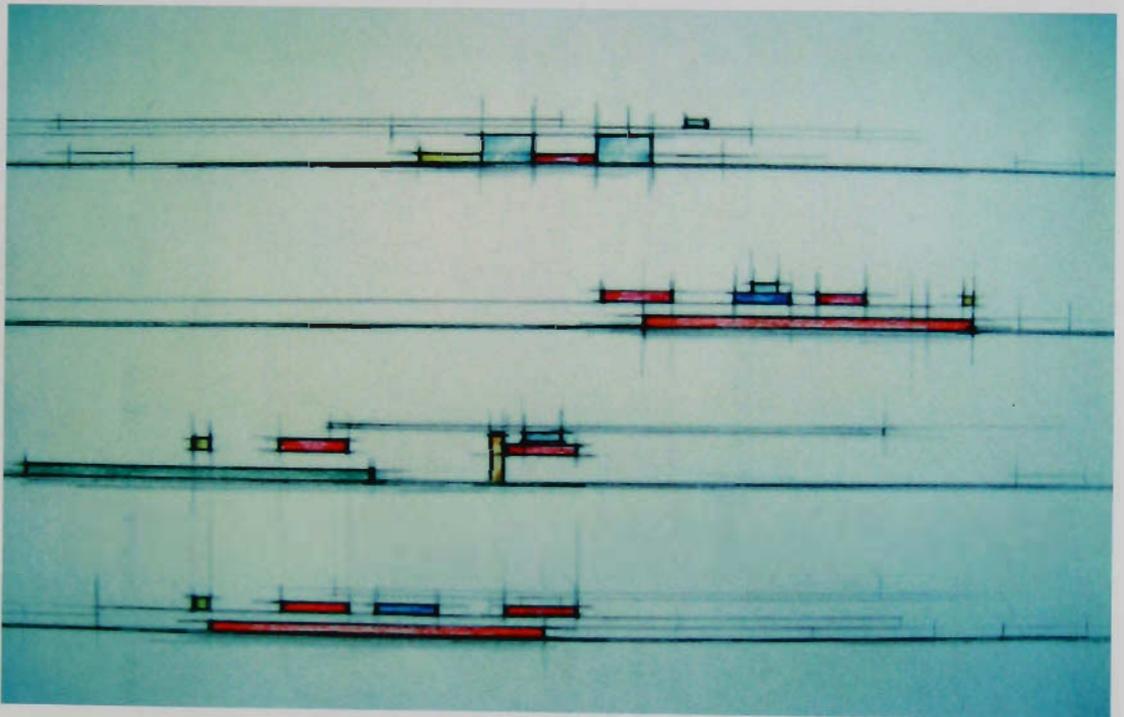
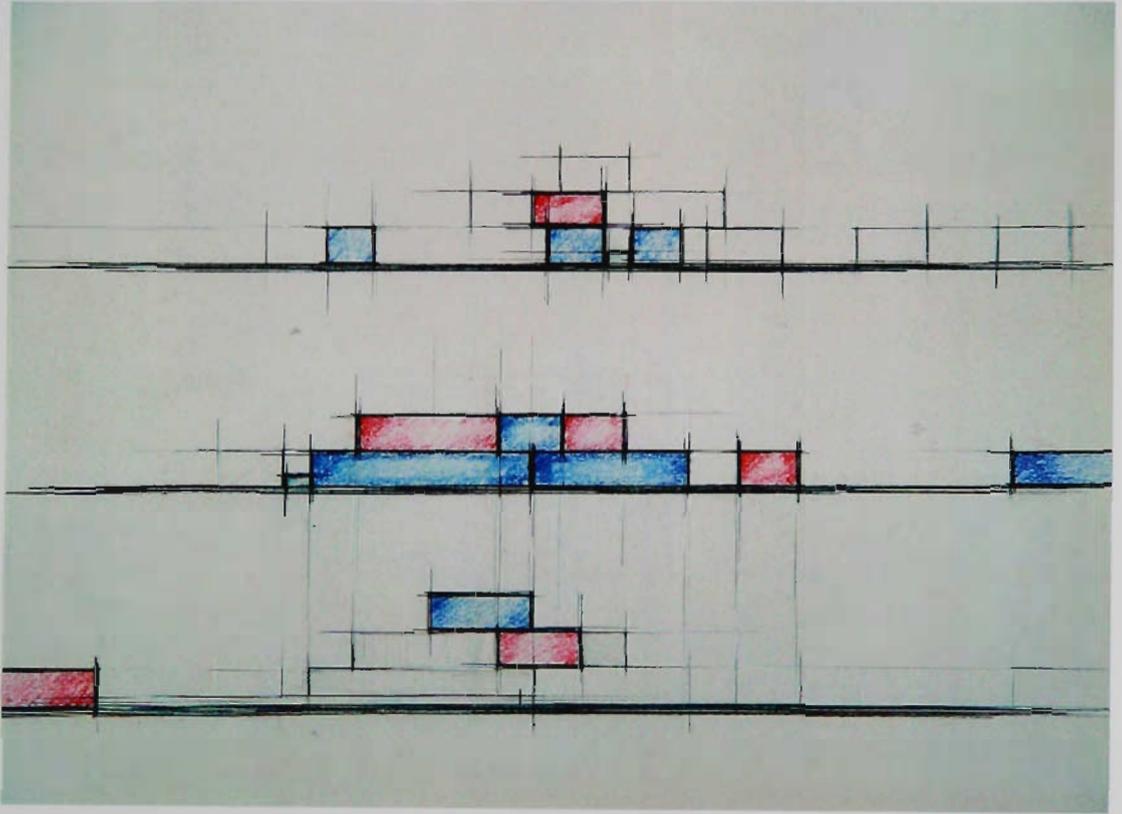
As the gestural models advanced, materials began to signify various programmatic functions such as the individual and collective spaces. These spaces came to the forefront of the investigation. It is within these conceptual models that I began to interpret how these spaces interacted together and define how they would function within the programmatic framework. Furthermore, I began to make the connection to the surrounding context more evident.



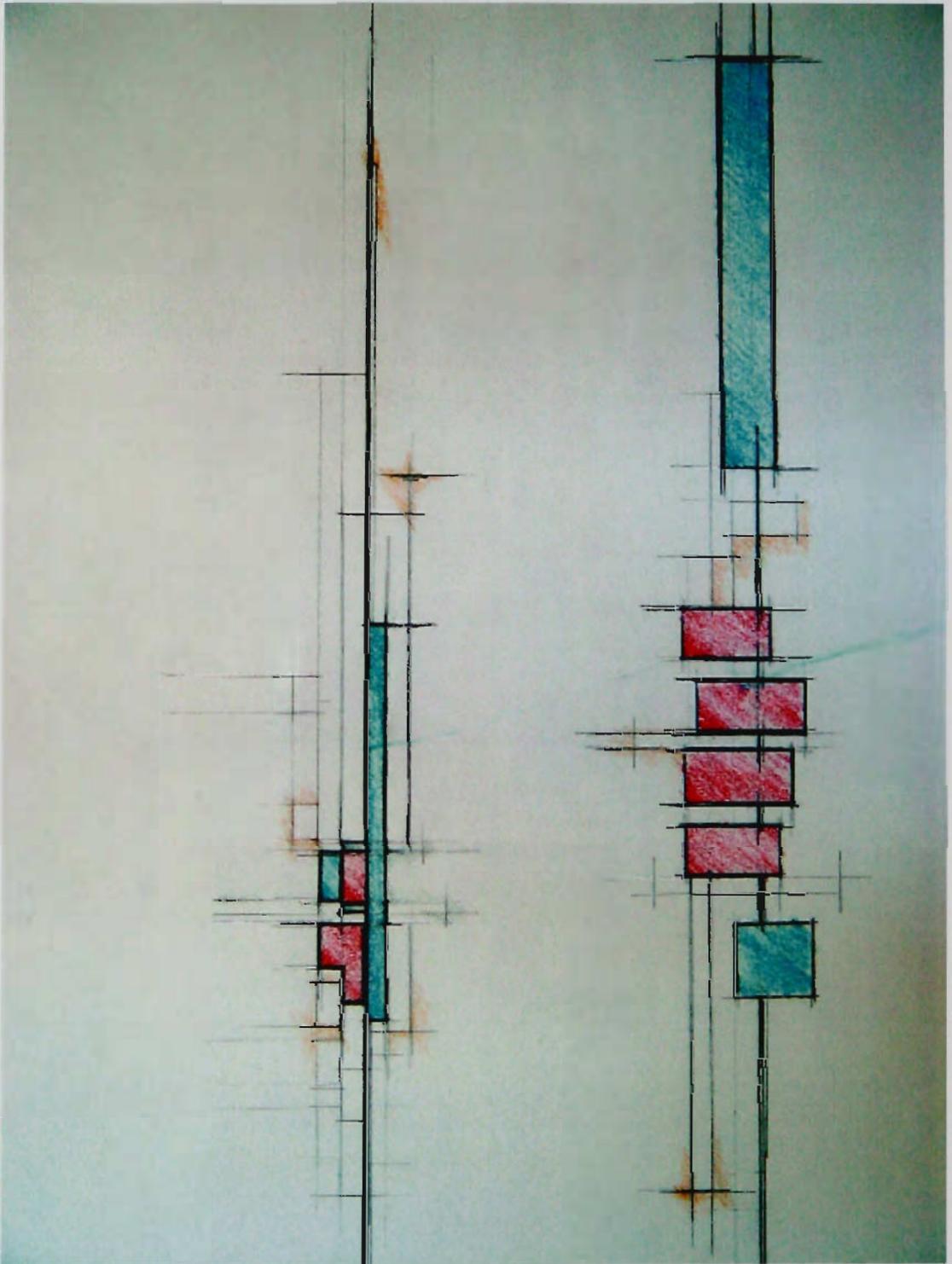
The above model along with the one on the following page both begin to attribute function to materiality in a loose, conceptual way. For instance, the clear pieces in the above model signify what may become collective spaces while the cardboard pieces on top begin to signify the possibility of an individual space or a dwelling unit. The black strips of paper are an extension of the site into the surrounding neighborhood as well as signifying what may later become the in-between spaces of the site.



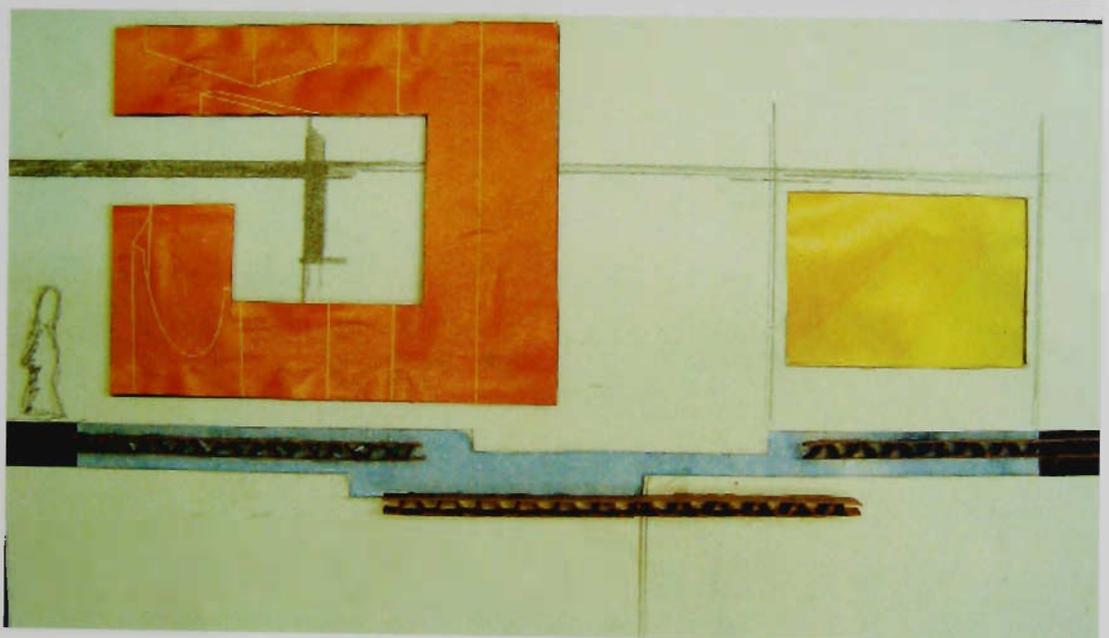
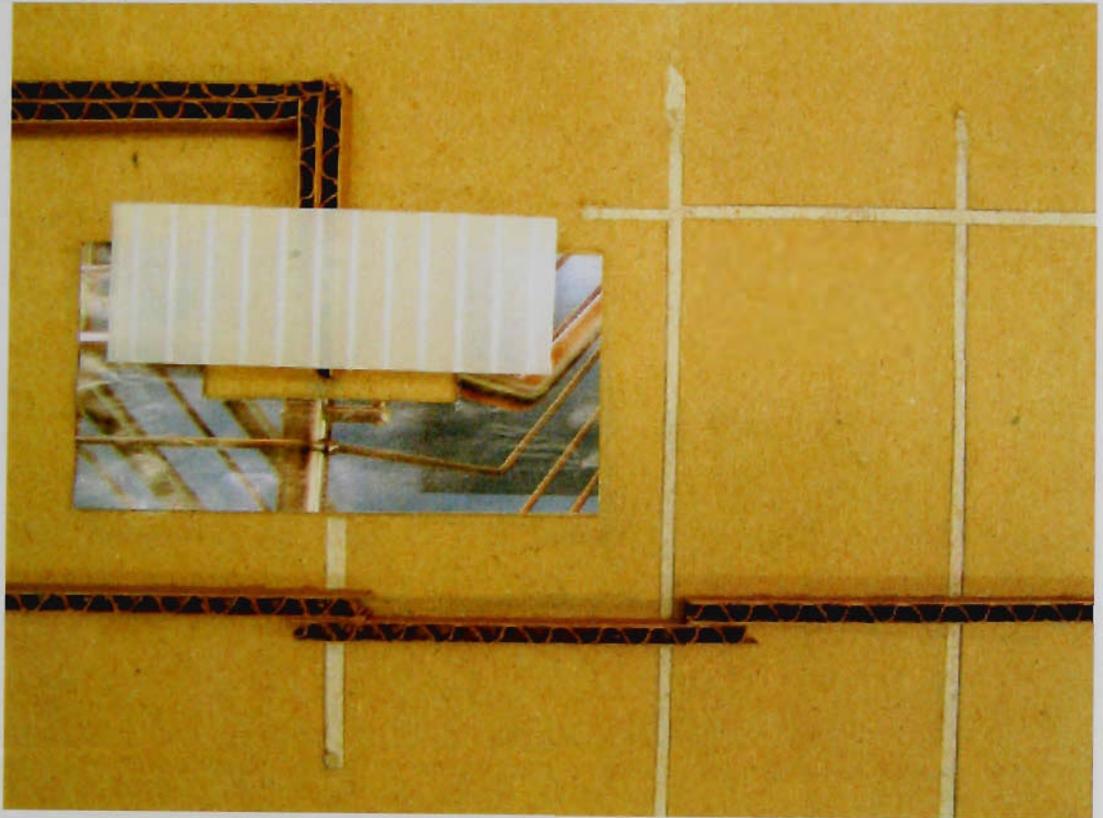
From these gestural models, another set of section drawings were constructed. Each of these series of drawings investigated a certain detail within one of the models at a larger scale. These drawings were intended to uncover other possibilities for programmatic functions and to observe how these functions might possibly interact together.



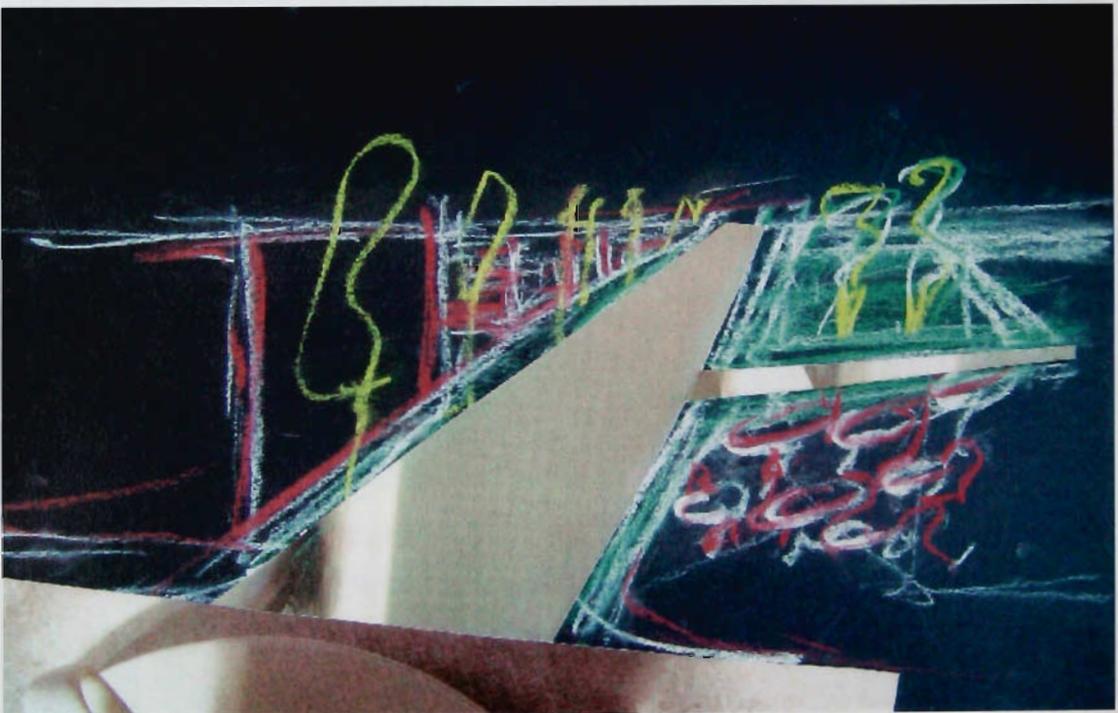
These two drawings begin to develop the idea of the in-between space as well as start to create variations in the topographical nature of the site. These moves would eventually be articulated throughout the site and lay the foundation for an architectural landscape

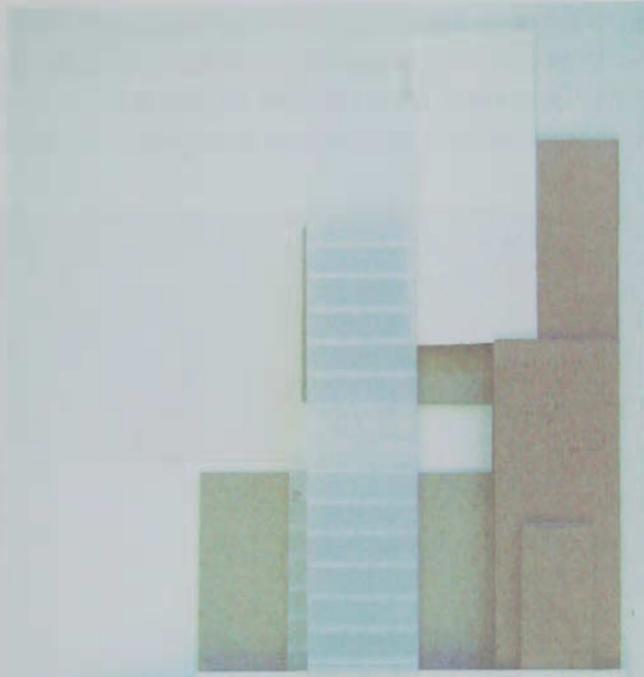


Following these section drawings, another set of models was created, this time focusing on a certain aspect of the site and trying to discover how different program functions interacted at certain areas within the site. These two studies begin to illustrate the idea of depth and framing in the form of a section model. What kind of connection does the space have with its surrounding conditions? Furthermore, how are some of the other spaces in the site viewed or framed? These were questions I asked myself as I undertook these investigations.

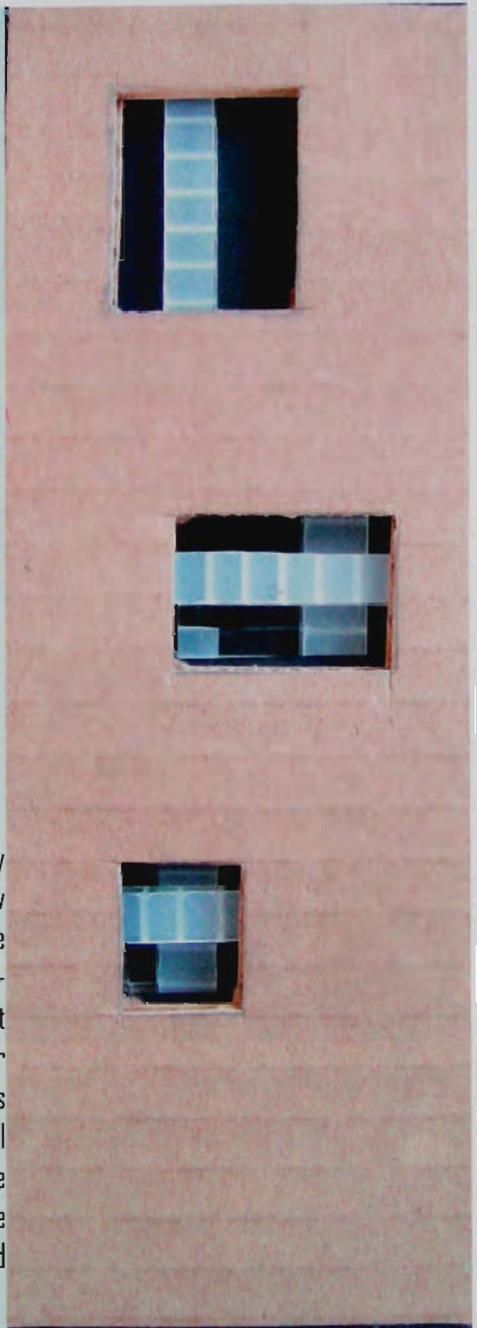


Also important to the investigation were a series of perspective drawings. These drawings were loose investigations into what certain spaces may feel like in a three dimensional environment and were based on some of the earlier gestural models. They begin to show how certain spatial arrangements may work with one another. I tended to focus primarily on the collective space and how this space interacted with the built environment.

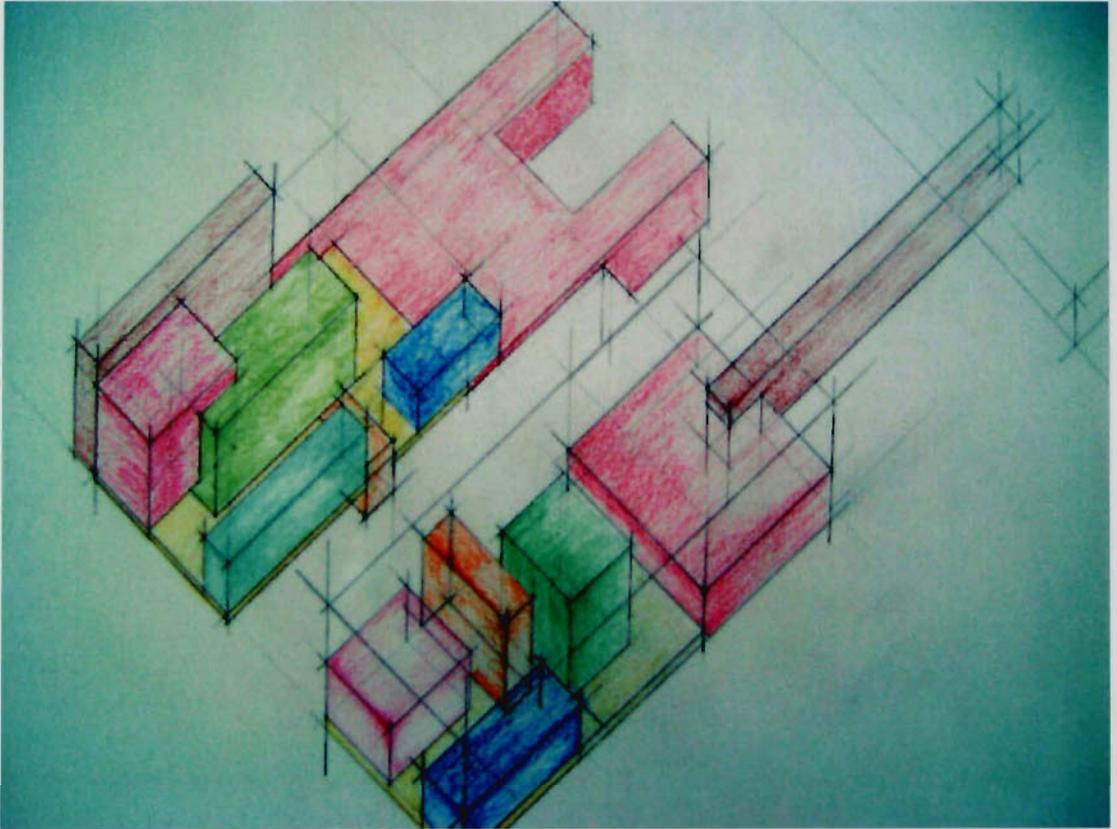




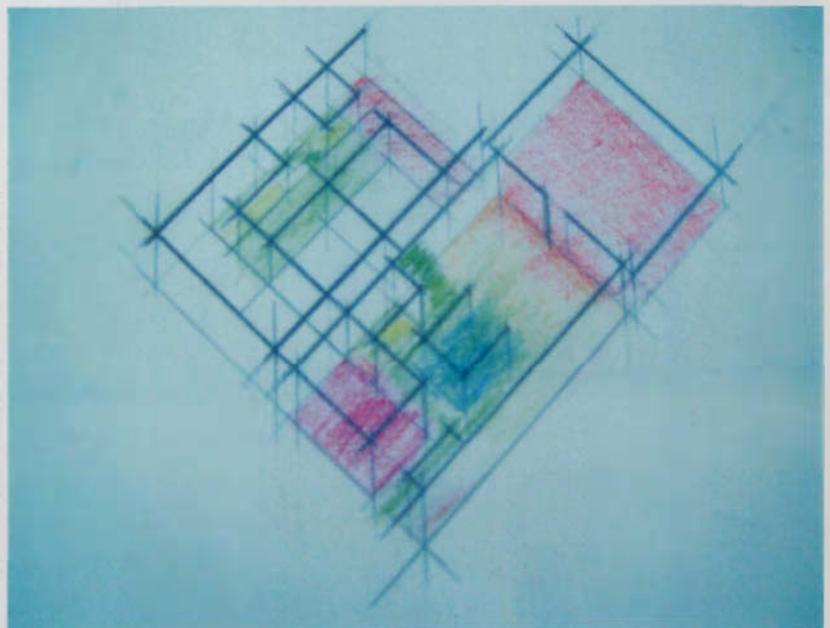
The wall sections were created to elaborate on the materiality and tectonics of the various program functions. They show how different materials intersect to define a certain space and also begin to elaborate on the previous concept of framing views within and outside a unit. The model to the right attempts to capture how the wall of a housing unit - exterior or interior - may begin to function in regards to framing views and creating a connection between various spaces. The model below attempts to show how a multi-unit building may engage the street level. An element of translucency begins to take effect as the notion of how the building engages the ground plane and the street begins to take shape.

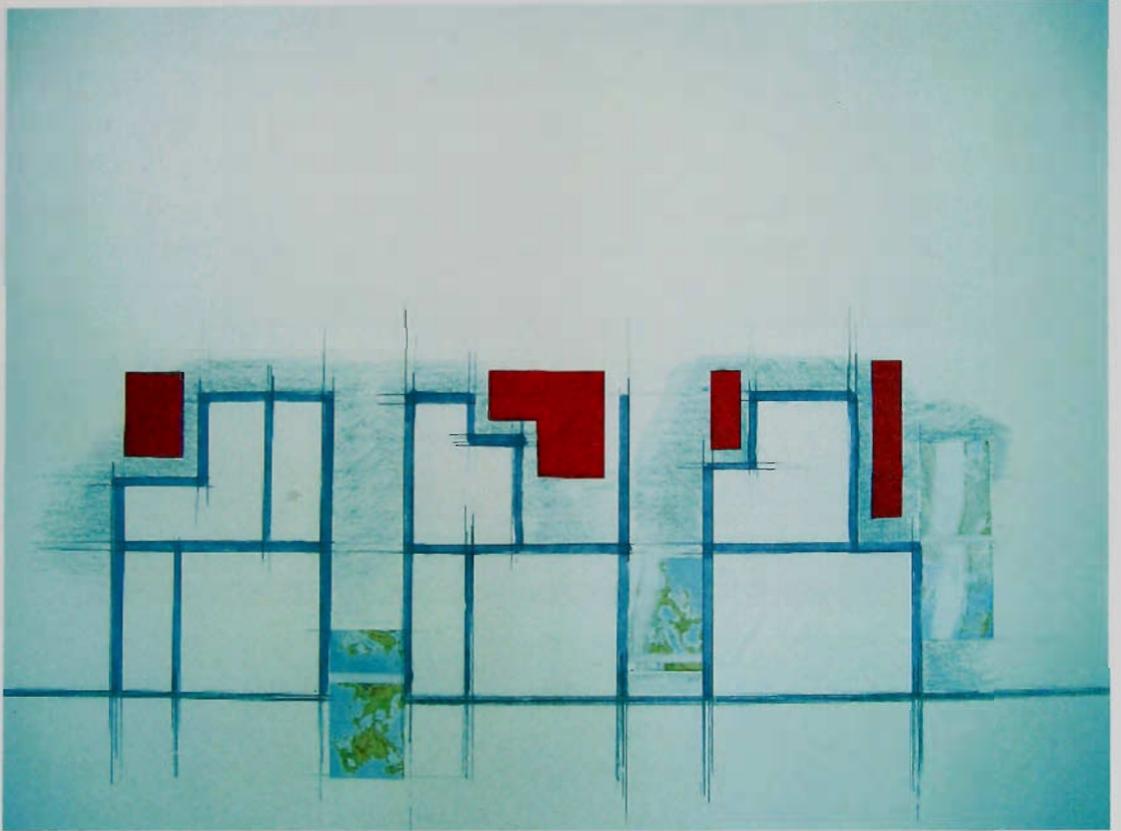


For the last part of my springboard investigation I turned my attention to the individual housing unit. I began by creating a series of abstract axonometric drawings in order to begin to loosely define the volumetric properties of the spaces within the housing unit. There was no precise function assigned to each volume. These were strictly abstract representations to show how these spatial housing arrangements can be re-configured.

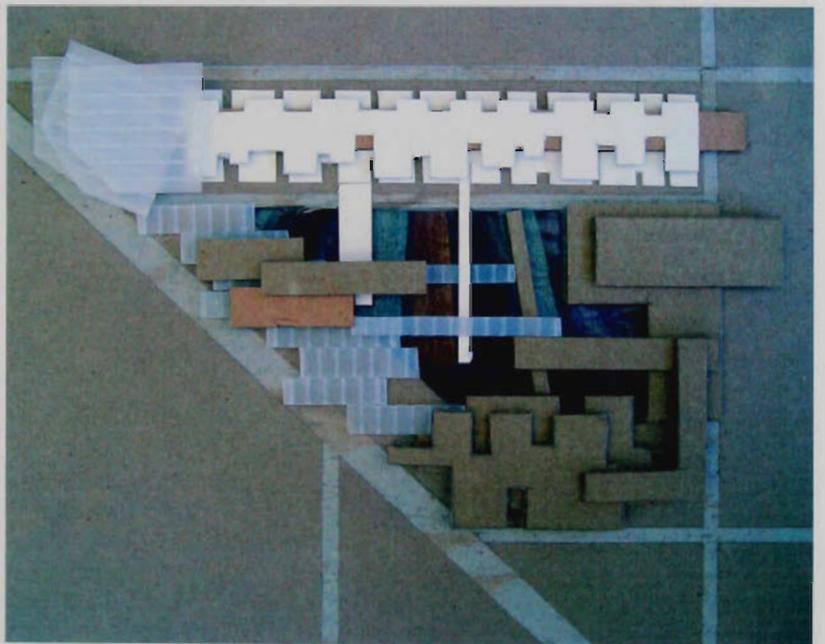


These drawings are loose interpretations of how some of the spaces within the unit begin to function. It is also one of the first drawings to address the in-between space and how the moves made on the interior affect what happens in this space and vice versa.





The above section diagram investigates the housing unit in section form and begins to uncover how the in-between spaces might begin to function in section. Emphasis is still on framing views, as the red strips indicate this while the green pieces begin to discern the in-between and how it engages both the unit and the ground plane.

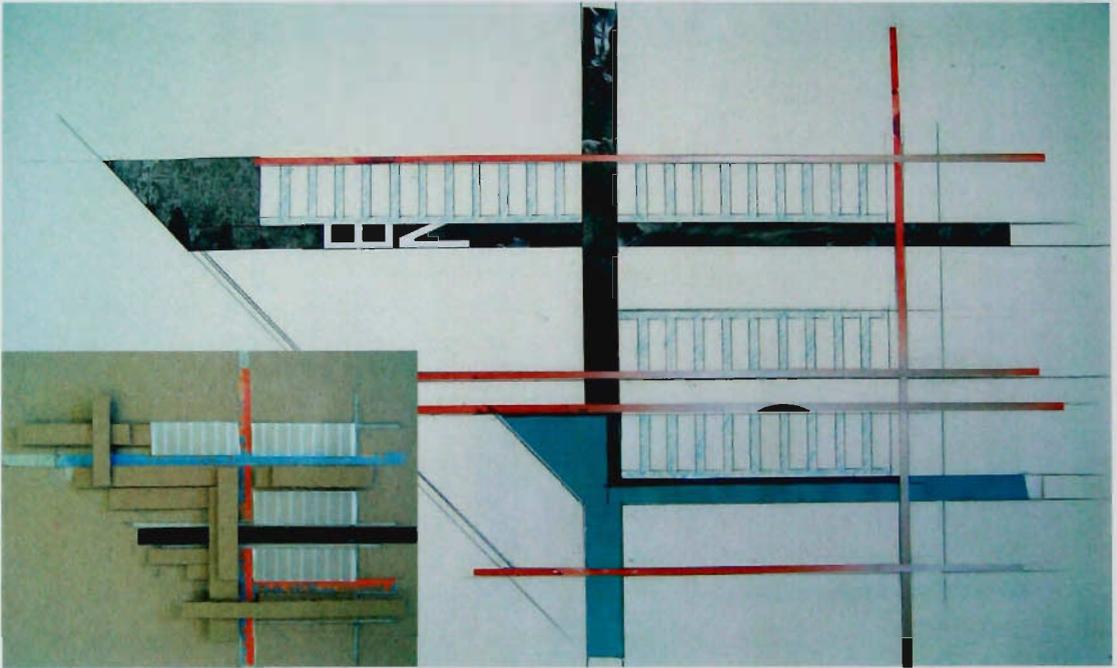


To the right is one of the later gestural models. This model begins to place some various program functions within the site grouped around a sunken collective space with outlets to the various building types.

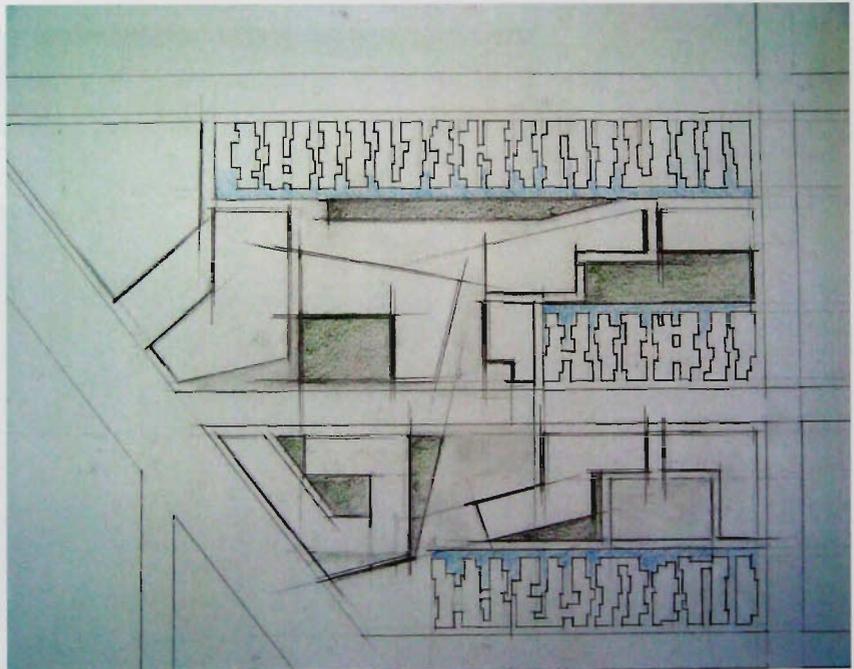
Schematic Design

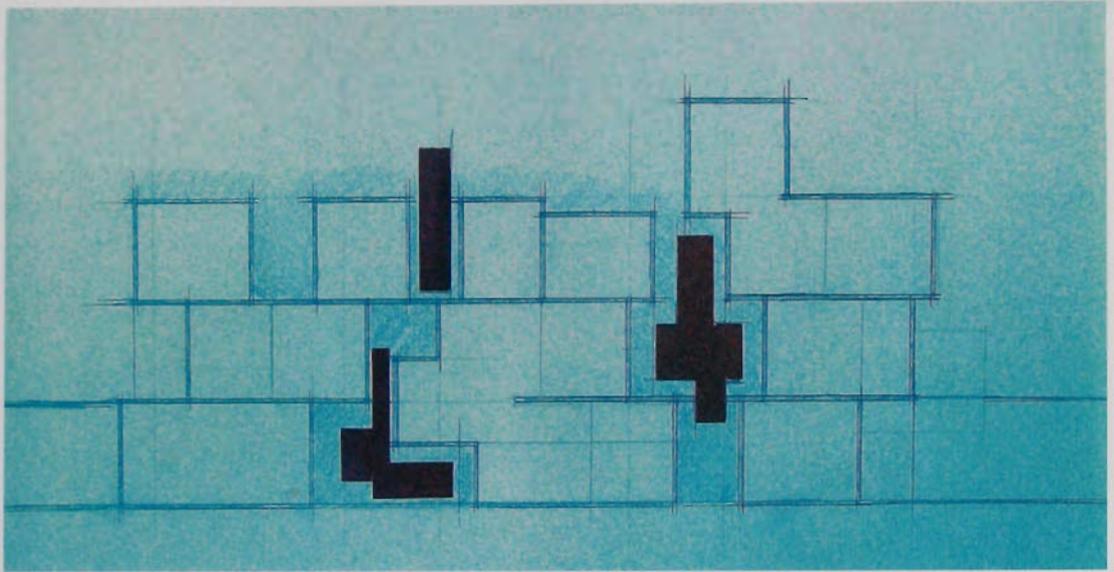
The schematic design phase set the tone for how I would approach design development for the rest of my investigation. It is at this stage that I began to acknowledge the different scales embedded within my project and work between them, allowing the moves I made at one scale influence what happens at the other.

The drawing below is one of the first attempts to place my program within the site. It is still very diagrammatic and collage-like - techniques I would employ throughout the design process. This drawing begins to uncover how my individual housing units may be aligned on the site and how they would function in relation to the various pedestrian circulation spaces (strips of orange paper).

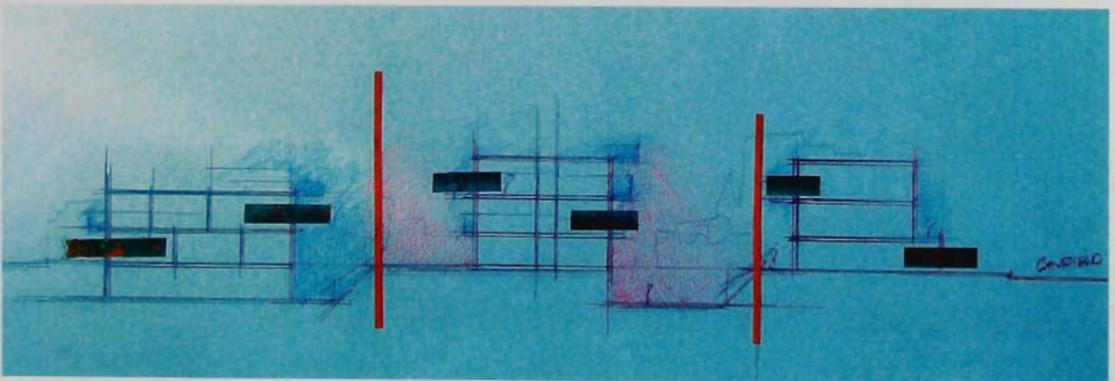
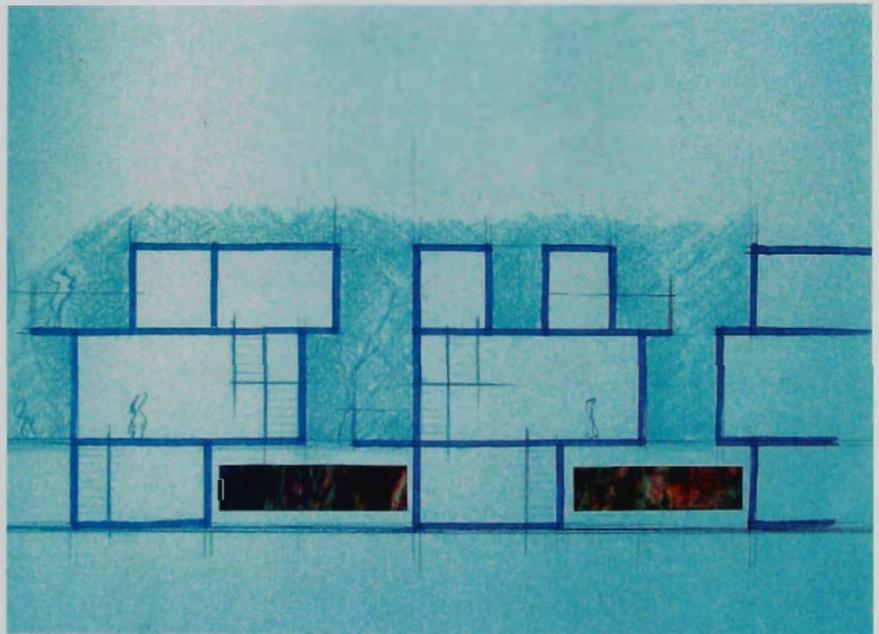


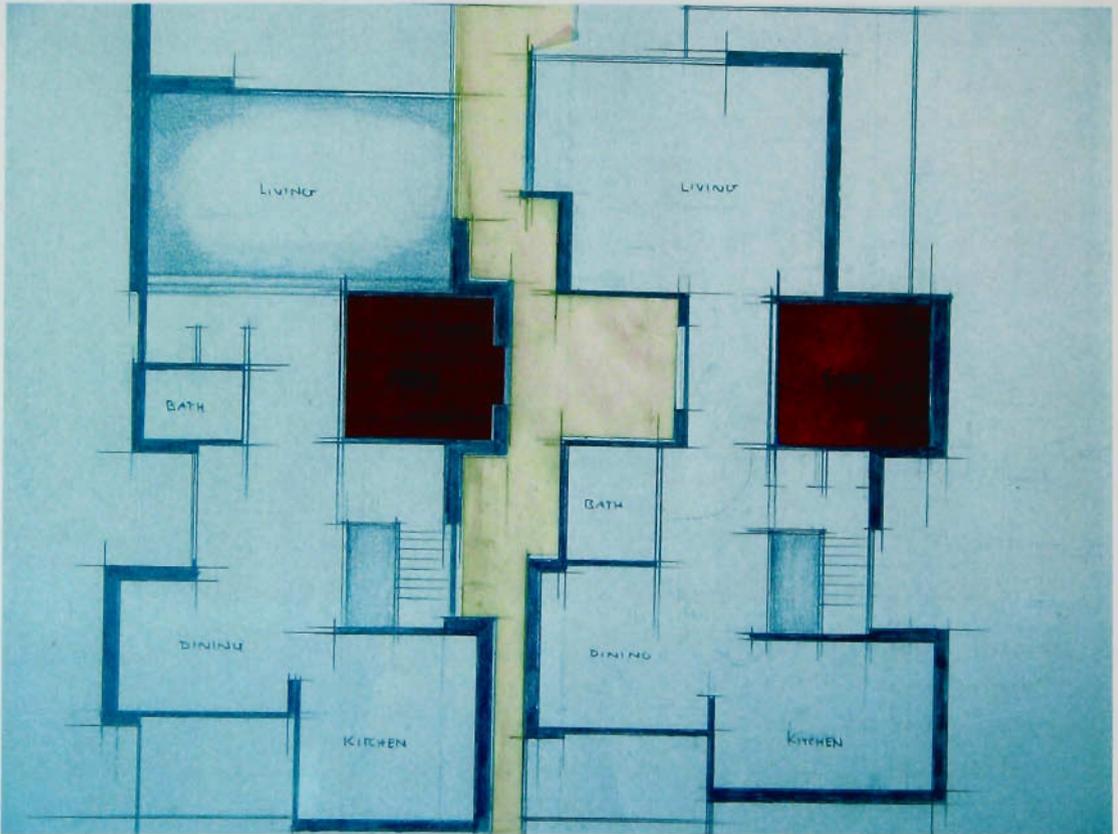
To the right is one of many drawings at the site scale that begin to layout the various building types. Working at the site scale proved to be a tedious and never-ending task. It is a continual work in progress, even after the final design is completed. Note the introduction of Lysander St. which continues from the east, connecting the site with the Woodbridge neighborhood.





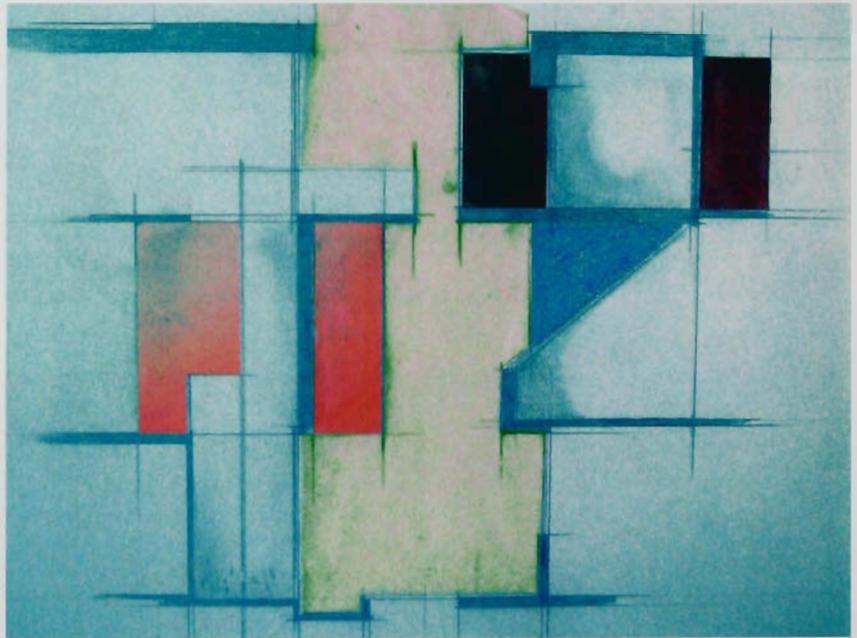
These section drawings are continuations of the sections from the springboard investigation. However, the moves made in the in-between space is more defined as well as the spatial arrangements inside the unit. The section below illustrates how the housing unit might engage the landscape both at the ground and sky levels

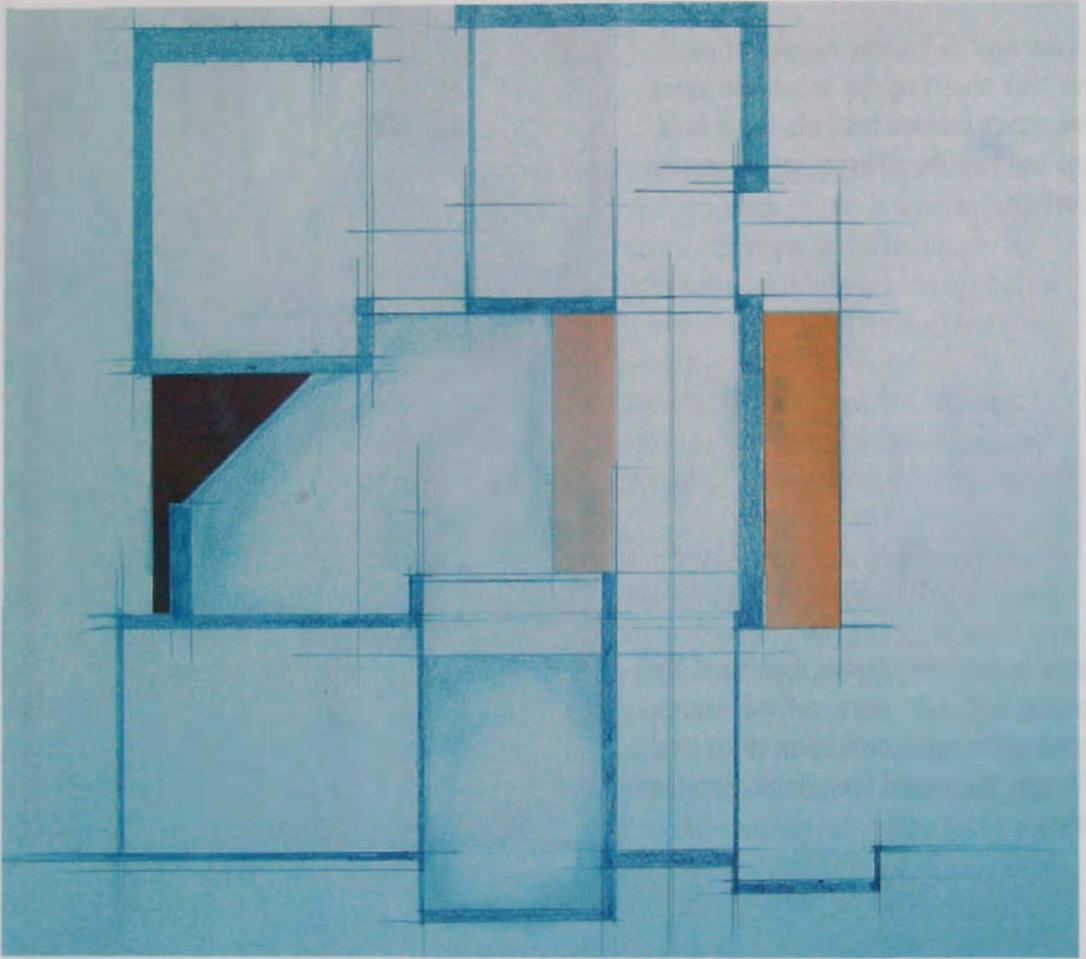




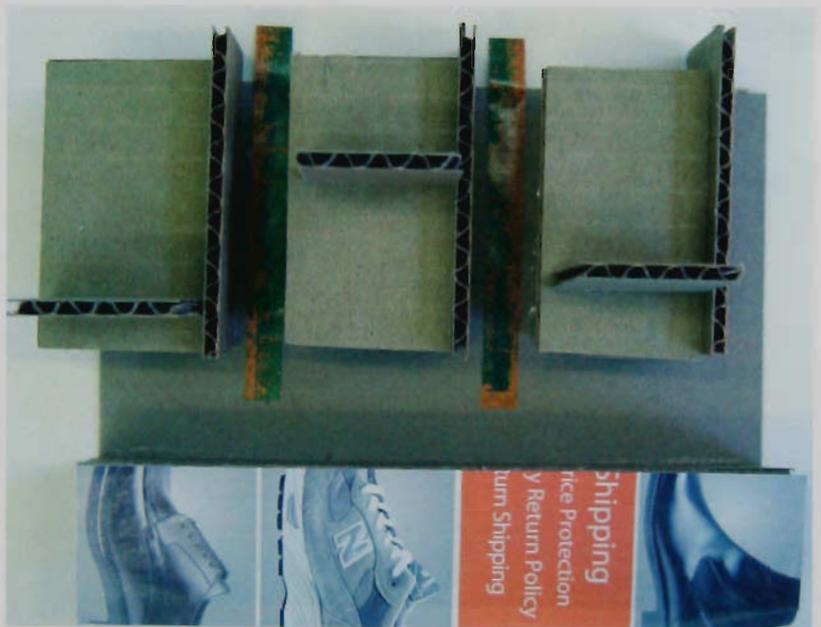
The above drawing is a first attempt at a floor plan for the single-family housing units. The yellow trace paper shows the in-between space in plan while the red shows the spatial relationship between the two units.

The drawing to the right and on the following page are sectional collage's of the above plan. The goal in these drawings was to create a sense of depth inside and outside of the unit and to also explore the concept of framing views in the in-between space as well as from the unit to the outside.

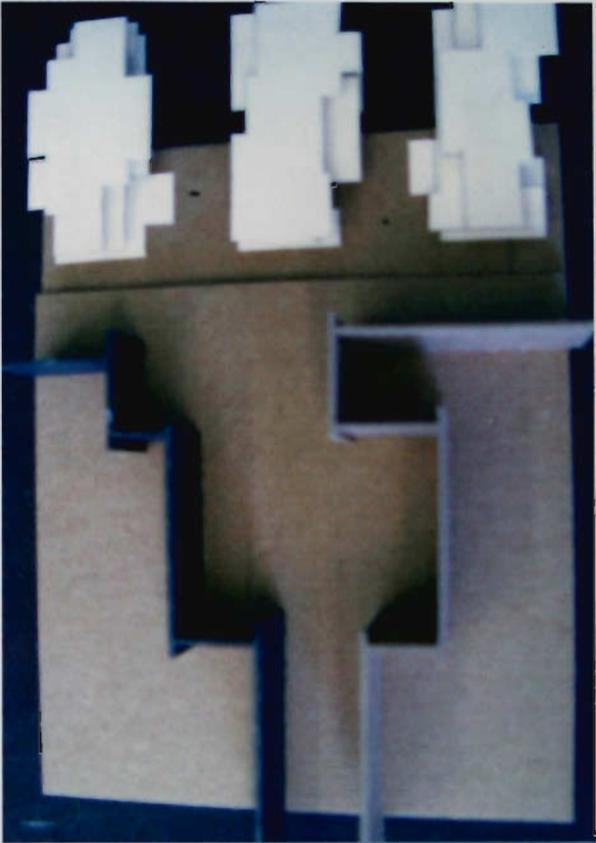




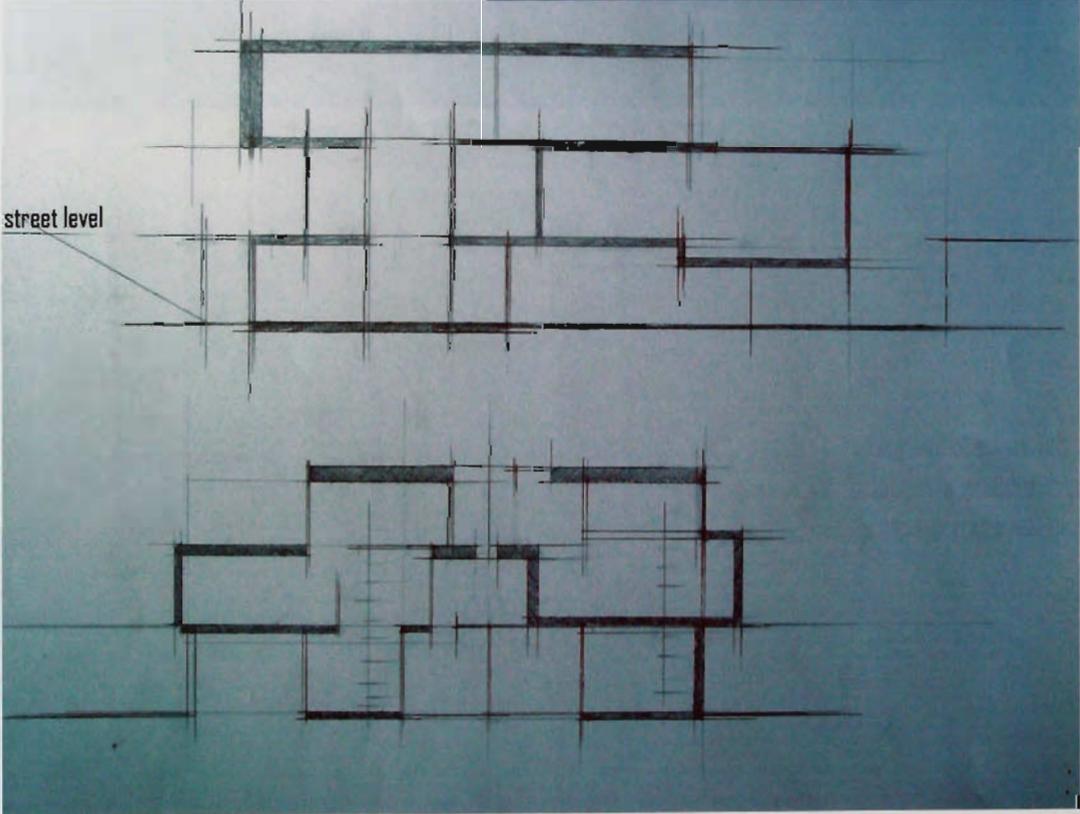
To the right is an early, loose conceptual model of the in-between spaces.



To the right is another conceptual model, this time observing the in-between space that occurs between two multi-family buildings and how the different scales operate together.



Below is another sectional drawing of the housing unit with more defined spaces. Note how the unit is sunk below street level with only the second floor visible from the street.

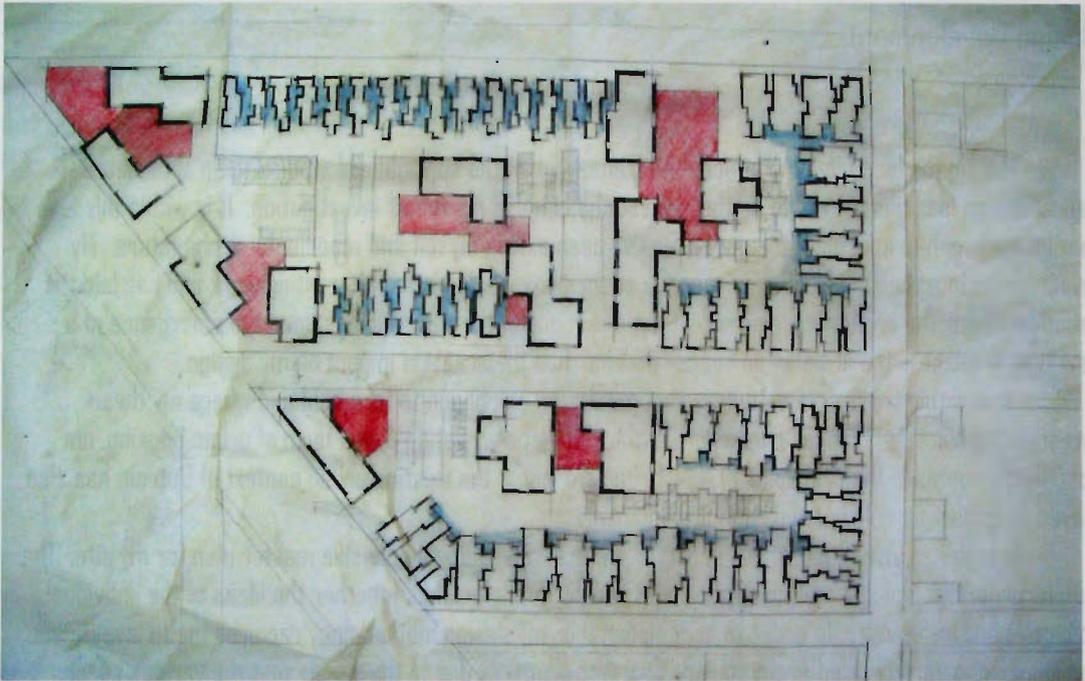


Making the leap from the conceptual framework of the springboard studies to an articulated, logical design idea has proved to be the biggest challenge of my thesis investigation. It is within this leap that I have begun to articulate the questions I've been asking myself into meaningful architecture. My investigation into the individual and collective spaces has yielded some interesting work and has laid the groundwork for the architecture on my site. Most importantly, however, has been the emergence of a new type of space – the in-between space- that has had the greatest impact on my design.

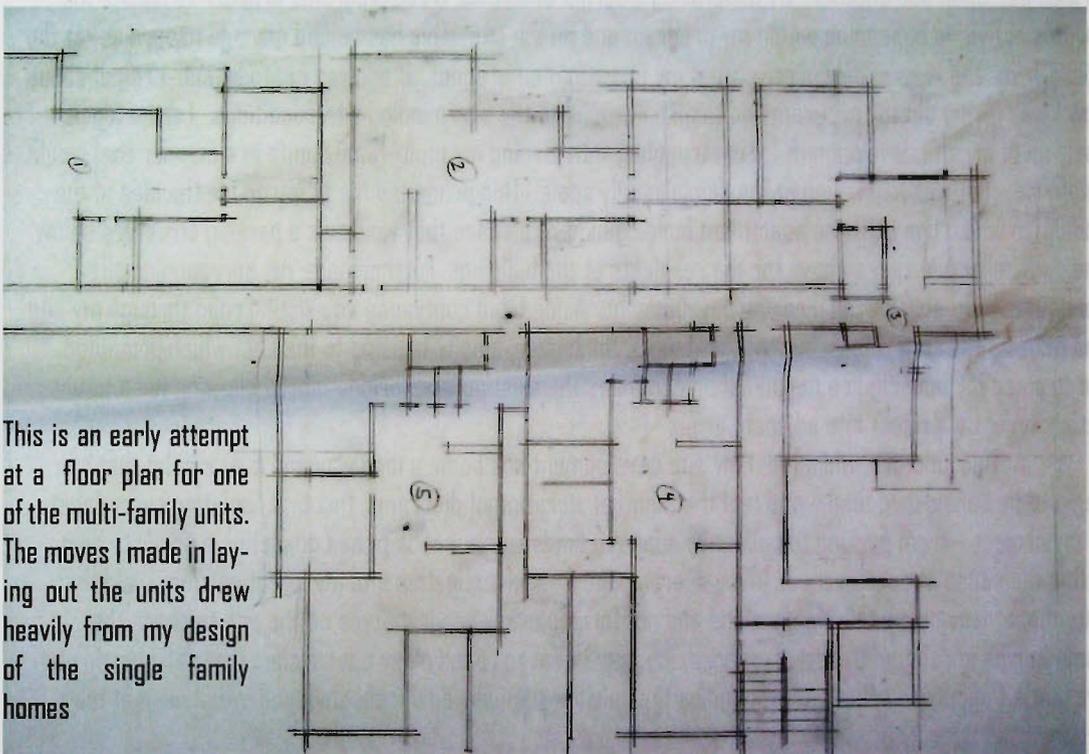
It is within these sets of spaces that my design has begun to take hold and where my thesis investigation has taken shape. Furthermore, the concept of creating a new form of urban housing, not specifically rooted in the principles of New Urbanism, but in the existing urban context of Detroit, has also played an important role in my design development.

In order to investigate these concepts, I began to develop a cohesive master plan for my site. The plan incorporates the spirit of my program as well as gently meshes together the ideas of the individual, collective and in-between. In order to accomplish this, my design methodology requires me to investigate this thesis at a variety of different scales. This was primarily due to the scales that the various spaces were represented in. So, as I explored the conditions inherent in a cohesive plan at the site scale, I also focused on developing the individual housing unit in plan and section, which would have a direct effect on the in-between spaces of my site. The complication between the disparate scales lies in the translation of the conceptual spaces to a larger scale and having them retain their function rather than having them seemed forced. Essentially, all of these spaces are tied together and have a relationship, whether direct or indirect, upon one another. By generating a series of layover trace diagrams in order to isolate the various activities happening within my program and on the site. This has helped manage my project at the micro-level and keep in perspective what my investigation is about. It allowed me to be self-critical about how I was laying out my program and to also respond to the surrounding site conditions. For instance, early on in my site development I was struggling with placing my multi-family units in a manner that would reinforce what was happening at the single-family scale. This prompted me to introduce the idea of the podium in which two or three apartment buildings share a space that works as a parking structure below and as a collective space above for the residents of the buildings. Furthermore, my surrounding site conditions have also played a role in development. Aside from continuing an existing road through my site and utilizing the edge, I have also acknowledged the higher density housing to the east which prompted me to place my housing in a manner than continues the existing Woodbridge fabric, allowing for a future extension of my project into adjacent areas.

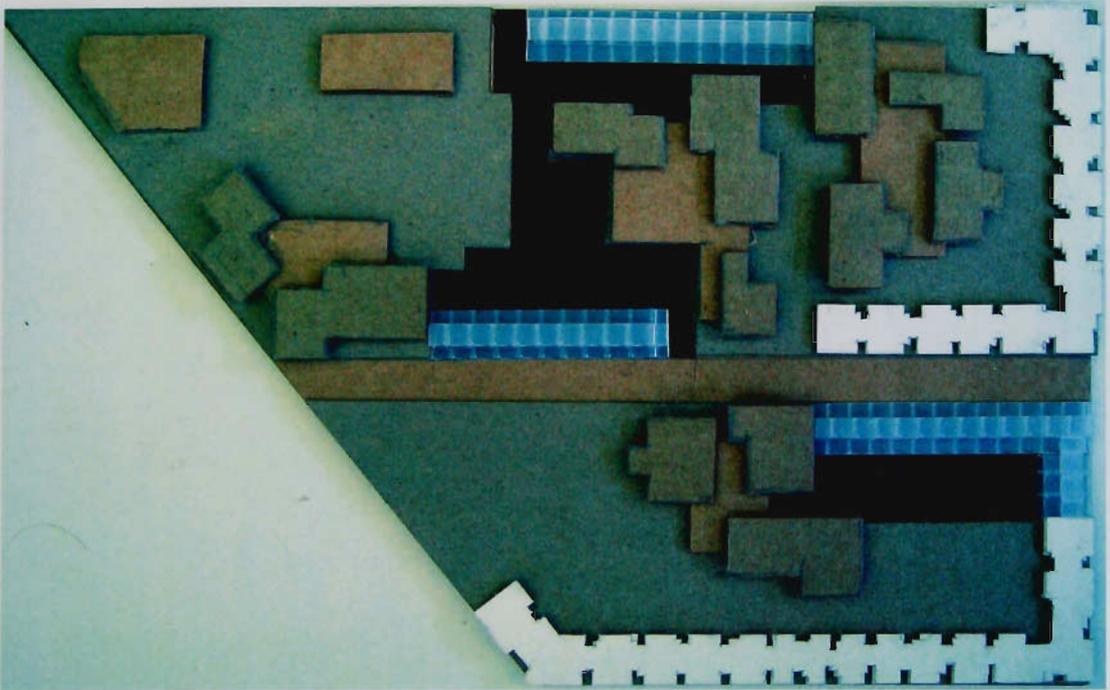
At this juncture, while I feel my site development has come a long way and is at a point that can begin to be considered final, I still feel that another iteration of diagrams, this time isolating every facet of my project – from parking to collective space to landscape – needs to be completed in order to help refine the sense of cohesiveness in my overall plan. A re-investigation into my intentions may yield the potential of leaving certain things alone and not forcing every program type on the site to share the same moves in relation to certain spaces. It is my intent to resolve any open issues that still remain and present a final project that truly embodies the spirit of the individual, collective and in-between at the urban scale.



During the final phase of the design process, I began to focus on my multi family units as well as introducing the row-house to the building typology. Furthermore, I decided to group my multi-family units on raised podiums. These podiums would serve two functions: one, to provide parking for the above units and, two, to provide a collective space at the top for residents of the multifamily buildings. In the site diagram above, the podium spaces are highlighted in red.

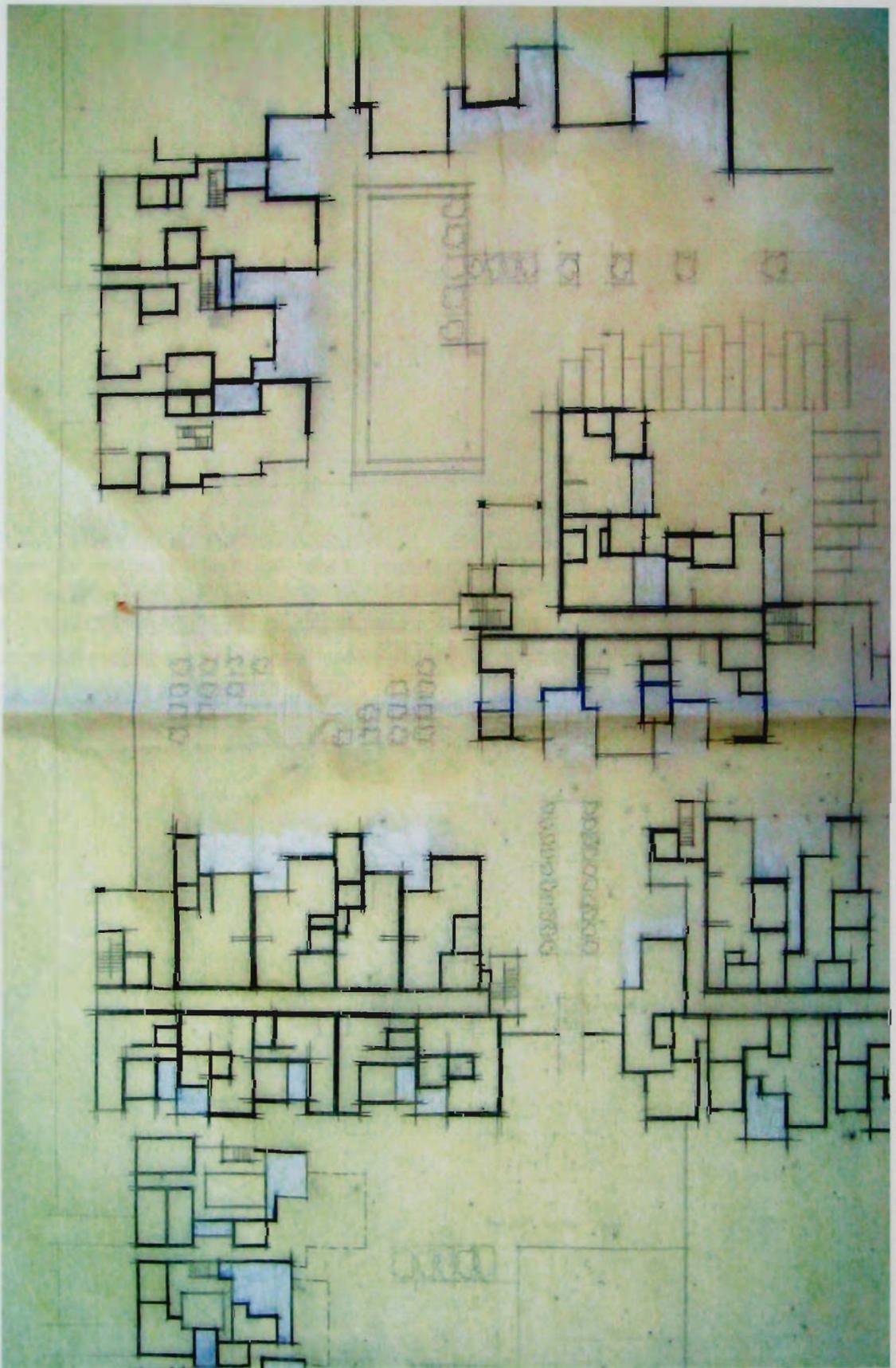


This is an early attempt at a floor plan for one of the multi-family units. The moves I made in laying out the units drew heavily from my design of the single family homes



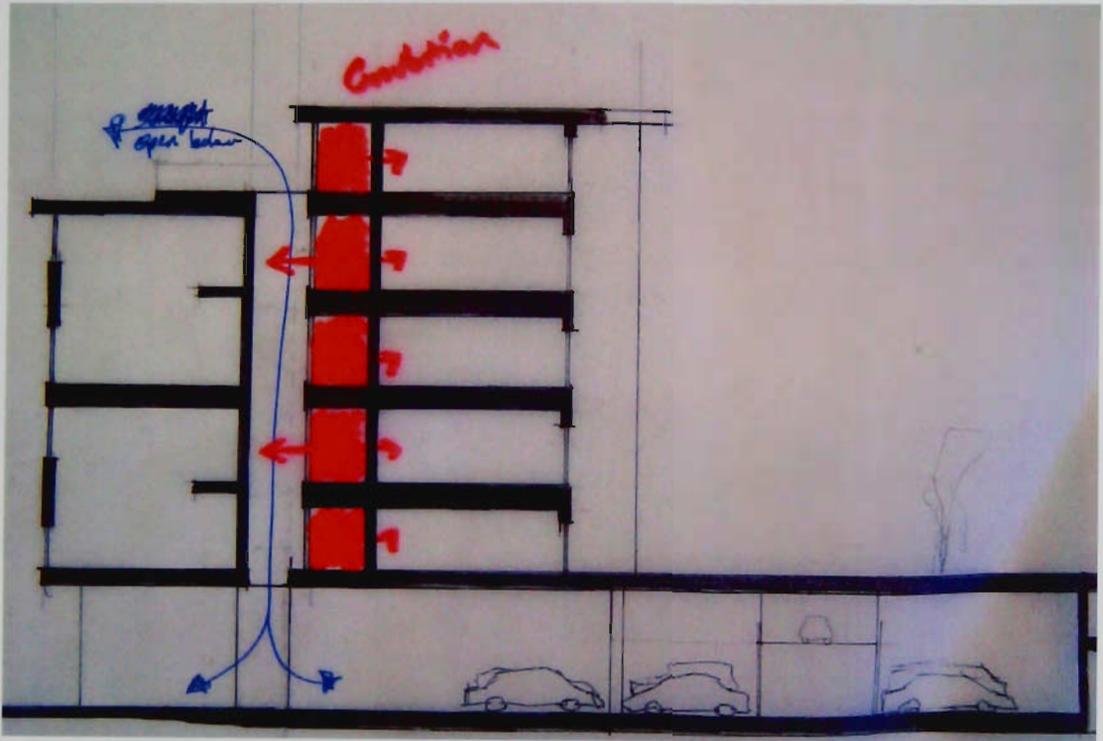
These diagrammatic site models layout the various programmatic and spatial functions of the site in order to better understand how they work together. Below are two models overlaid on one another in order to show how the spatial considerations interact with the built form.



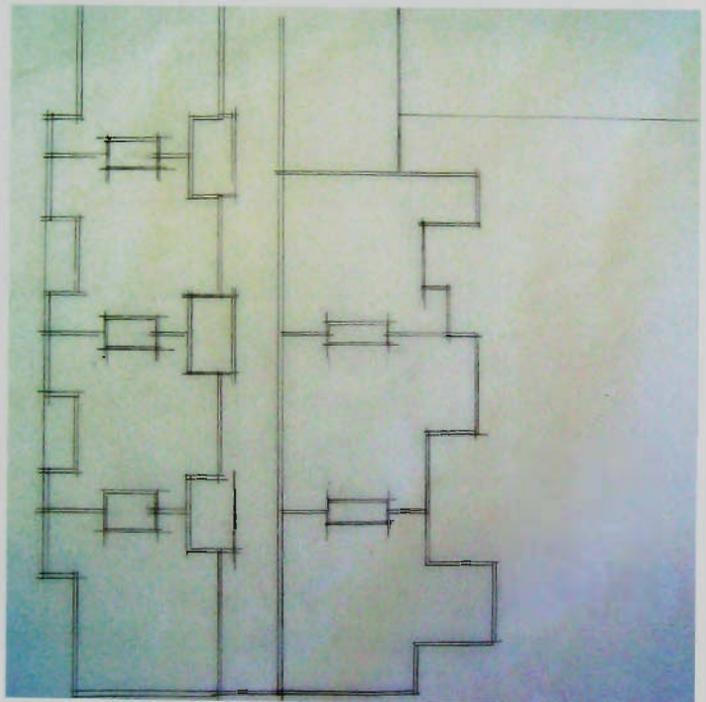


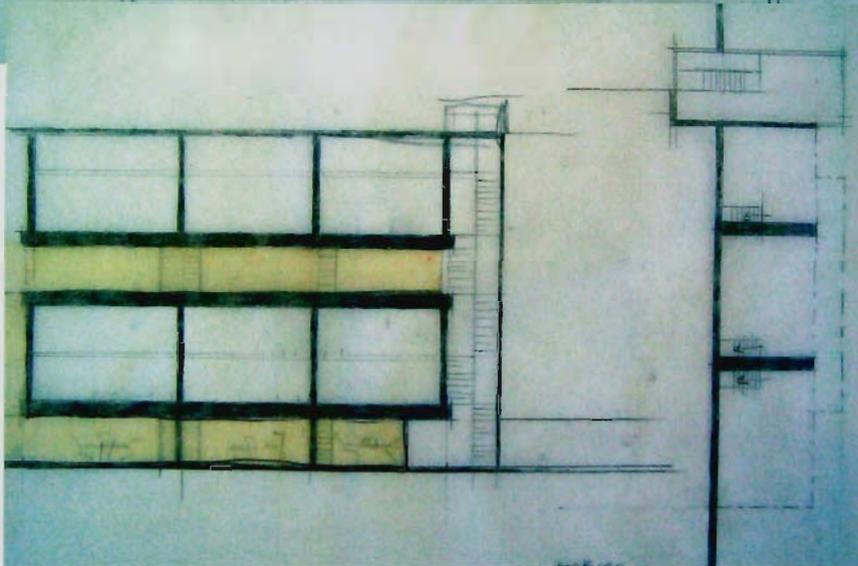
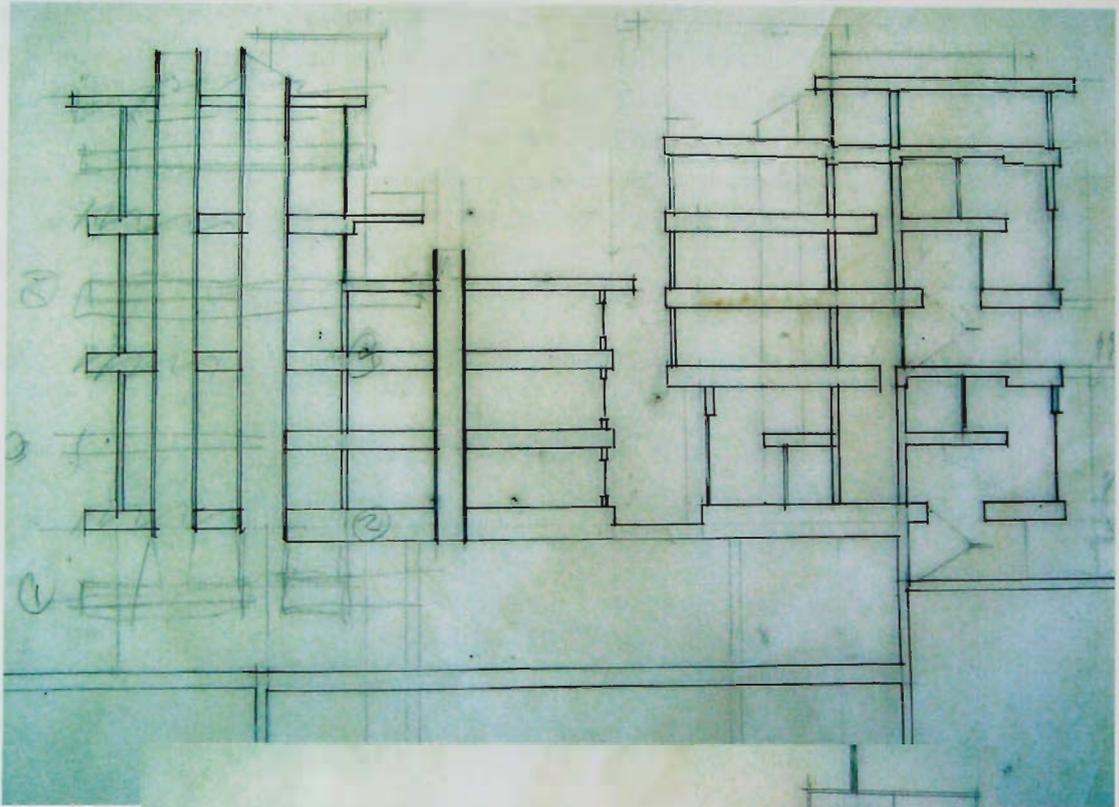
Due to the large nature of my site it would have been impossible to design every aspect of it. To minimize the scope of my site, I chose a district in which to focus the rest of my design process on. The moves that happened in this area would then be translated throughout the site.

The previous page shows an early ground plan layout of my district. The highlighted white spaces are the private outdoor areas. These areas occurred in the form of a balcony space, interior void space or, in the case of the ground floor units of the apartment buildings, as a semi-enclosed patio space.

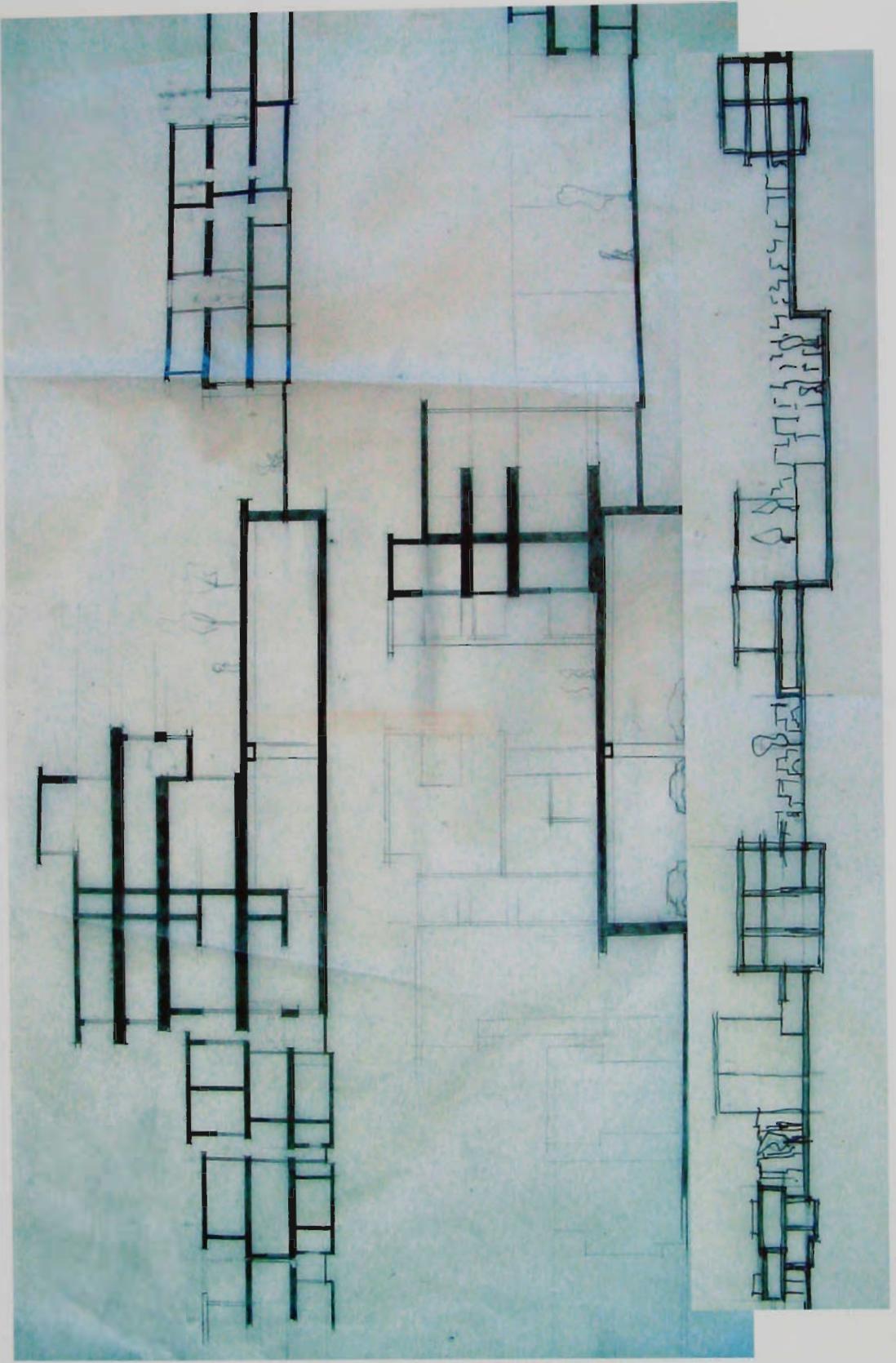


In order to add an element of the in-between space to my multi-family units, I introduced the idea of having light wells that extend through the building. These light wells (shown in plan to the right and section above) are completely open to the elements and are a way to connect the interior with the outside as well as provide shared exterior space for the units that share these light wells.





I also created a series of section drawings in order to figure out how the multi-family buildings operated in section as well as how they engaged the podium space below, the ground plane as well as other units. I introduced multi-level units to the mix, allowing for a greater tectonic variation in sections. The section below shows one of the lofted multi-family units with a private outdoor space directly below, shown in yellow. The following page is another section drawing, this time of the entire district. The intent was to give an indication of how the buildings relate to one another as well as to the surrounding landscape

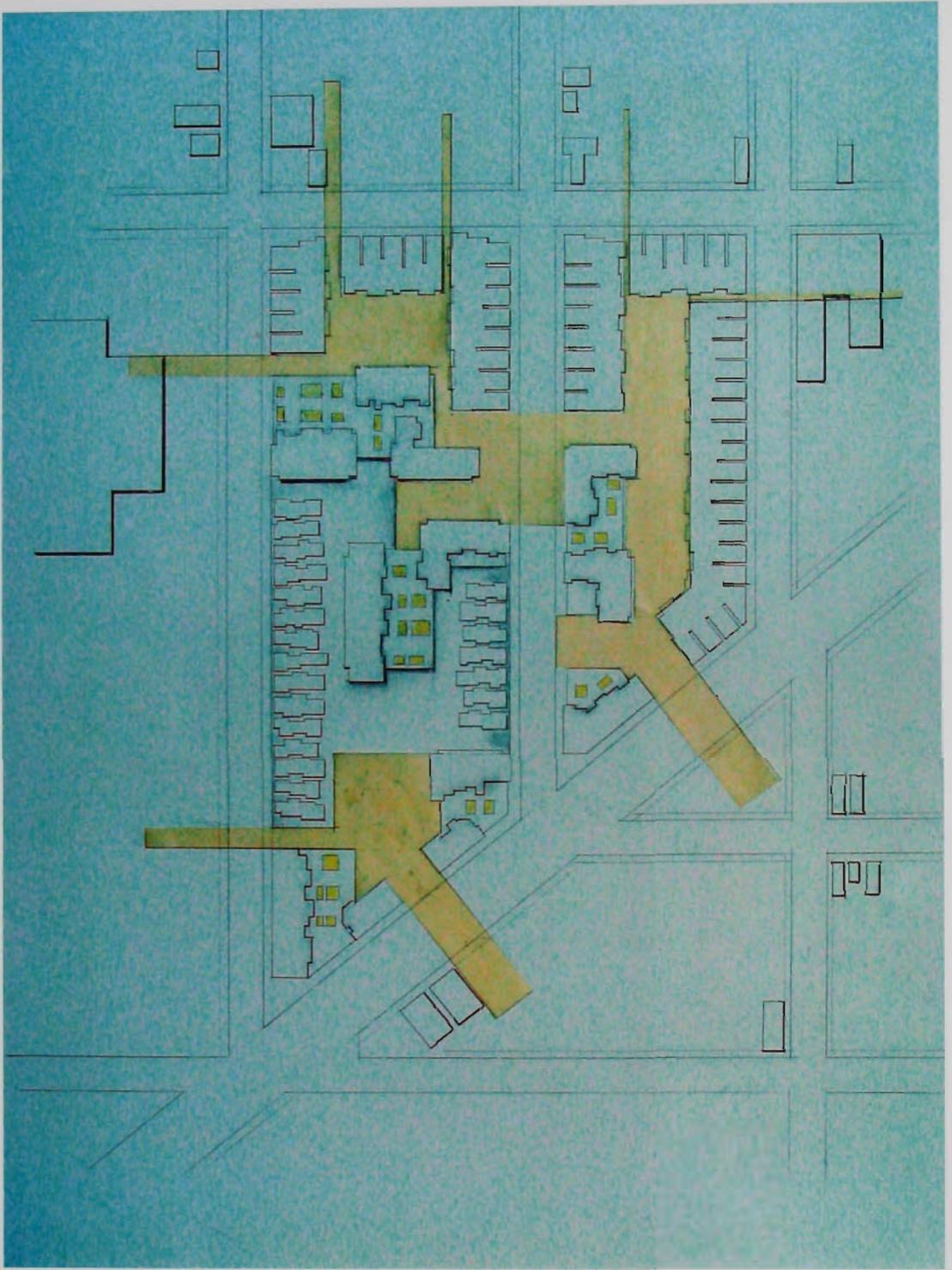


detroit: urban housing [re]considered

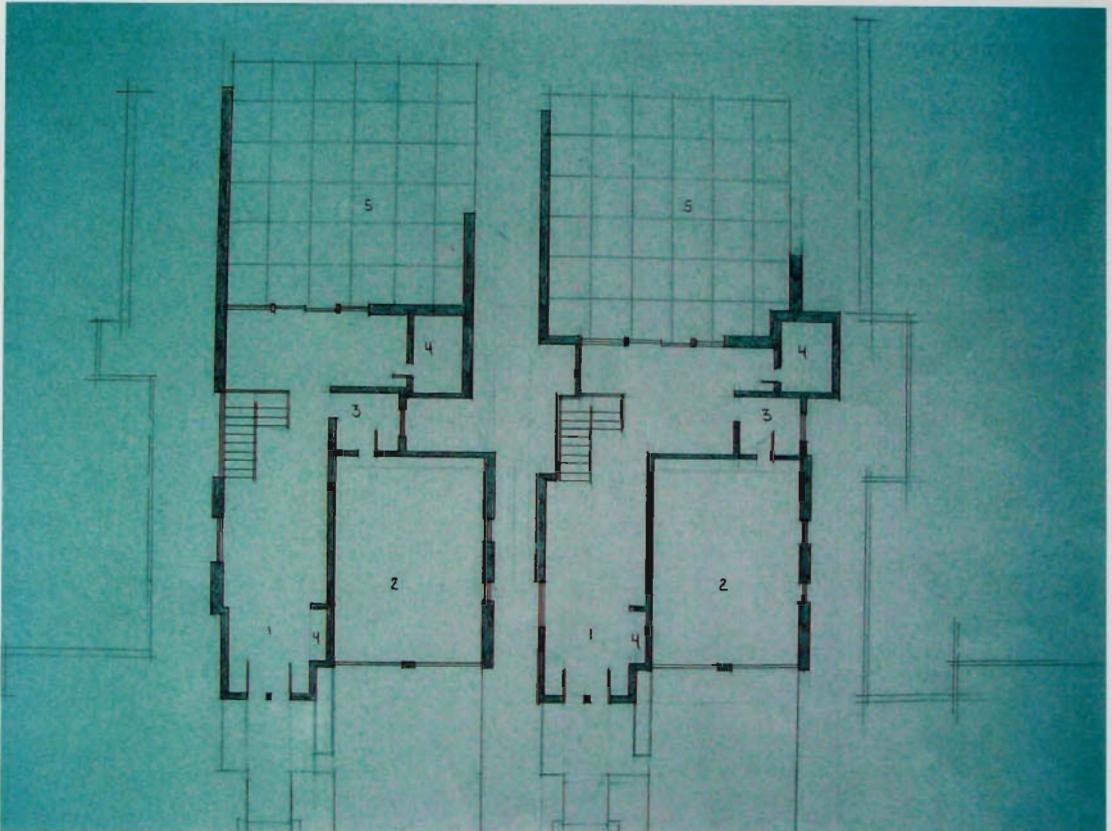
drawings + models + diagrams

final project

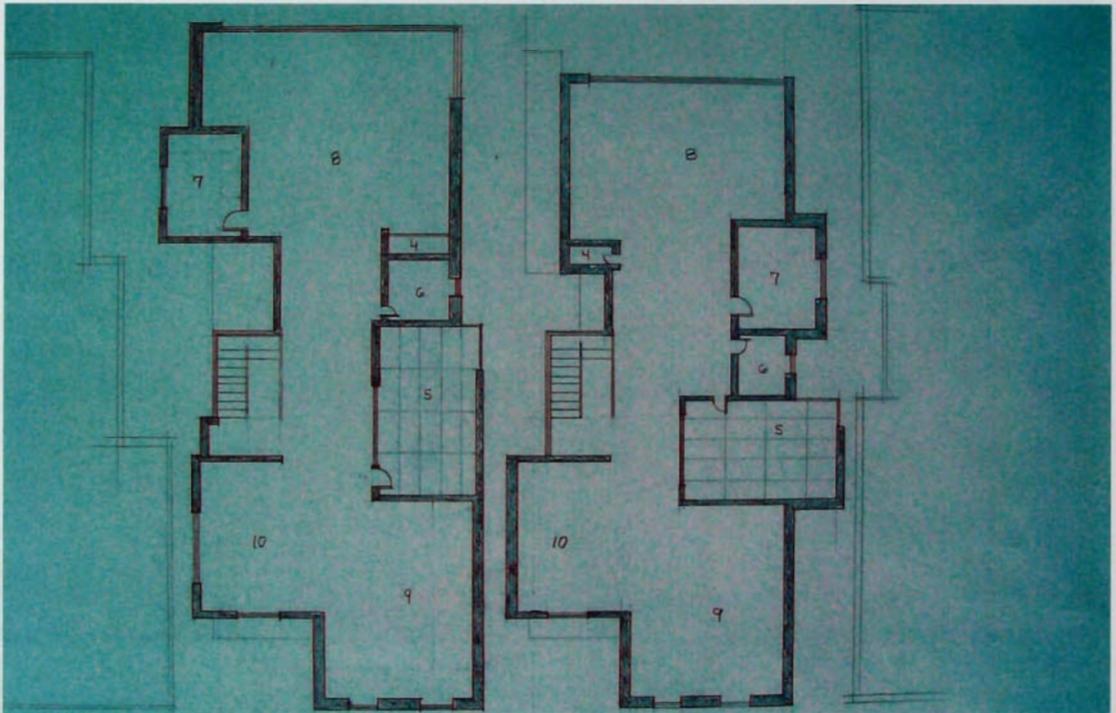




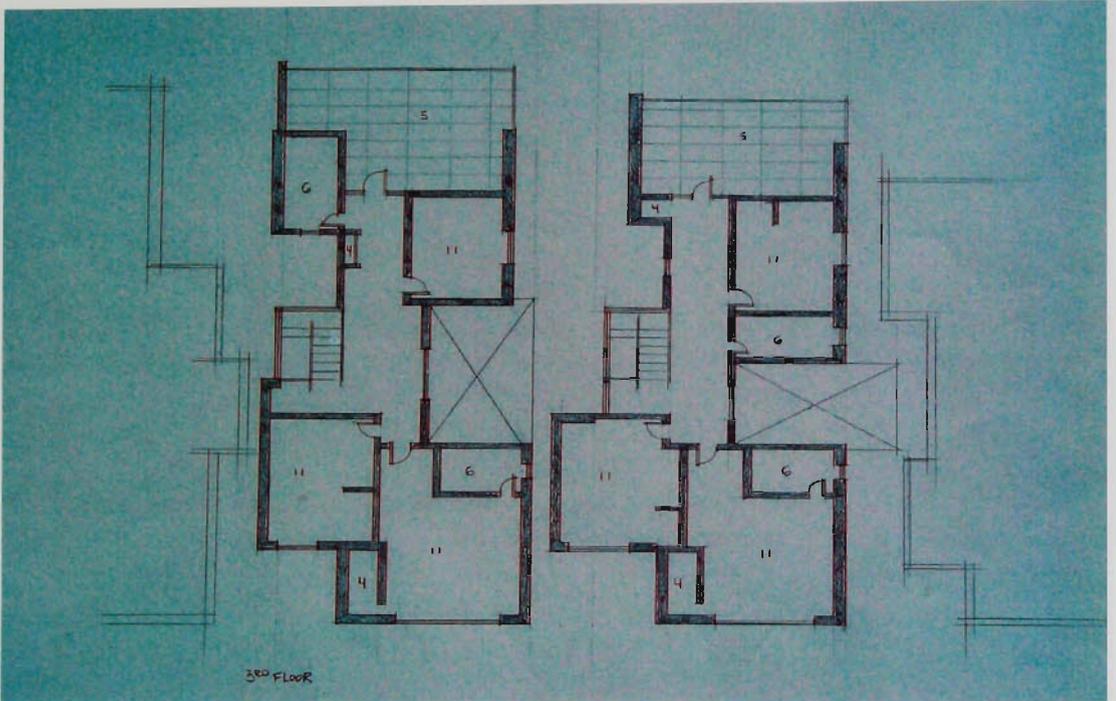
single family housing



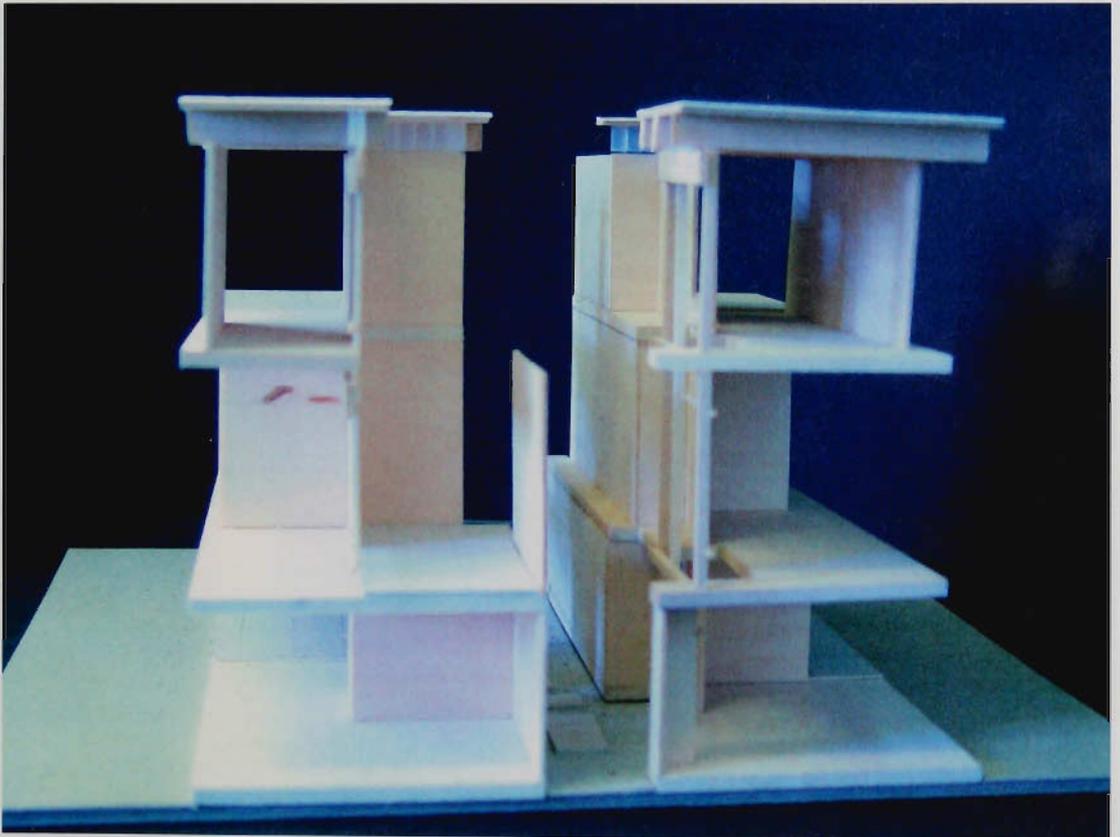
first floor



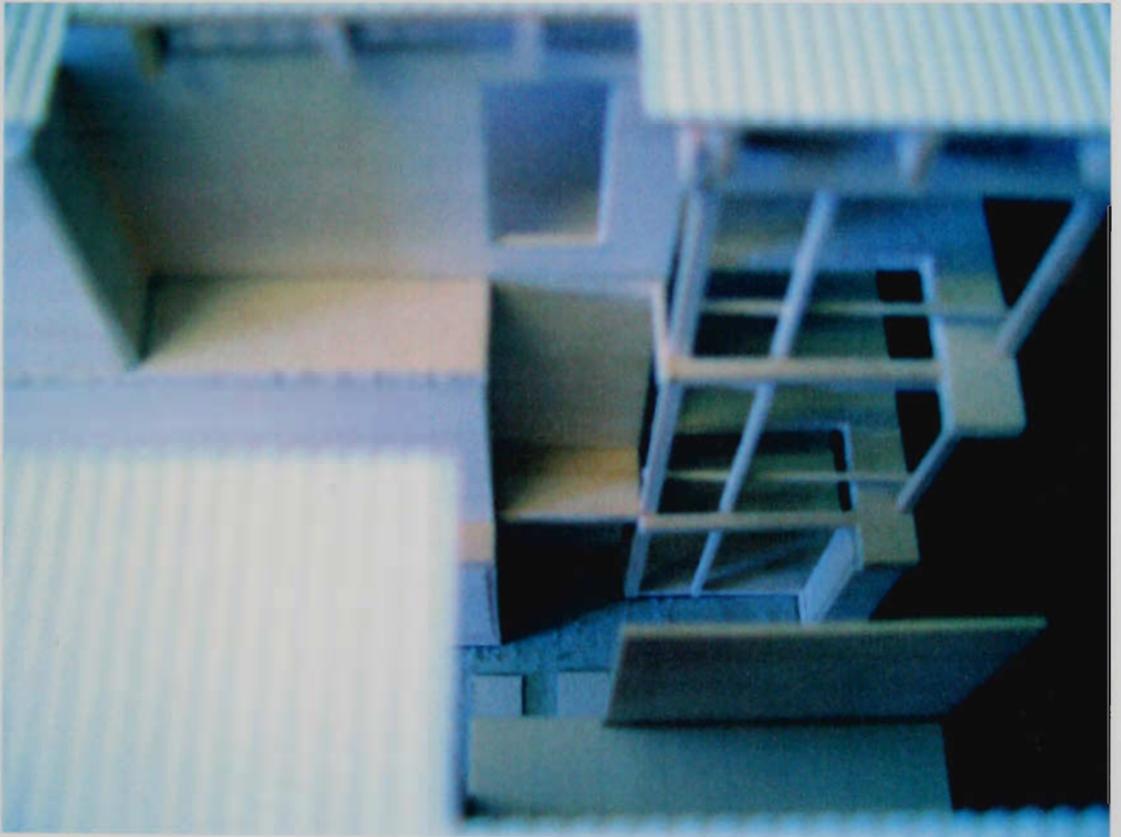
second floor

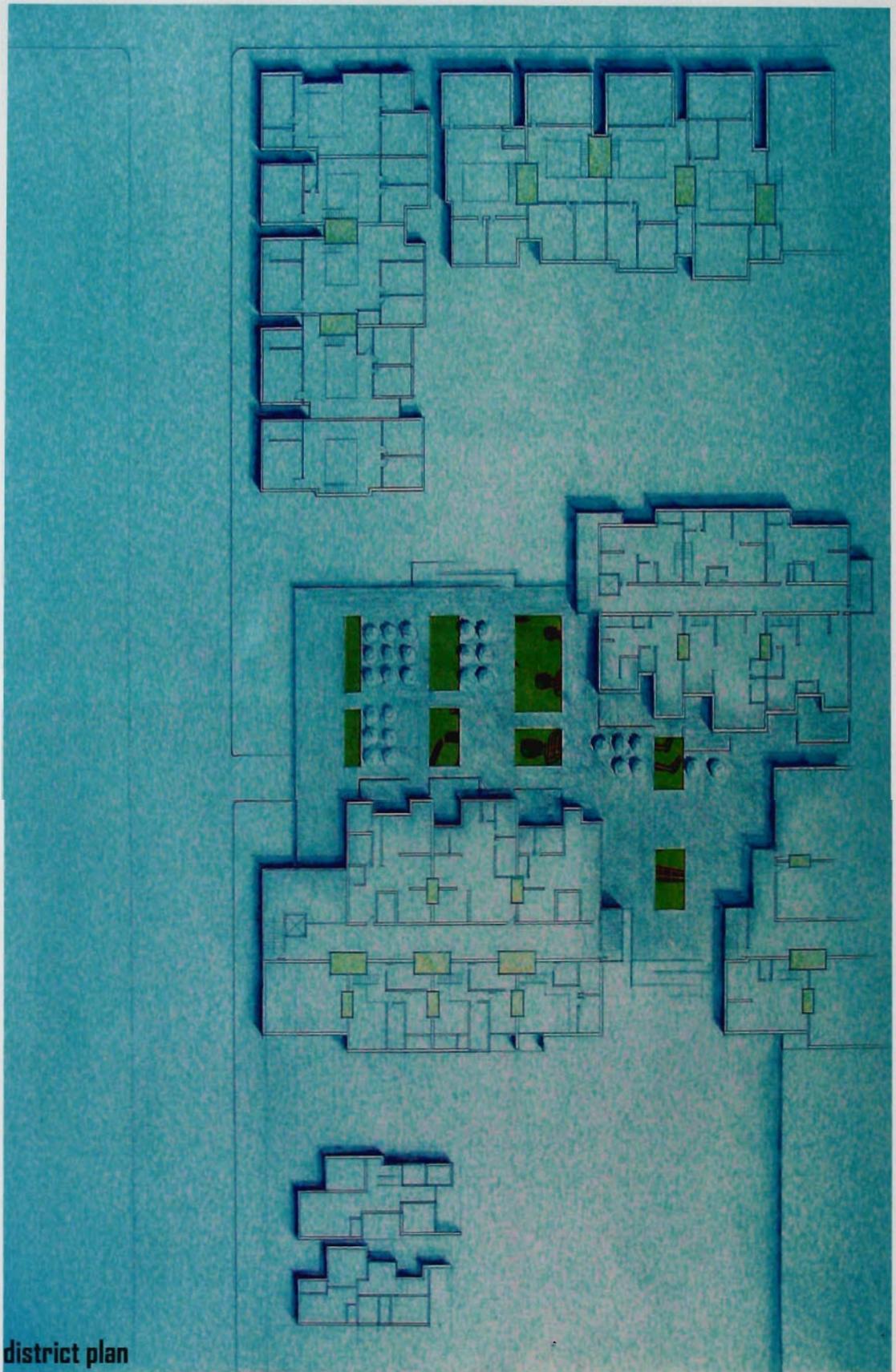


third floor

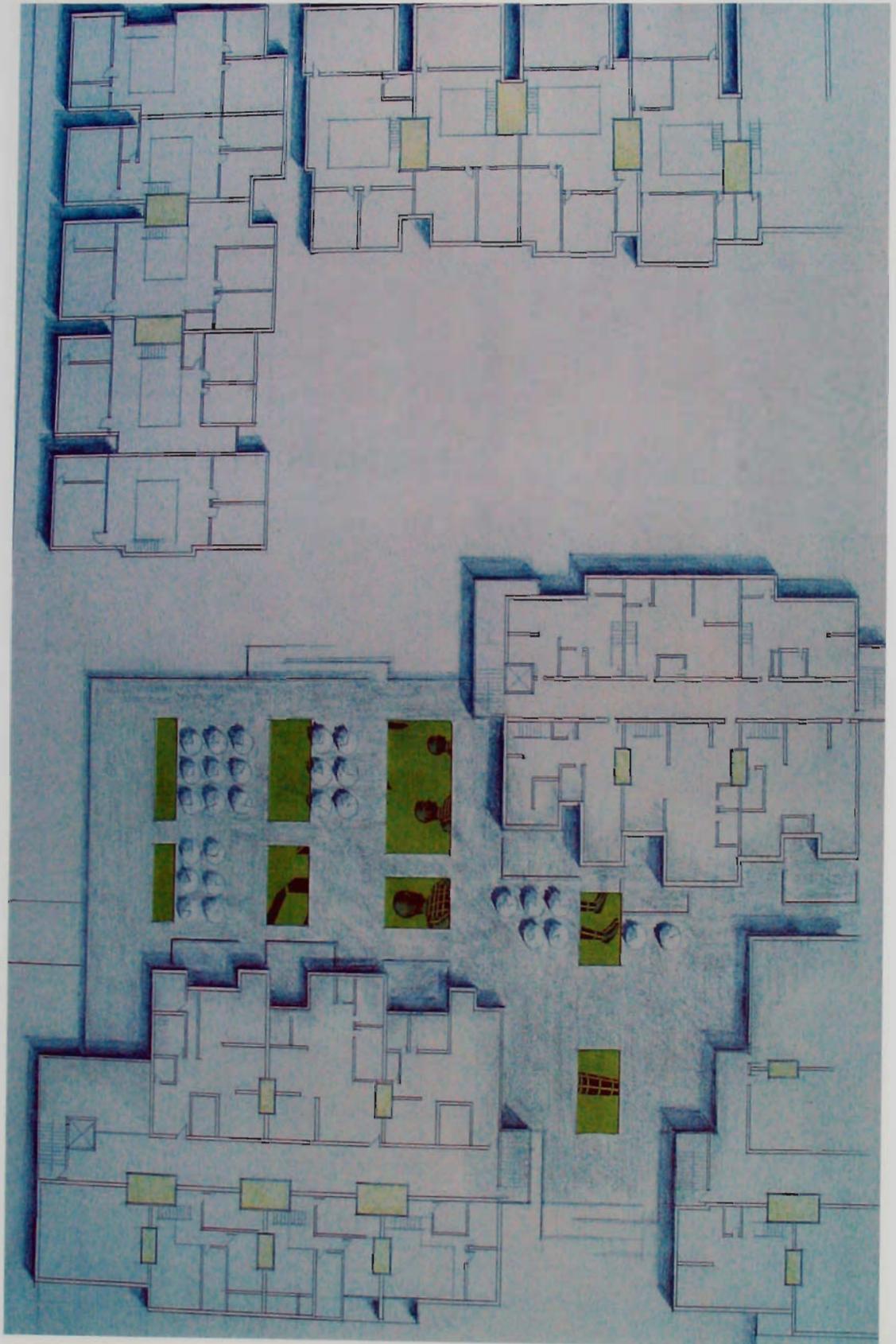


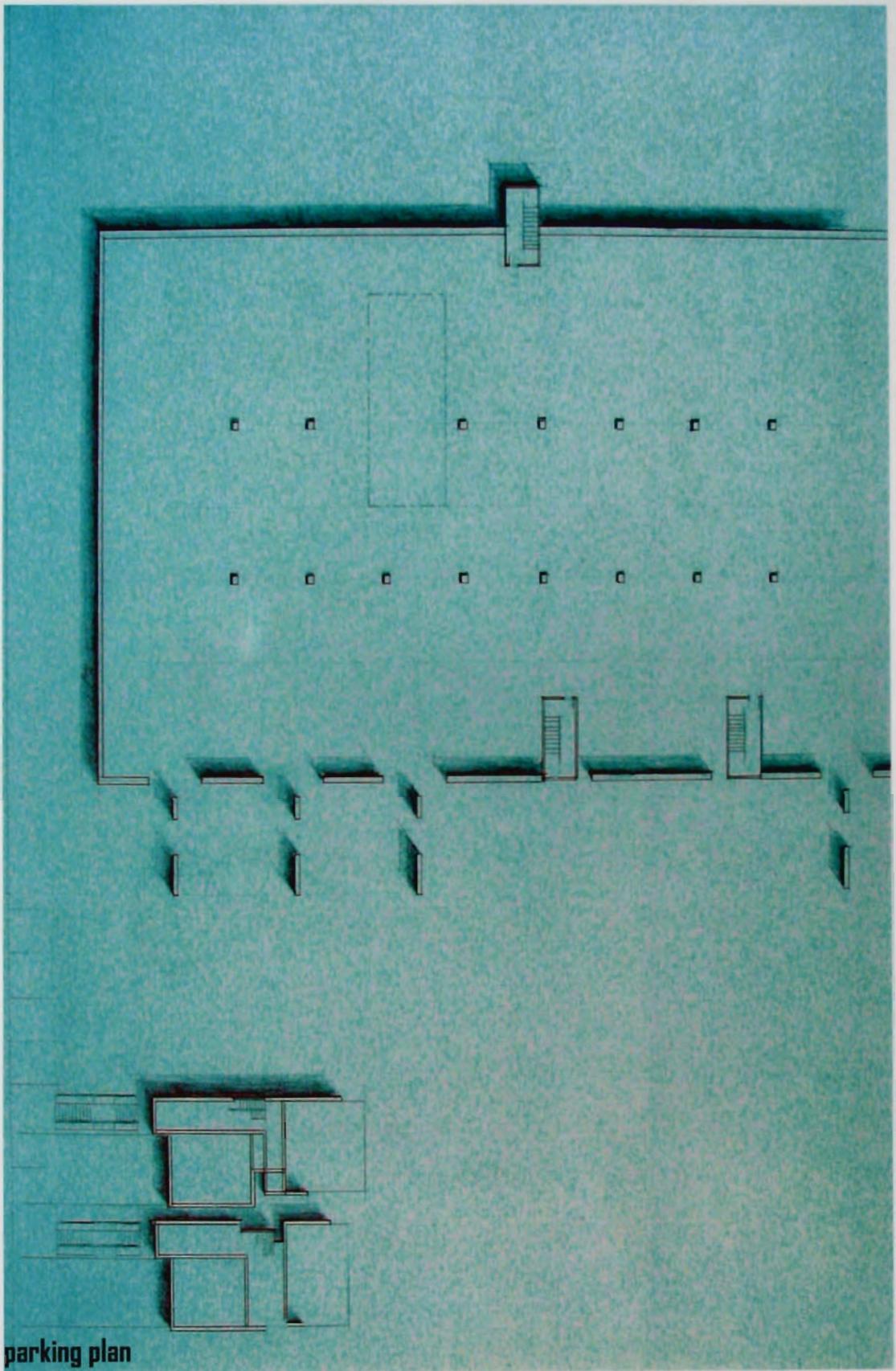




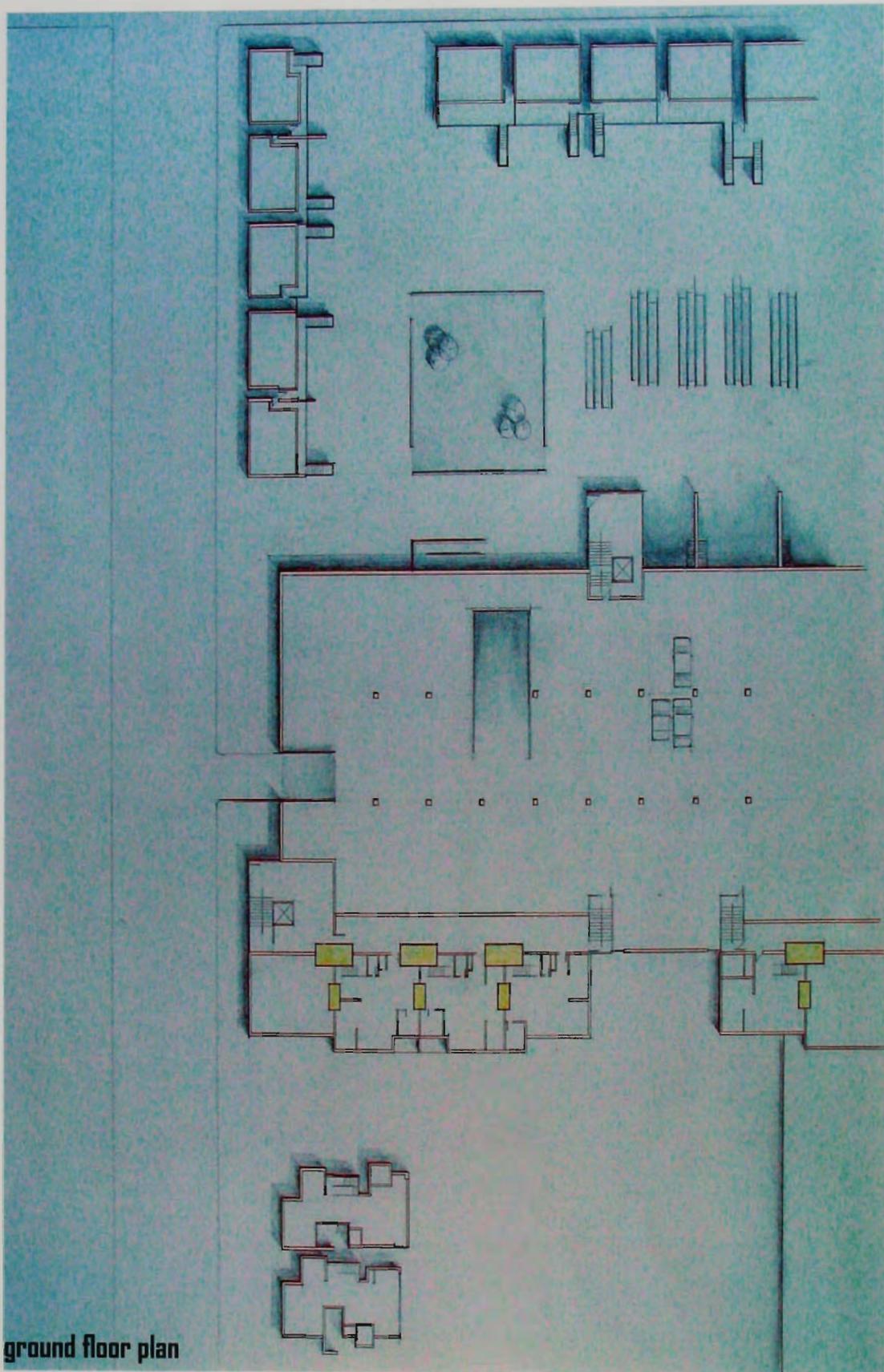


district plan

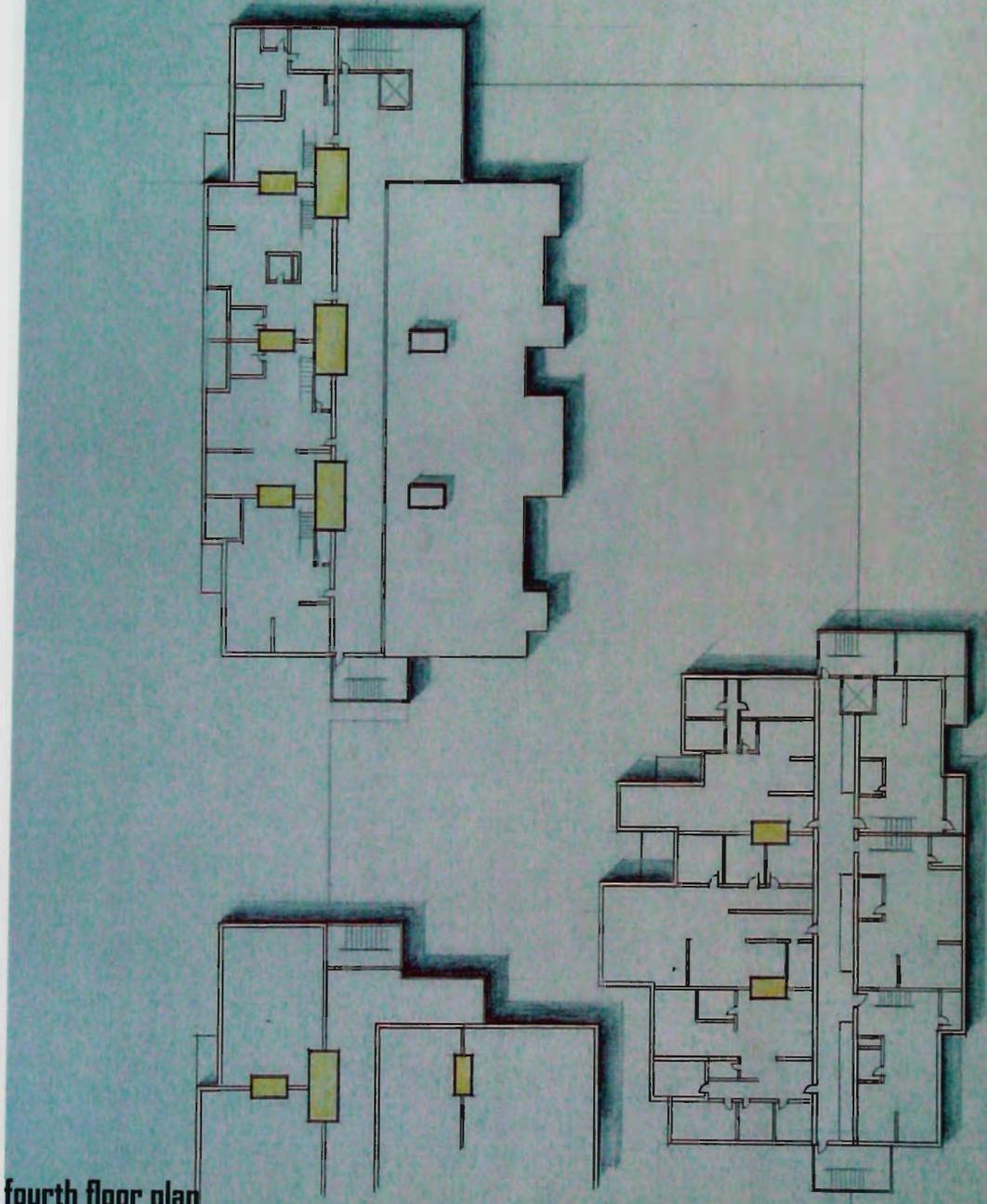




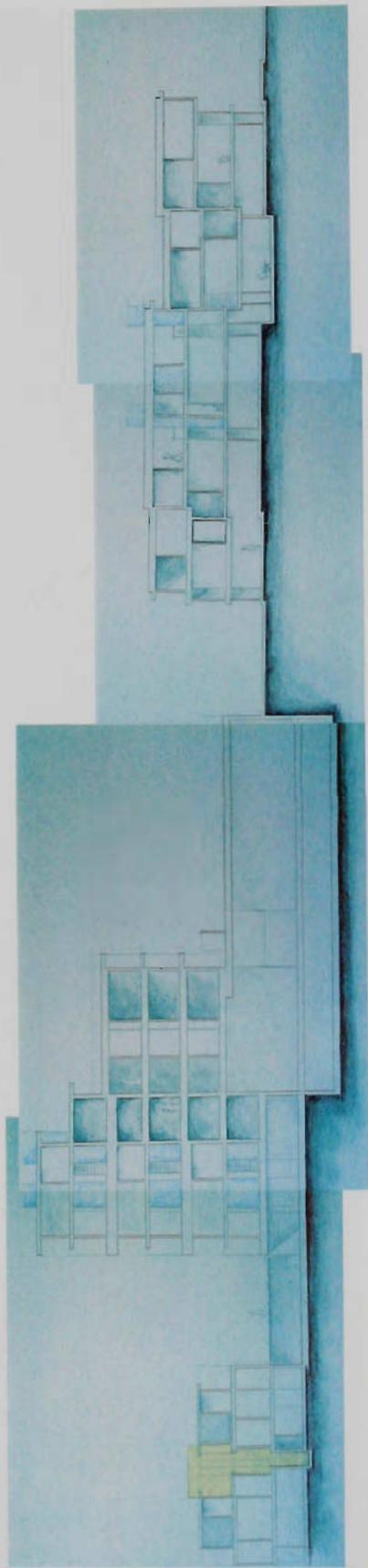
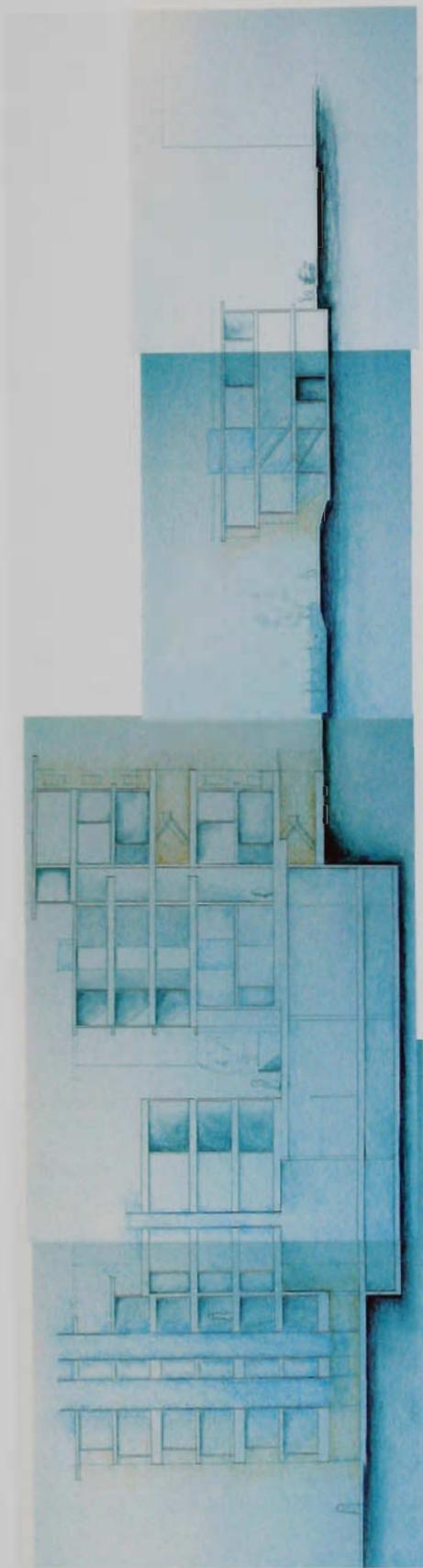
parking plan



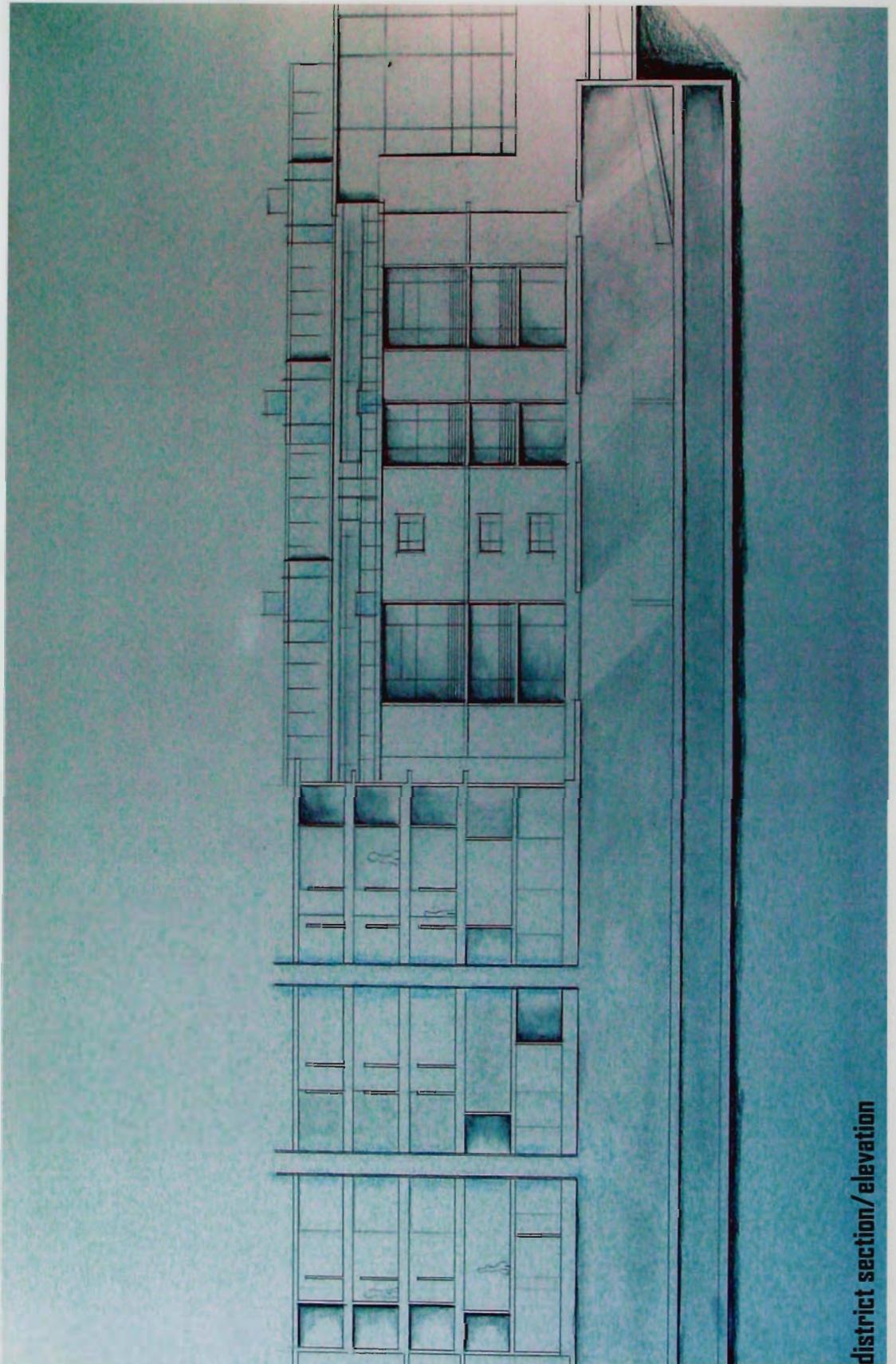
ground floor plan



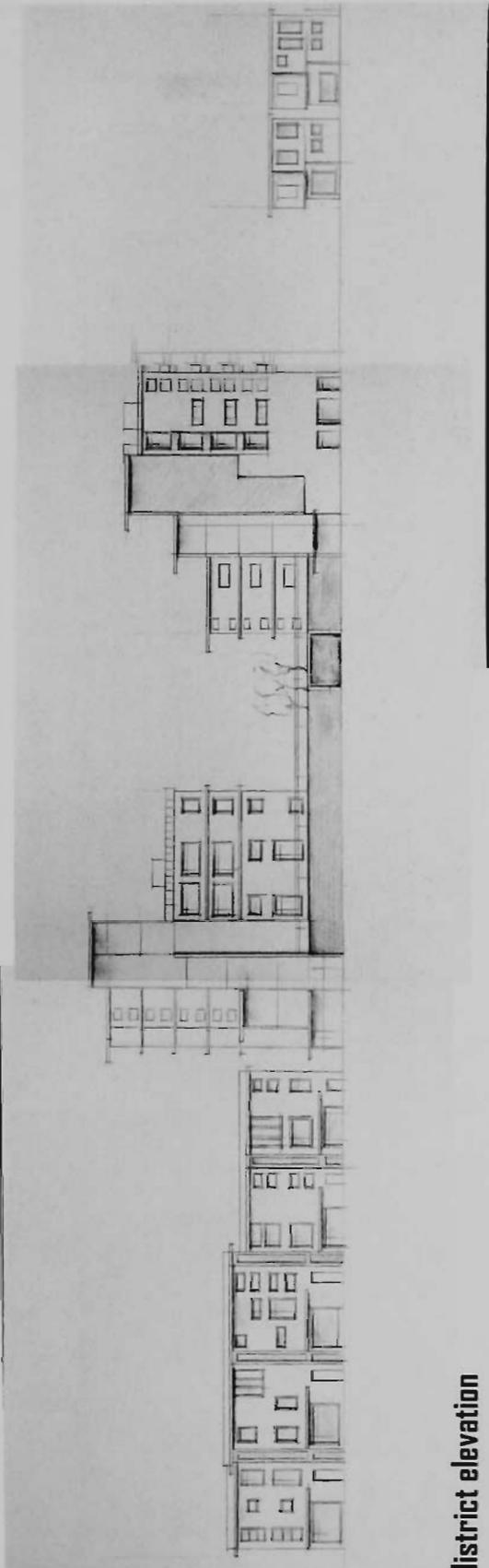
fourth floor plan



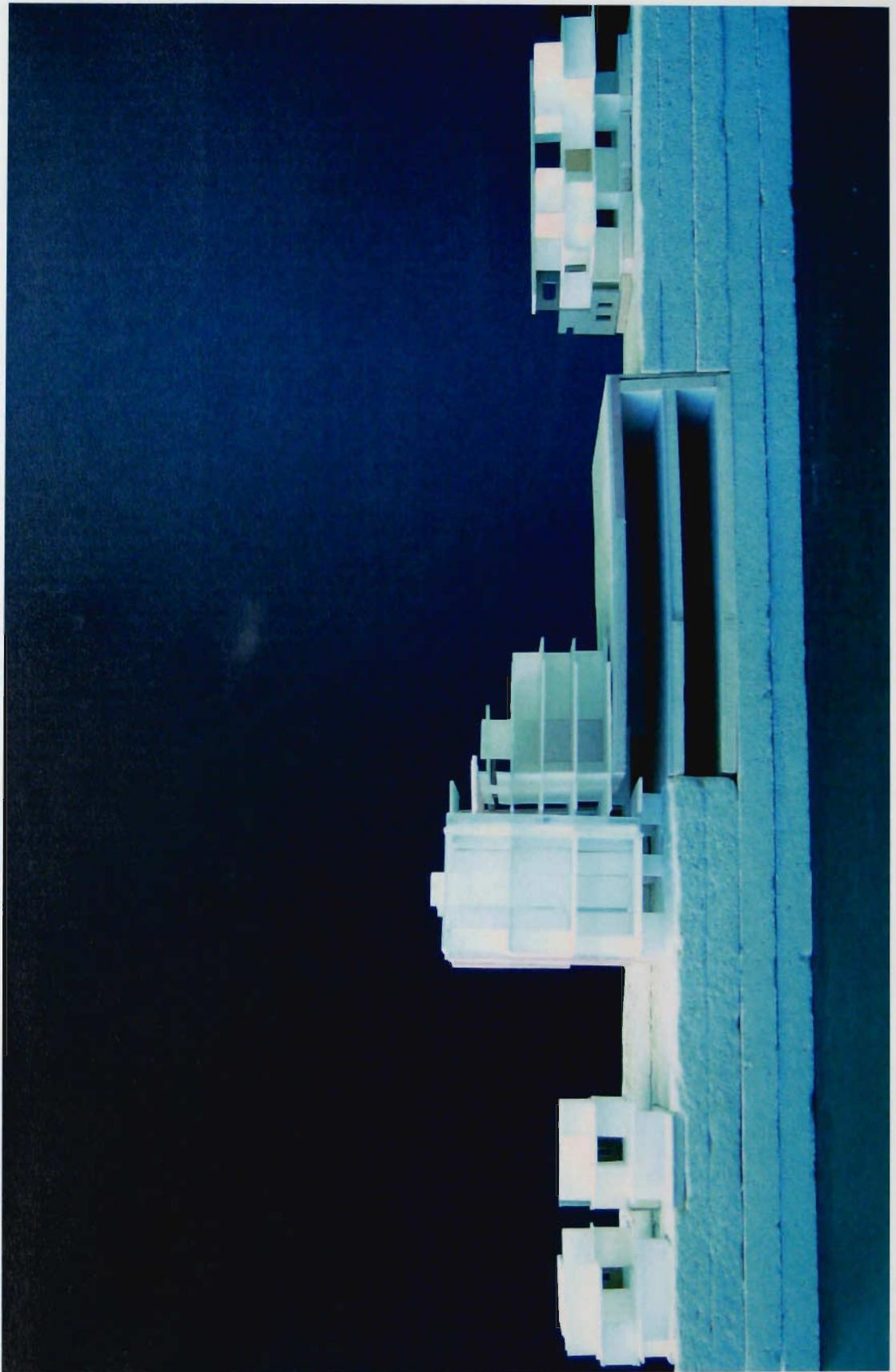
district sections

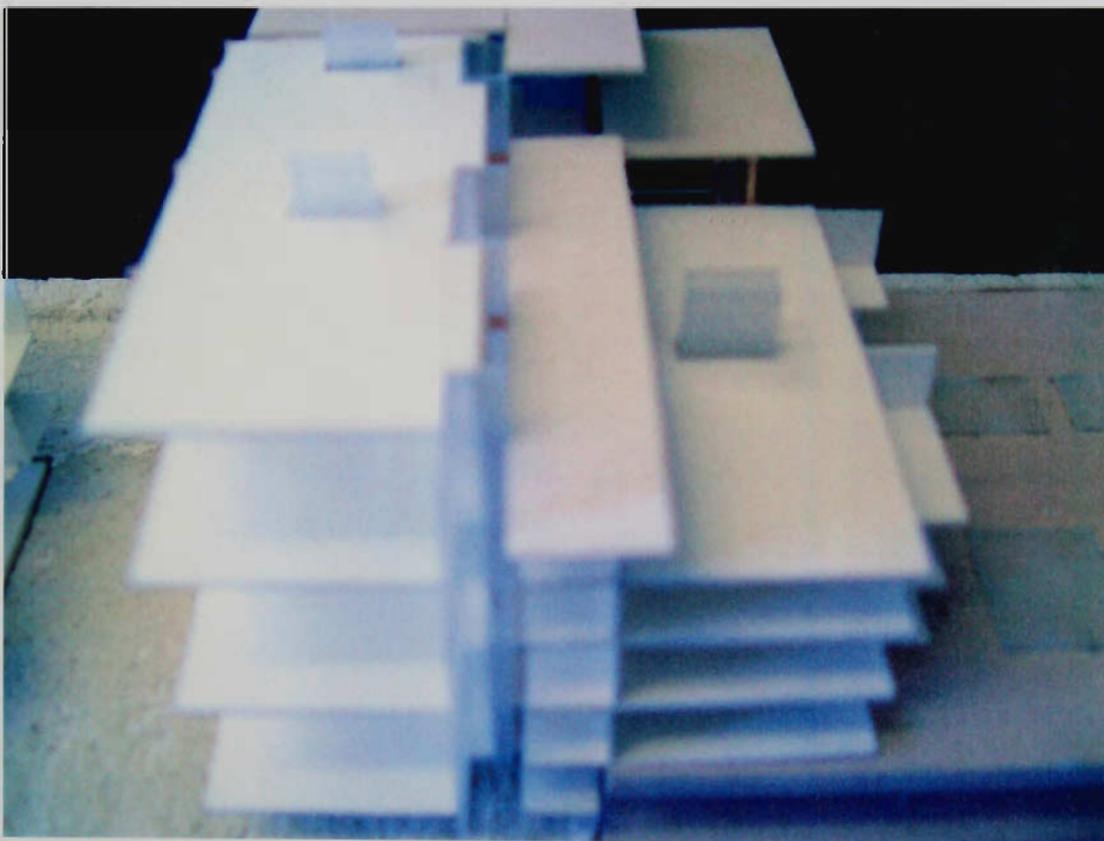
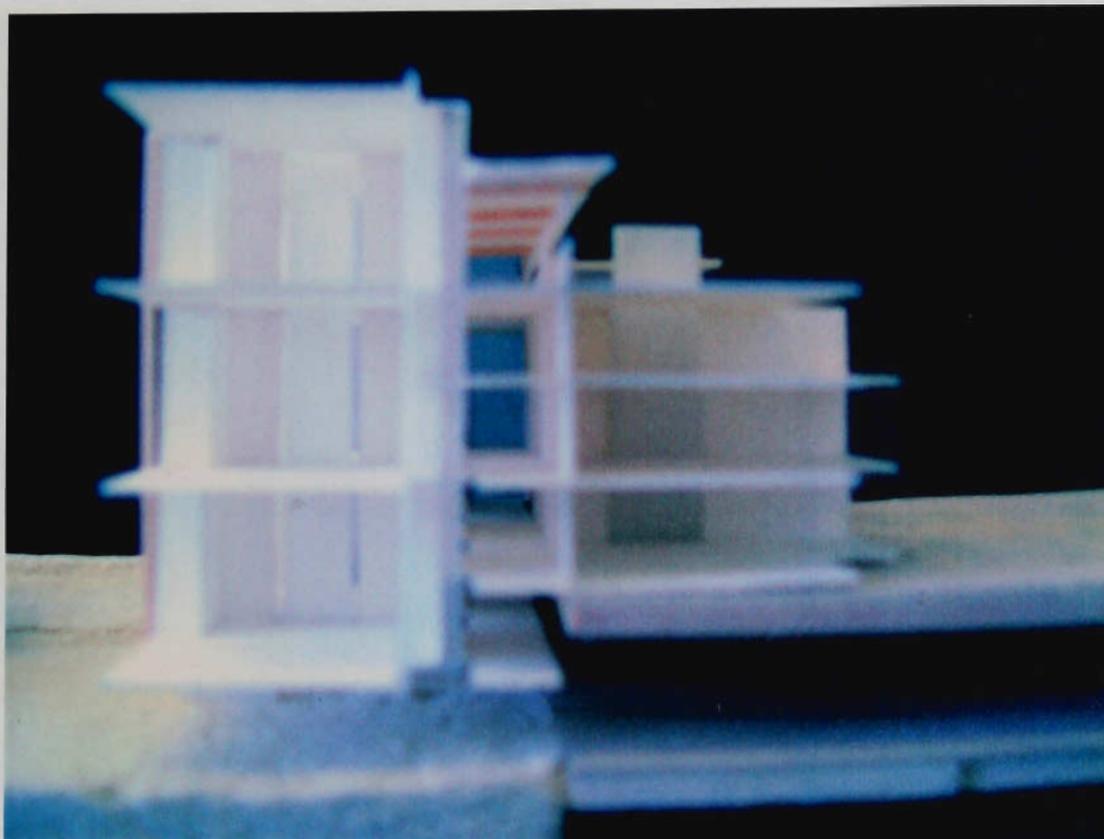


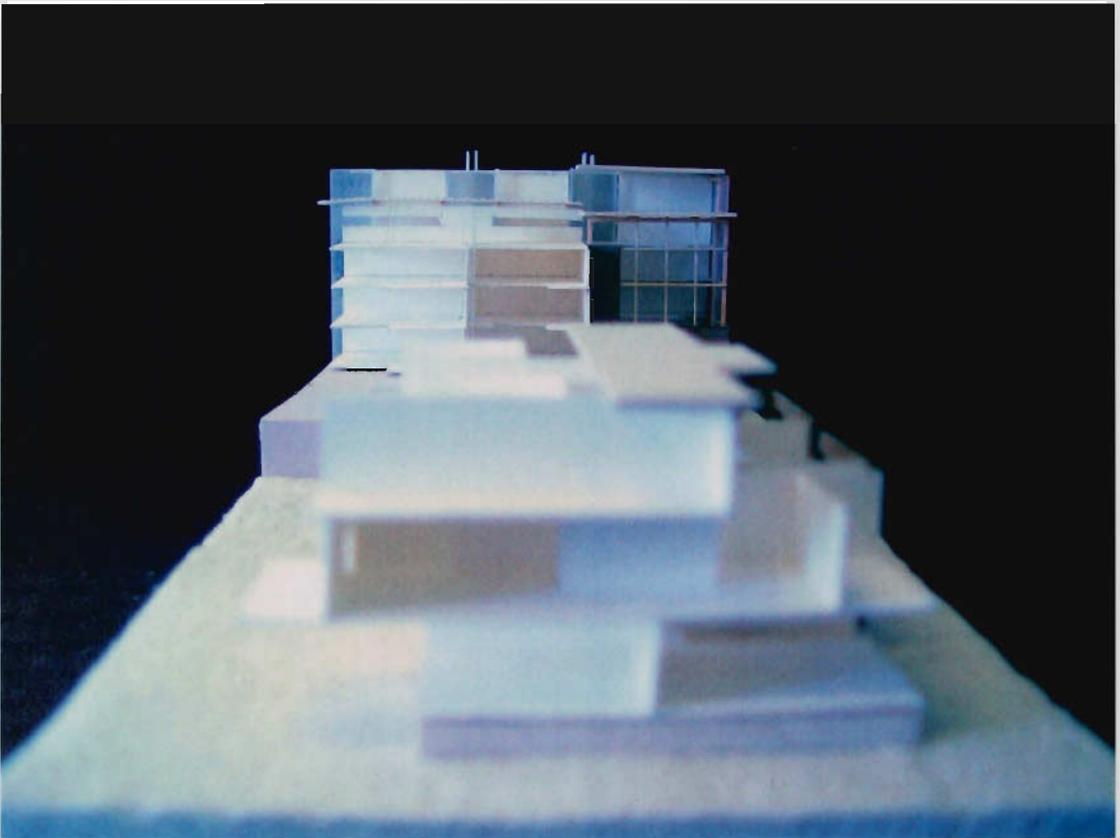
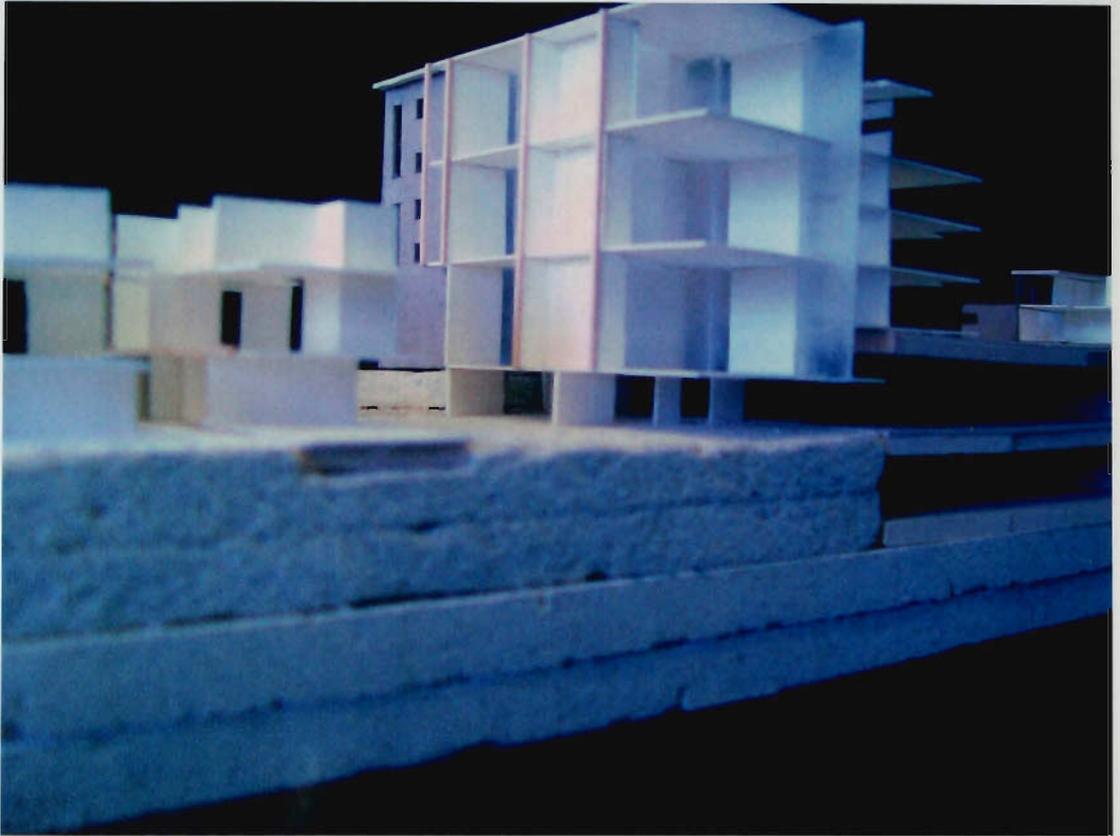
district section/elevation

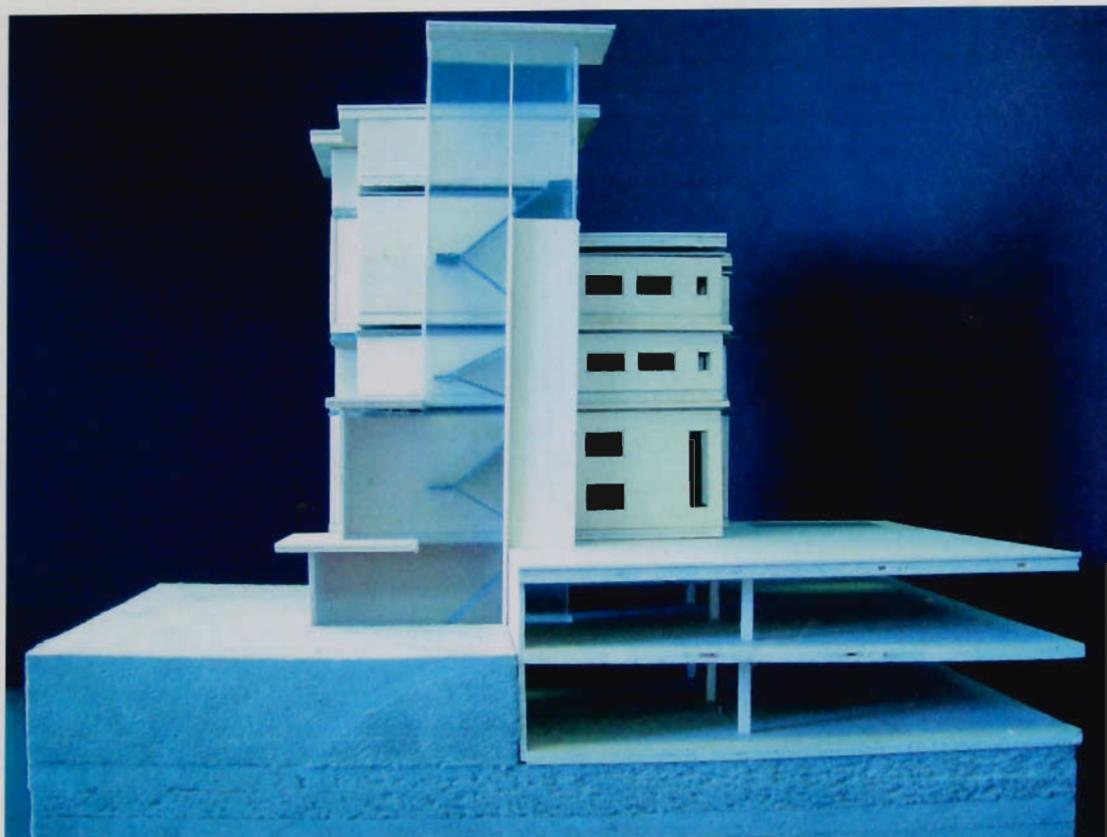


district elevation

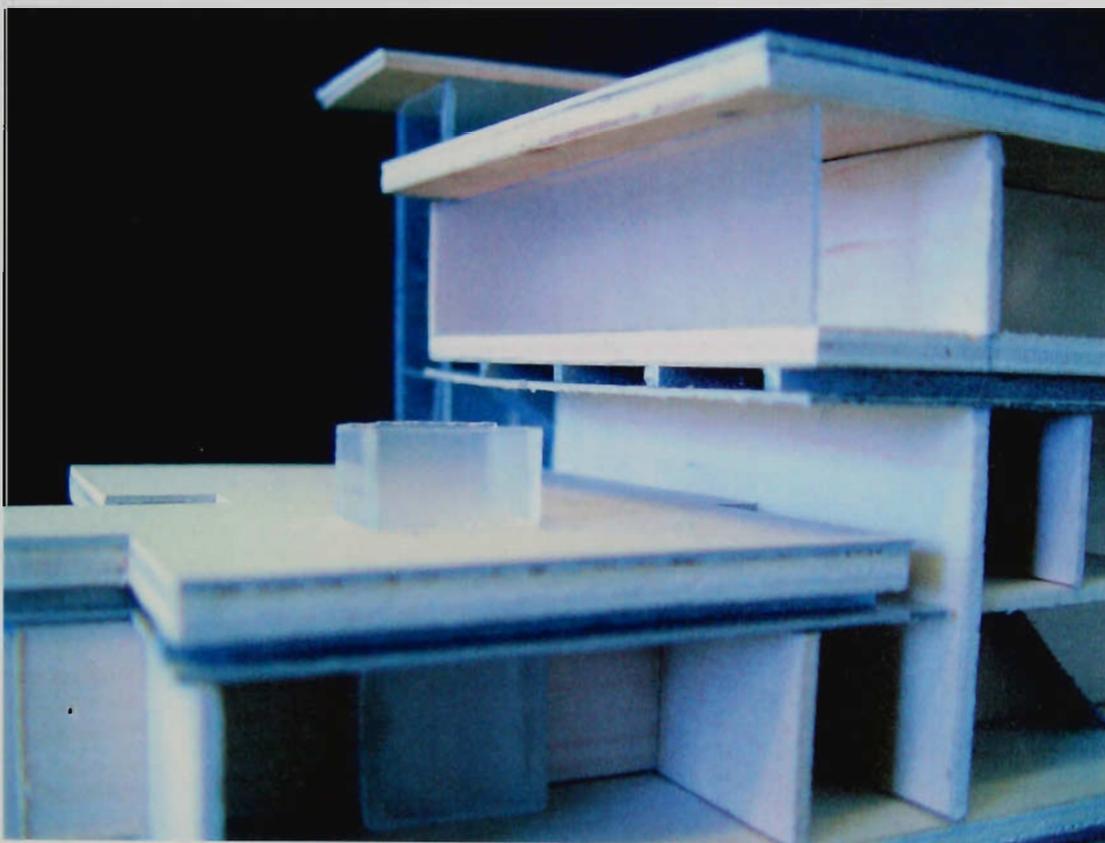
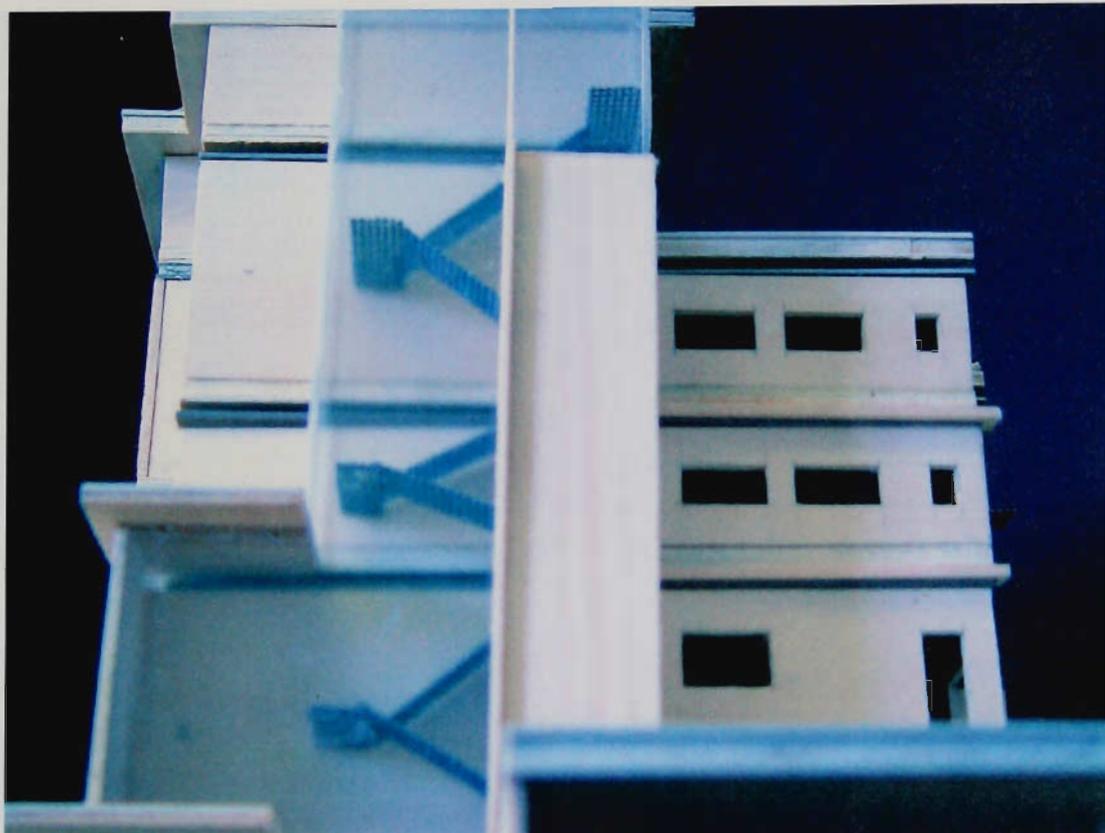


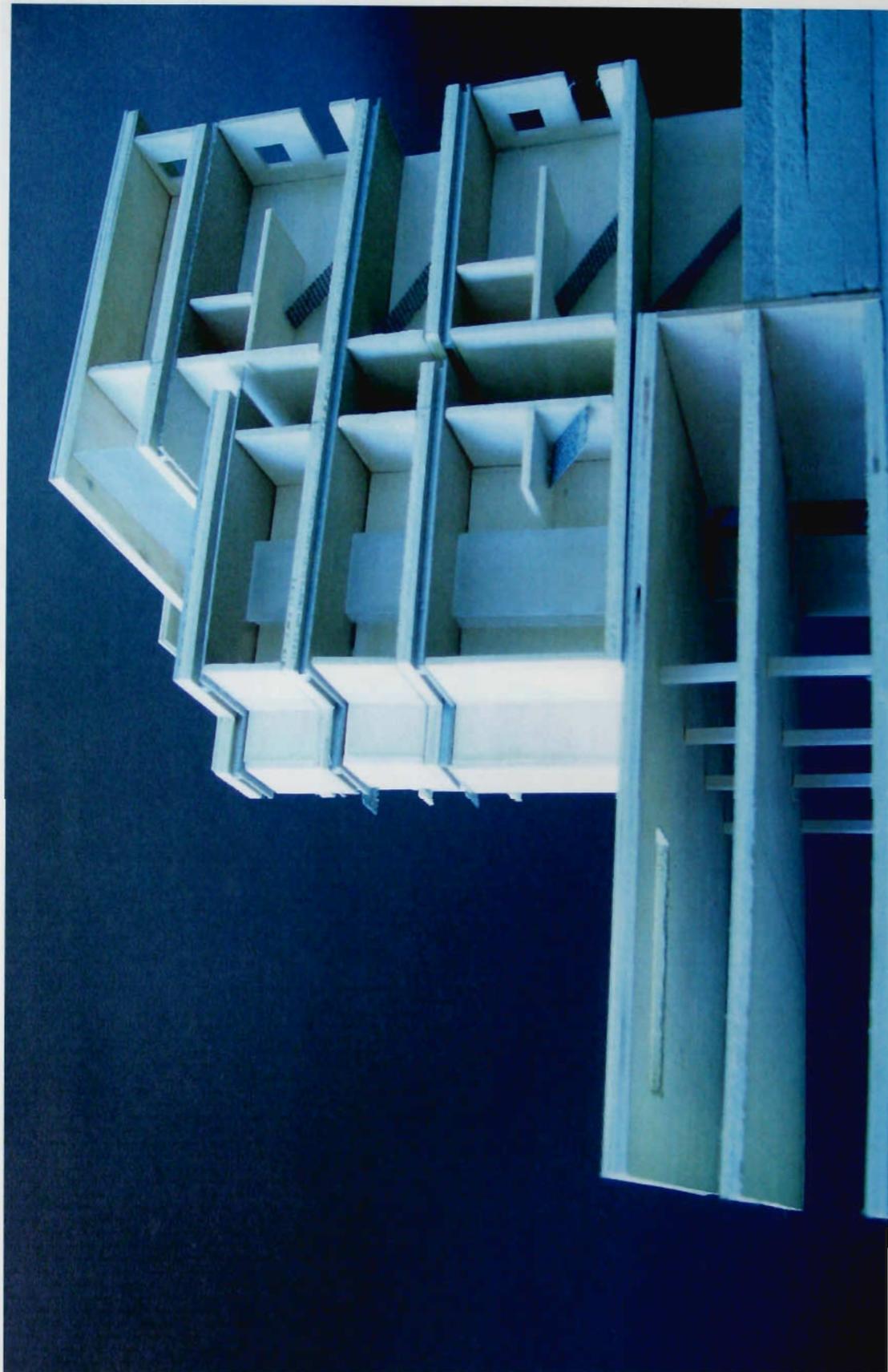


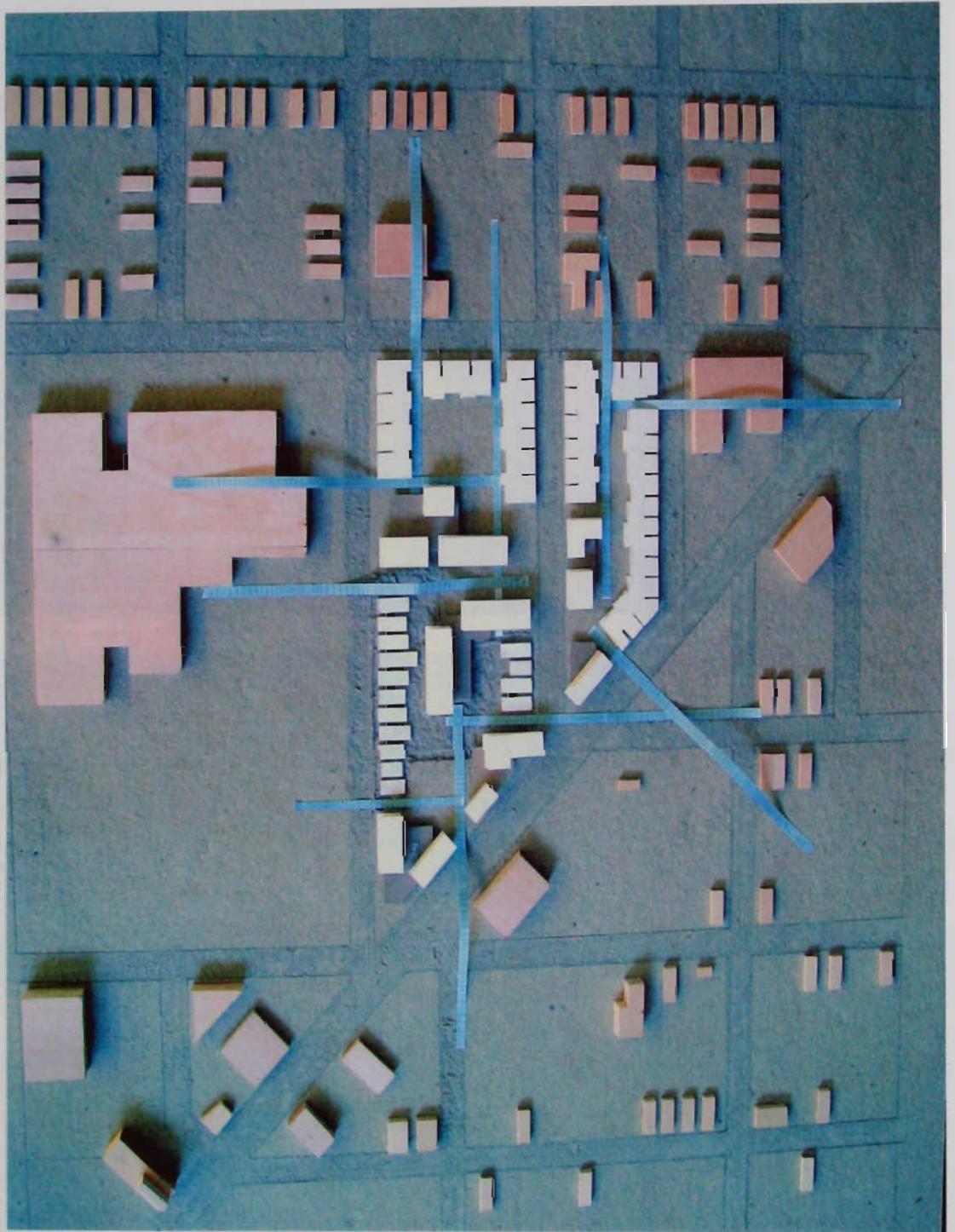


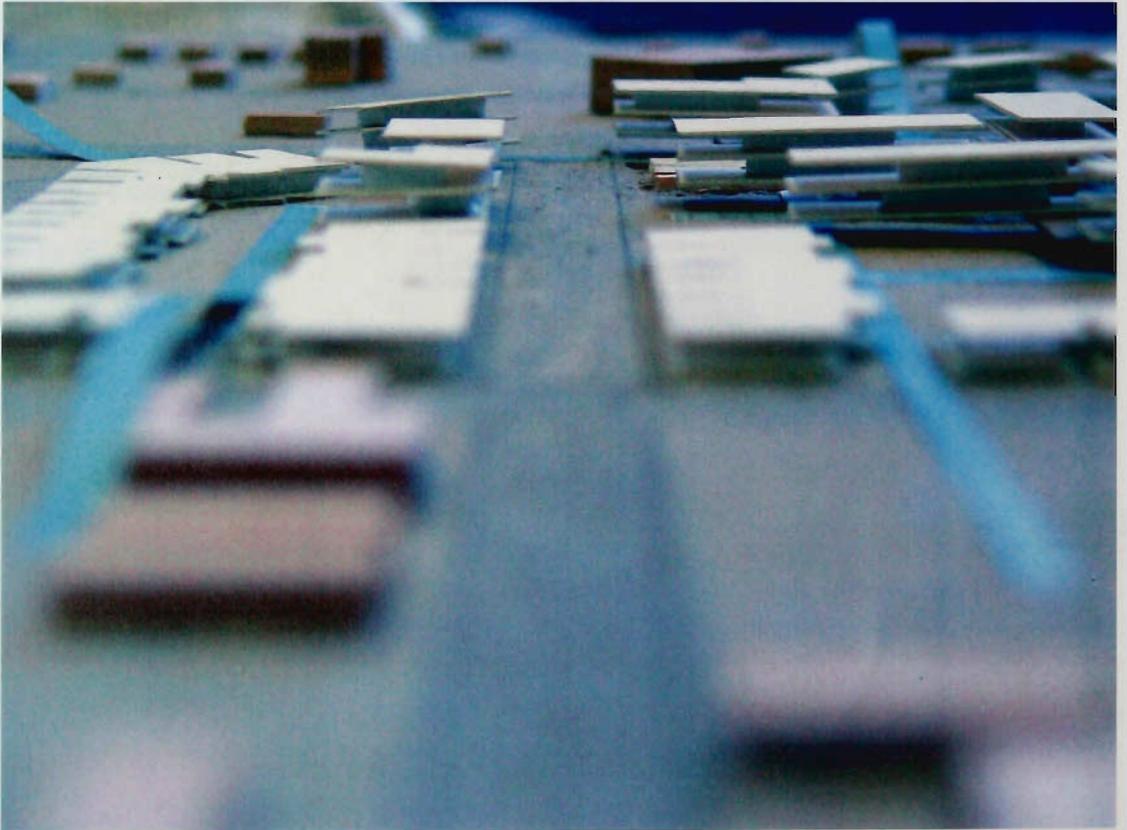
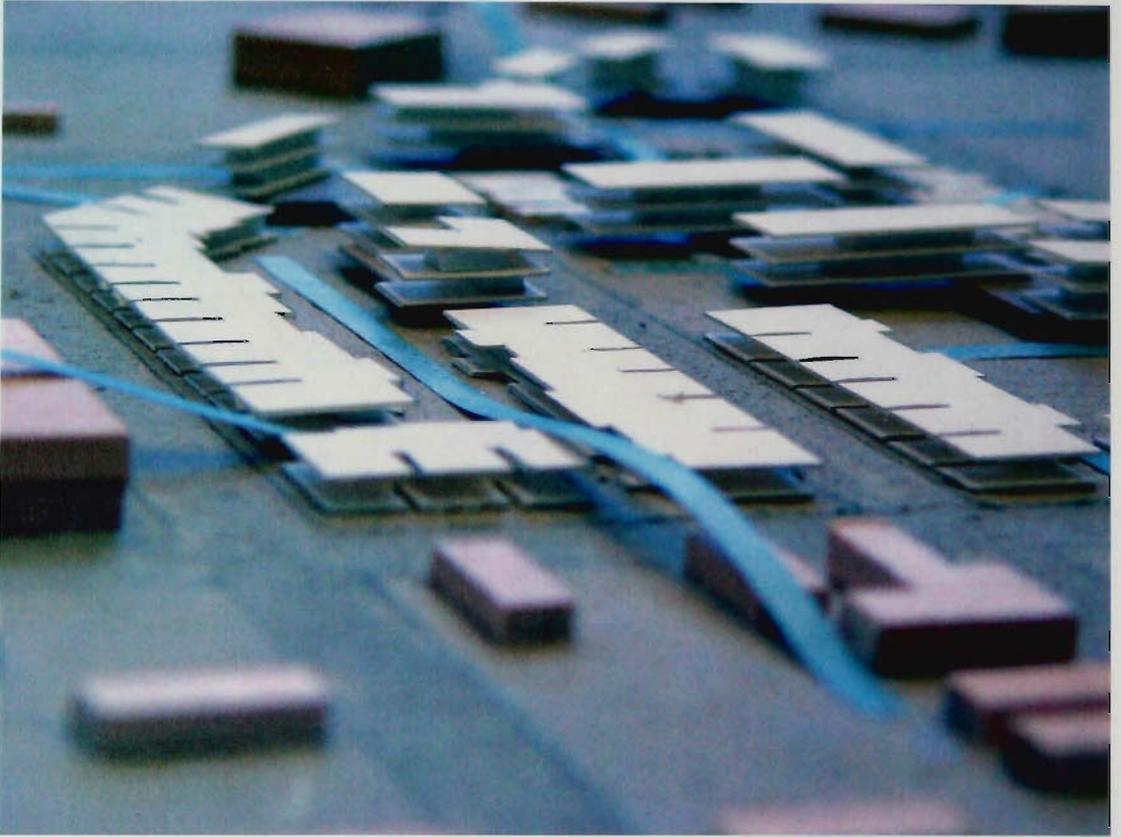


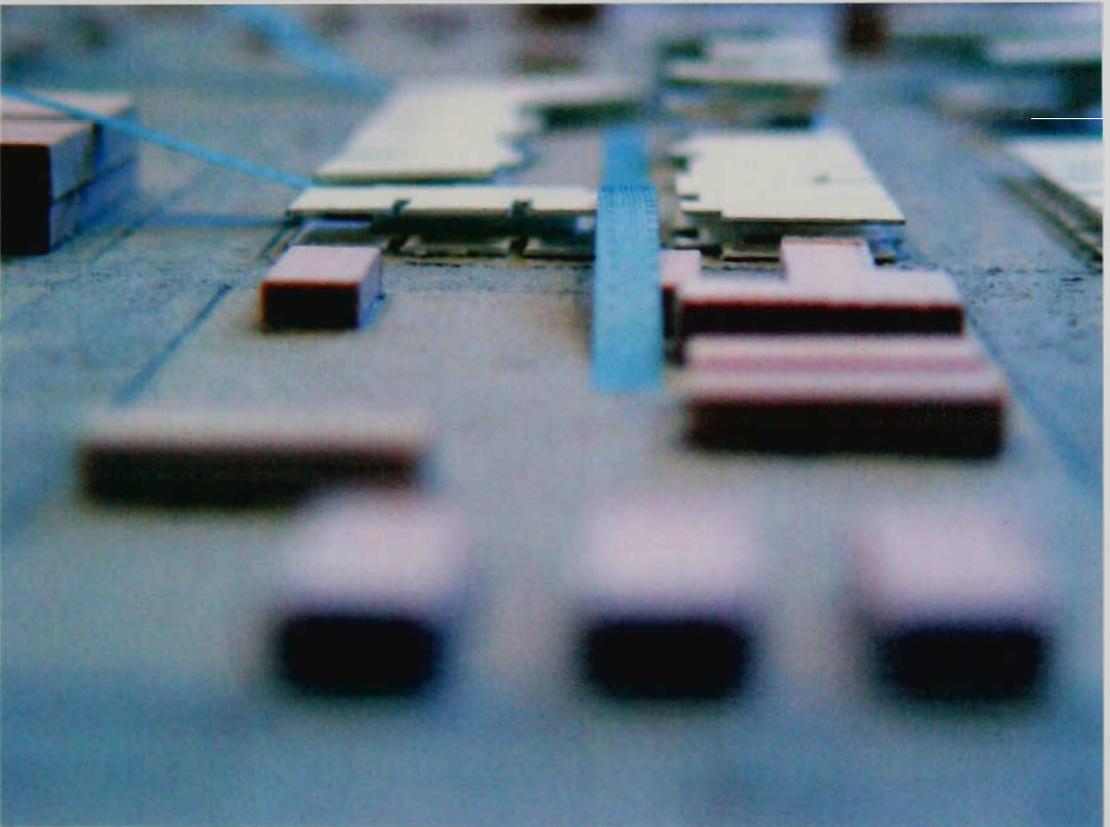
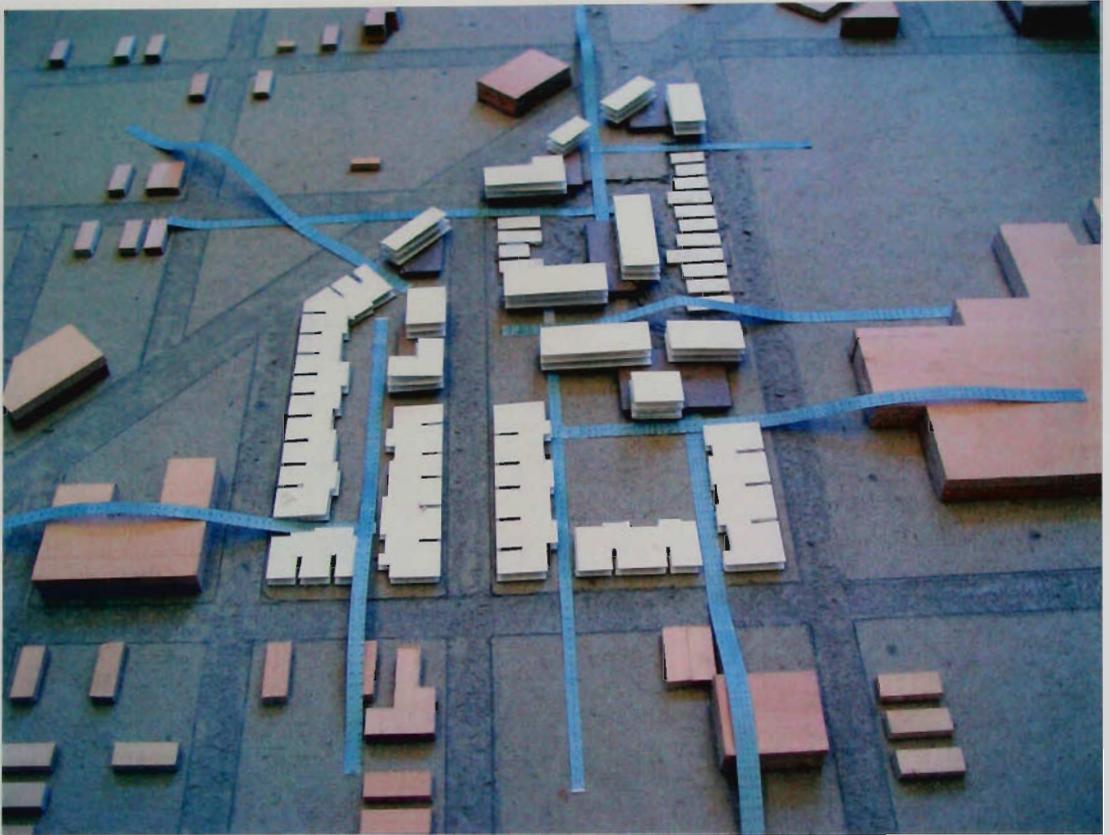


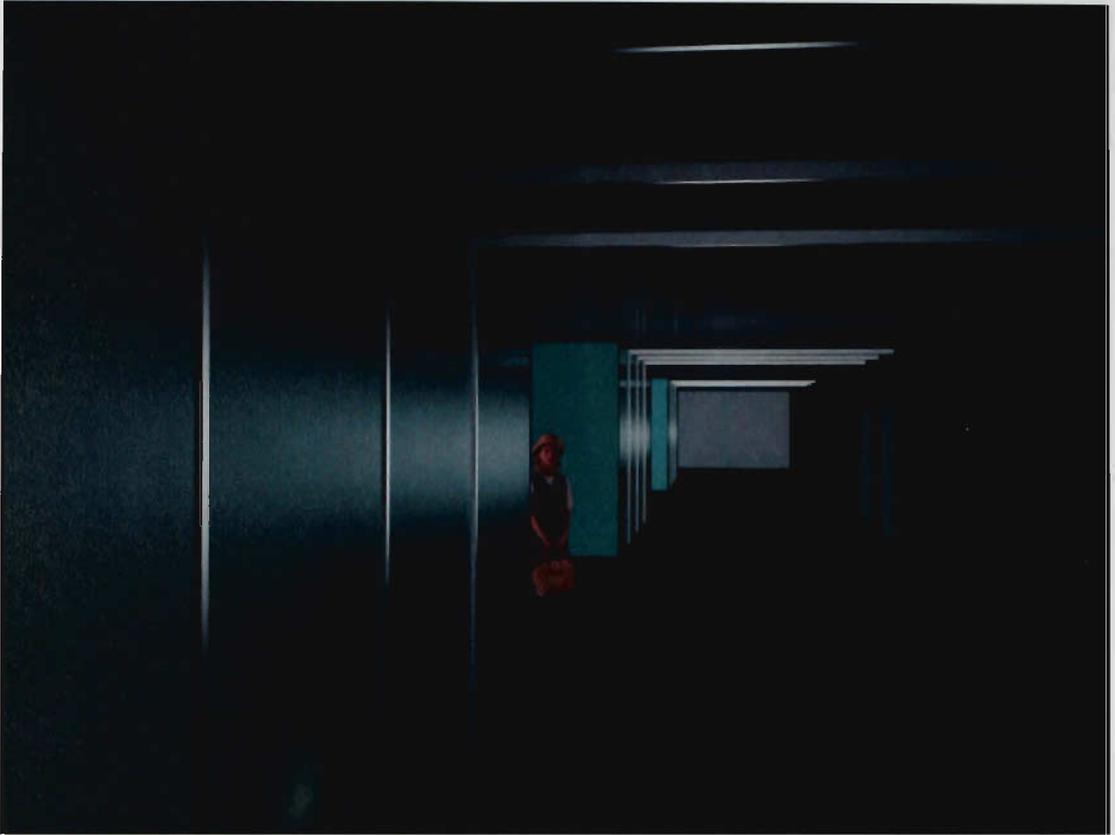




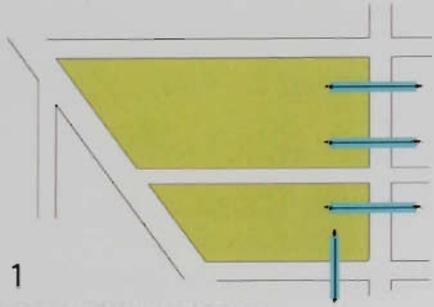




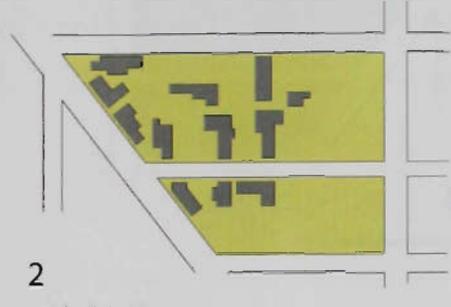




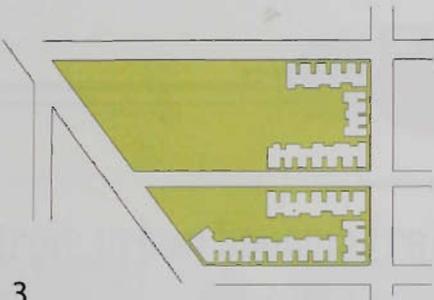
diagrams



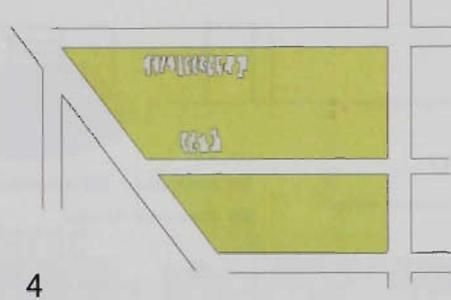
1
visual connections with Woodbridge



2
multi-family housing



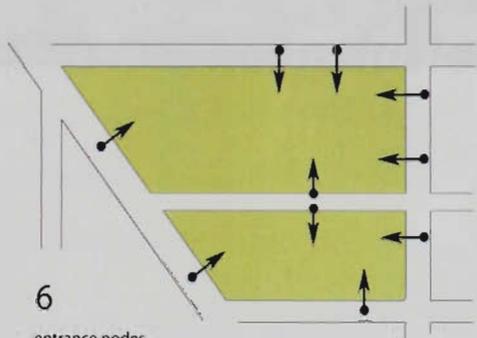
3
row houses



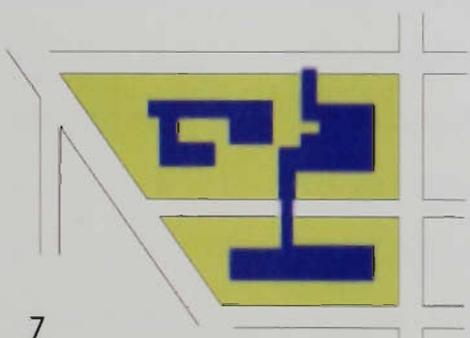
4
detached single-family homes



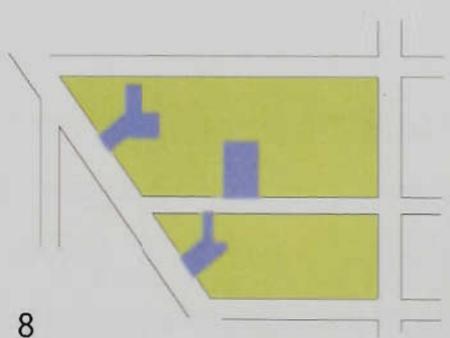
5
podium spaces



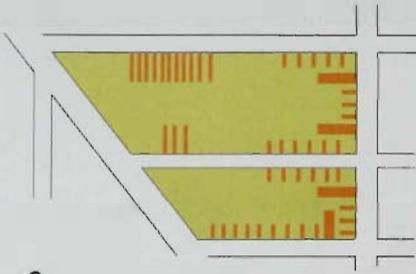
6
entrance nodes



7
semi-private/semi-public space

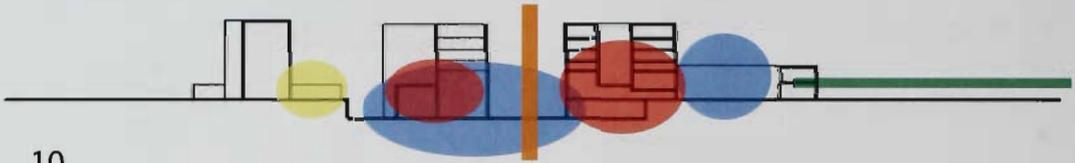


8
collective space



9

in-between space

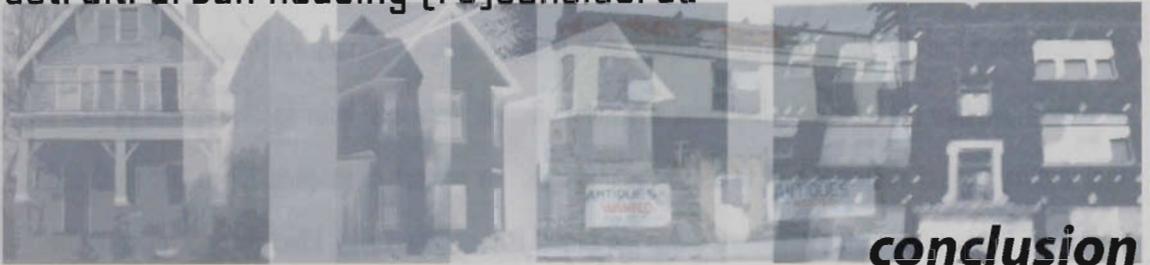


10

diagrammatic section

- podium space
- semi-private/public space
- in-between space
- collective space
- connection to wodbridge

detroit: urban housing (re)considered



conclusion

When I first began my investigation, I had intentions of completing an urban infill housing project with an emphasis on the development side. In other words, how could I design housing in an urban area that will yield a profit for the developer yet still be focused on design? This idea was soon dropped as I began to explore urban housing in a strictly spatial sense. My project soon developed into an investigation of the various spaces that engage an urban environment within a housing development. It is the last iteration of my project that has really taken over as the primary focus of my investigation. One can argue that my thesis isn't even about housing anymore, but of the spaces that comprise an urban environment and how we inhabit those spaces.

My final building proposal wasn't so much a specific building as it was a proposal for an architectural landscape. In regards to the built environment, my emphasis was never on elevations or materials, but on the spatial arrangements associated with the dwelling unit. As my project progressed I found myself designing an architectural landscape instead of an actual building. However, when I step back and reflect on this notion, I find that the urban fabric, especially Detroit's, is a rich architectural landscape. One needs to understand how the landscape functions in order to design successful housing. In regards to this, I feel that my project responds well to Detroit's landscape. My project, in essence, is not just on Grand River Ave. but can be located anywhere within the City of Detroit. Moreover, I feel that my focus on the architectural landscape has allowed for a richer dialogue to occur between the built environment and my spatial constructs. If I had merely remained focus on individual and collective spaces and how these spaces influence the built, then I feel I would have fallen short of a truly integrated project - one that weaves its way into Detroit's urban fabric.

In looking to the future, my project is a work in progress. Ultimately, the next step is to begin to focus on the exterior design of the housing units. This aspect was neglected in my investigation, but for good reason, as I instead focusing on spatial arrangements. Furthermore, in order for the project to maintain its success, emphasis needs to remain on the sustainability of the project. How will the project adapt to site conditions in 20yrs? 75yrs? . Moreover, how can I better integrate my project with the surrounding context? Also, there is still a lot of work to be done in regards to the spatial arrangements of the site.

There is still room for progress in regards to how the various spatial functions can better work together. How can these spaces provide a transition from the built to the site and from the site to the surrounding context? These questions need to remain at the forefront and ultimately need to drive any further design modifications.

detroit: urban housing [re]considered



abstract

[1] Harris, Joe

thesis

[1] Mindell, Amy

[2] Waldheim, Charles.

[3] Herron, Jerry. This number is a bit dated as it doesn't take into consideration the construction boom of the last few years. However, it still shows the complete isolation and abandonment of the city in the 1980's and 90's.

[4] Waldheim, Charles

[5] Waldheim, Charles

[6] Waldheim, Charles

[7] Kelbaugh, Douglas Groundbreaking architecture and modern developments are usually praised by the general public, but this is usually because they are few and far between. If every development that went into an urban area was an ad hoc modernist sculpture, chances are there'd be a public backlash

[8] Kelbaugh, Douglas

[9] Kelbaugh, Douglas Of course, in Detroit's case or any other fractured urban setting, this could have the opposite effect

[10] Kelbaugh, Douglas

[11] Kelbaugh, Douglas

[12] Habraken, Neil

[13] Habraken, Neil

precedent analysis

[1] Schaap, Ton

[2] Russel, James S.

[3] Harvard Architectural Review

detroit: urban housing [re]considered



"18th and Arkansas, San Francisco, CA; David Baker & Associates." Harvard Architecture Review 1998: 90-93.

Used in my research on the 18th and Arkansas Housing Project for my Precedent study. My focus was on the images and site plan along with some of the project overview.

"18th and Arkansas Housing; David Baker Associates." Progressive Architecture January 1995: 86-87.

Used in my research on the 18th and Arkansas Housing Project for my Precedent study. Primary use was for the floor plans.

Fitch, James Marston. Curatorial Management of the Built World. 4th ed. Charlottesville: University of Virginia Press, 1990.

First chapter was helpful in research on the commodification of goods in 20th century America and how they have affected the built environment.

Habraken, N.J. The Structure of the Ordinary. 1st ed. Cambridge: MIT Press, 1998.

This source was helpful in researching the organization of collective and individual spaces and their relationship to other typologies, scales and other built forms.

Harris, Joe. "The Harris Manifesto" The Metro Times 27 April 1005 <<http://www.metrotimes.com/editorial/story.asp?id=7615>>

A reprint of Harris' speech to the city council. A very pragmatic, straightforward account of the city's dire financial situation. Harris is the auditor general for the City of Detroit.

Herron, Jerry. AfterCulture: Detroit and the Humiliation of History. 1st ed. Detroit: Wayne State University Press, 1993.

Gave further insight into the topic of Fordism and the industrial city and how Detroit was built upon and ultimately collapsed from this model. It also elaborated upon certain socio-economic aspects of the city.

Kelbaugh, Douglas S. Repairing the American Metropolis: Common Place Revisited. 1st ed. Seattle: University of Washington Press, 2002.

This book gives great insight into the urban form and the ways in which certain aspects of the urban condition (typology, green space, etc.) work together and can be improved upon. It was helpful in understanding urban typologies and space.

Leach, Neil. The Anaesthetics of Architecture. 1st ed. Cambridge: MIT Press, 1999.

Book explores the role of aesthetics in architecture and was useful in explaining how too much of an emphasis on aesthetics can ultimately erode the value inherent in architecture. Very useful as a source on the standardization of architecture.

Mindell, Amy. "Urban Re-Leaf." The Metro Times 23 July 1997 <<http://www.metrotimes.com/news/stories/news/17/43/urbreleaf.html>>

Referred to Detroit as "The Paris of the Midwest". Interesting article on the de-forestation of the city.

Pearson, Clifford A. "At the Little Italy Neighborhood Development a Group of San Diego Architects-Turned-Developers Push the Housing Envelope ." Architectural Record March 1999: 80-89.

Used in my research on the Little Italy Housing Development for my precedent study. The article gave an overview of the project along with site images.

Russell, James S. "A New New Urbansim Renews Dutch Docklands." Architectural Record April 2001: 94-98.

Used in the Borneo/Sporenburg precedent study research. Some images were abstracted, but mostly focus was on the article.

Schaap, Ton. "Borneo-Sprenburg, Amsterdam, The Netherlands." A + U May 2002: 19-67.

Used extensively in my research on Borneo/Sporenburg primarily for the plans and sections but also for the written analysis as well.

Waldheim, Charles. "Motor City." 2002. Shrinking Cities. 10 Sept 2004 <http://www.shrinkingcities.com/fileadmin/shrink/downloads/pdfs/WP-Band_III_Detroit.pdf>.

Useful in my research on Detroit's abandonment and what to do with the increasing number of vacant parcels in the city.