To the Graduate Council:

I am submitting herewith a thesis written by Ellen Scanlan Cathey entitled "An Exploration of Diversity and Congruency as a Means of Encouraging Community through Architecture." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Architecture, with a major in Architecture.

Tracy Walker Moir-McClean, Major Professor

We have read this thesis and
recommend its acceptance:

Accepted for the Council:

Associate Vice Chancellor and
Dean of The Graduate School

# An Exploration of Diversity and Congruency as a Means of Encouraging Community through Architecture

A Thesis

Presented for the

Master of Architecture

Degree

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Ellen Scanlan Cathey

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Dedicated to

Michael Allen Cathey

and to

Tom and Margaret Scanlan

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## ABSTRACT

This study explores the premise that there exists a human need for diversity which can and should be accommodated in the built environment, especially within the public realm. Further, the specific types of diversity required to sustain a community within an urban setting are explored as well.

These issues will be investigated through the development of an educational facility intended to serve as both a magnet school for the arts and a community center.

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## CHAPTER I: THE MAKING OF COMMUNITY

### INTRODUCTION

*You have invented a very useful brother called Ernest, in order that you may be able to come up to town as often as you like. I have invented an invaluable permanent invalid called Bunbury, in order that I may be able to go down into the country whenever I choose.*
–Algernon to Jack
in Act I of Oscar Wilde's
*The Importance of Being Ernest*

In *The Forest Edge*, Robert Geddes writes, "It is time to reconsider nature as a source of architecture..." This statement stems from his interpretation of the frontispiece of Marc Antoine Laugier's *Essai sur l'Architecture*, which shows an engraving by Ch. Eisen called The Primitive Hut (Fig. 1.3). Laugier's interpretation in 1753 consists of the idea that the engraving depicts the muse indicating the true origin of architecture in that the columns of the hut are actually trees, with branches forming roof trusses.

Geddes does not reject Laugier's interpretation, but instead suggests that while it is valid and logical, it is not the only interpretation possible (which can be said of any work of art). He therefore suggests an additional interpretation: that the muse is not only indicating the origin of architecture, she is also making reference to the physical position of the hut, that she is "...pointing out the ideal habitat of man, the forest edge, where the woodlands and grasslands meet." Following, Geddes suggests using natural history as a source for architectural design.

I suggest that his interpretation can be taken to another level. While I support both Laugier's and Geddes's views, in addition, I believe that in indicating the primitive hut at the edge of the forest, the muse is directing our attention to the properties of the structure itself. In other words, we should not only recognize the materiality of

***Fig. 1.1:*** *Nature's architecture.*
***Source:*** *Thiis-Evensen (54).*

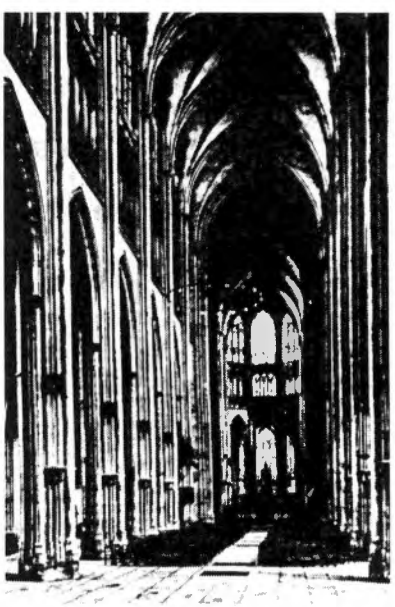


***Fig. 1.2:*** *Gothic architecture.*
***Source:*** *Thiis-Evensen (54).*

*Fig. 1.3:* The Primitive Hut.
***Source:*** *Herrman.*

the hut, or where it sits, but we should recognize the diversity of the structure. For example, although the supporting members are tree branches, it is evident that they have been placed and formed in this particular configuration by man. In addition, the structure provides protection from those elements which come from above, yet the four sides of the hut are open. Hence, the structure offers properties of both natural and man-made elements, as well as both shelter and openness. There are multiple and even infinite ways to interpret the engraving, including the necessity or possibility of providing both prospect and refuge, as well as the indication of using nature to protect us from nature. I believe another "diverse" reading of the engraving is one of the simultaneity of teaching (on the part of the muse) and learning (on the part of the cherub). In fact, I believe it is all of these indications of diversity that make the Primitive Hut "the ideal habitat of man."

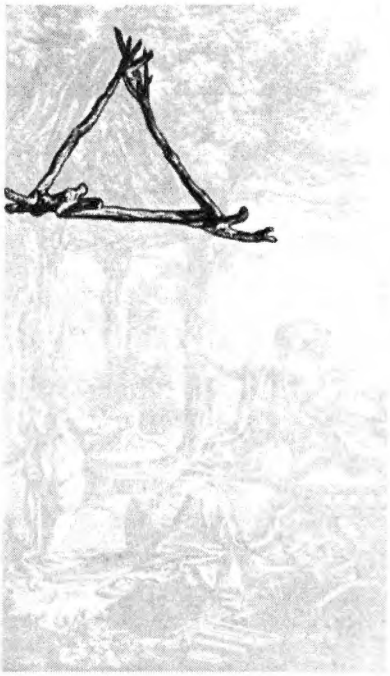


***Fig. 1.4:*** *Natural elements have been placed in a particular configuration by man.*
***Source:*** *Author.*

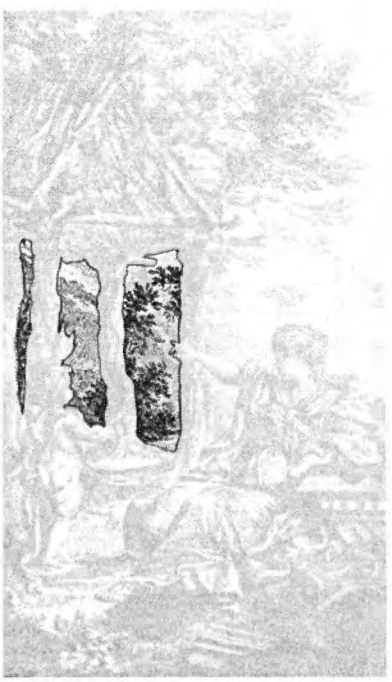


***Fig. 1.5:*** *The hut offers openness, as well as shelter.*
***Source:*** *Author.*

While it is difficult for architecture to dictate behavior, it is conceivable that it be designed to facilitate a certain course of action. I believe it is clearly possible to form our built environment in such a way that it provides for its users on many levels, from the scale of the city to the individual building. It is therefore important to have a clear understanding of the requirements of our built environment today.

In its earliest form, shelter was the primary function of architecture. Thomas Thiis-Evensen relates in *Archetypes in Architecture* that "Filarete asserted that it was

Adam who formed the first roof by placing his hands over his head to protect himself from the rain and sun" (Fig. 1.7). This gesture took the form of a triangle, the same triangle which constituted one of the basic elements in Marc Laugier's vision of the first architecture. Protection from the elements, along with food and water, are basic necessities for human beings, and similar to Adam's gesture, these early structures had a simple, express purpose: to provide for the needs of humans. At the time, those needs were almost exclusively physical in nature. However, as human beings have evolved along with a more complex or diverse social and cultural structure, so have the requirements or expectations of our built environment developed a similar diversity.

In *The New Urbanism*, Vincent Scully defines architecture as "...the shaping of the human environment within the natural world, the building of the human community entire." Continuing, he writes, "All human culture is intended to protect human beings from nature in one way or another and to mitigate the effect upon them of nature's immutable laws. Architecture is one of humanity's major strategies in that endeavor. It shelters human beings and reassures them. Its purpose is to mediate between the individual and the natural world by creating the physical reality of the human community, by which the individual is linked to the rest of humanity and nature is in part kept out, in part framed, tamed, and itself humanized."

***Fig. 1.6:*** *Another interpretation of the hut engraving is one of both instruction and learning.*
***Source:*** *Author.*

***Fig. 1.7:*** *According to Filarete, Adam formed the first roof.*
***Source:*** *Thiis-Evensen (334).*

Not only do we require protection from the elements, today we desire regard for aesthetics and provision for psychological needs as well. Shelter, in its basic form, is not enough. Arguably, true architecture surpasses shelter. Those buildings in which psychological and sociological needs are addressed are the ones in which we feel most comfortable and want to spend time experiencing. Scully reinforces this idea in claiming that reassurance is part of architecture's function. I believe it is essential to consider these psychological and social needs, in addition to the physical needs of humans, in order to produce environments suitable for humanity. Diversity is one such need.

***Fig. 1.8:*** *Nature and architecture are both independent and interdependent.*
***Source:*** *Author.*

From the earliest stages of our development, humans require diversity. As infants, we need stimulation and variety in order for our brains to develop properly. If we do not encounter a variety of new experiences, we lose some ability to use that knowledge. Further, if we repeatedly encounter the same experiences, we may lose interest and even cease to notice them after a while.

As adults, our need for diversity does not dissipate. For example, it is evident from literary works such as *The Importance of Being Ernest* that there is a human need for characteristics of both town and country; one evokes thoughts of hustle and bustle and much activity or excitement; the other, a feeling of calmness and serenity. It is human nature to desire the other when one has exclusively been subjected to the first for an extended period

of time. Thus, diversity in our built environment takes on an important role in affecting our psychological well-being.

In *The Crack-Up*, F. Scott Fitzgerald claims that "...the test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function." While diversity does not necessarily create opposition, simultaneity is often that part of diversity from which a capacity to create a stimulating and sustaining built environment arises. It is this creative tension that often satisfies our need for diversity in the built environment.

In fact, to diversify means to produce variety, but it also means to balance. The ecologist Eugene P. Odum contends that humans have consistently sought such a balanced or diverse environment. Odum points out that, out of the nine major ecosystems of the world, human civilization develops best at places where grasslands and forest come together: "Humans, in fact, tend to combine features of both grasslands and forests into habitats for ourselves that might be called forest edge. When humans settle in grassland regions, we plant trees around our homes, towns, and farms, so that small patches of forest become dispersed in what may have been treeless country. Likewise, when we settle in the forest, we replace most of it with grasslands and croplands, but leave patches of the original forest on farms and around residential areas...we can say that we depend on grasslands for food,

***Fig. 1.9:*** *Baden Baden, Germany.*
***Source:*** *Lennard (29).*

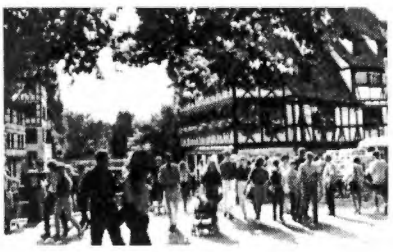


***Fig. 1.10:*** *Pedestrian area of Petite France, Strasbourg.*
***Source:*** *Lennard (68).*

but like to live and play in the shelter of the forest..."

It is therefore evident that while we need diversity, we also need congruency and wholeness at the same time. Much in the way that a city is made up of individual buildings, a community is made up of individuals, a building is made up of individual materials, and on and on. However, without cohesiveness, the building is likely to fall down or come apart. The individual pieces of wood or the individual bricks are just that until they are formed together to become a roof, or a wall. Their entity changes once they are placed together, just as when individuals come together to form a group, the dynamic changes. So in relation to diversity, there should also exist a larger sense of wholeness and congruency.

## ENCOURAGING COMMUNITY THROUGH ARCHITECTURE AND ITS LANGUAGE

There exists an undeniable link between architecture and community. In broad terms, the built environment signifies a gathering of humans in one form or another, whether it be a single family, a small town, or a large city. At the same time, however, I believe this link exists on a more precise level. In fact, I think it is possible for architecture to help create and encourage community by providing opportunities for certain conditions to exist which promote the gathering and interacting of humans.

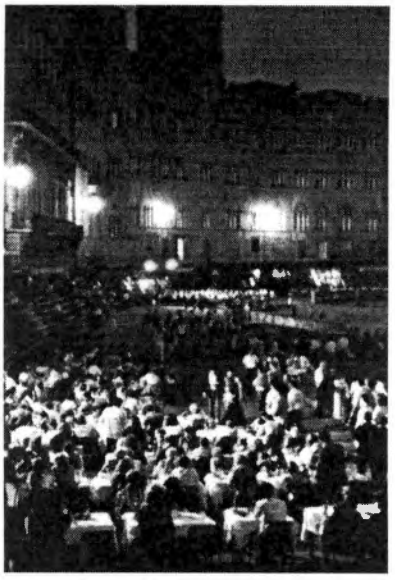


***Fig. 1.11:*** *Piazza Il Campo, Siena, Italy.*
***Source:*** *Lennard (24).*

## The Public Realm

I believe that the making of community begins with the public realm. As an artifact of humankind, the city embodies ideas and aspirations of a culture. Public institutions help to form, define, and identify such places. However, in many American cities today, the central city has become a part-time enterprise: populated during the working day, abandoned for the suburbs at five o'clock. Downtown Knoxville is no exception. According to Geddes, the development of the first romantic suburbs in the early 1900s, such as Llewellyn Park and Riverside, "were a reaction against the urban landscape and sought to put man in direct contact with nature." This movement has indeed had a far-reaching effect upon American cities. Our cities have lost much of their identity, focus, and that sense of history and place which give meaning to their very existence. We may "use" the city, but we seldom inhabit the city. It has become a commodity, rather than a cultural artifact. The popularity of the automobile contributed greatly to this condition, and in some cases, the move to the suburbs achieved exactly the opposite effects many Americans were seeking. Ironically, they were able to get there with the use of that which they supposedly feared most: the advancement of technology.

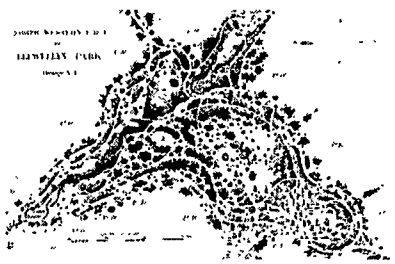


***Fig. 1.12:*** *Llewellyn Park, Orange, New Jersey, 1859.*
***Source:*** *Geddes (9).*

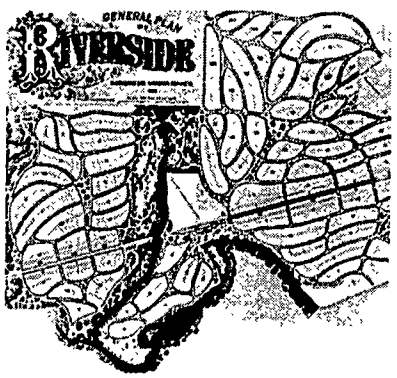



***Fig. 1.13:*** *Riverside, Illinois, Olmsted & Vaux, 1868.*
***Source:*** *Geddes (8).*

While I believe that an awareness of the city as a place of inherent value is re-emerging in some places, there is still cause for concern. These days, the private realm is generally triumphing over the public realm. Indeed, the

public realm is increasingly being privatized, an alarming situation, since the public realm should ideally serve as "the physical manifestation of the common good" (Kunstler, *Home from Nowhere*, p. 37). Fundamental to the life of the city is the existence of the urban public realm that is available to all. This realm includes streets, squares, parks, and buildings that constitute the language of the city — within which the public life of the city should be accommodated, supported, and celebrated.

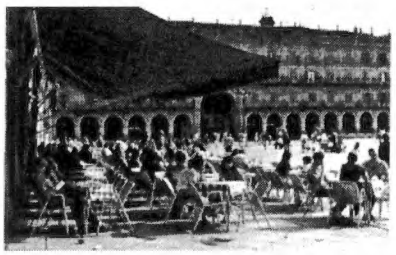


***Fig. 1.14:*** *Salamanca's Plaza Mayor is one of the world's liveliest and most successful urban spaces.*
***Source:*** *Lennard (27).*

***Fig. 1.15:*** *Piazza San Marco, Venice, Italy.*
***Source:*** *Lennard (27).*

**Diversity in the Public Realm**

One of the requirements of the public realm is that it be able to provide for its users on many different levels. I believe that self-sufficiency is tied to the availability of choices (and therefore dependent upon diversity), a commodity historically available in the city, but not in the suburb. Consider the transportation options of each. Children growing up in suburbs generally have one option: to wait for that magical day they turn sixteen and are able to drive away. Elderly people who no longer drive are stuck in a similar predicament. Even regular adults are without recourse if their car doesn't start in the morning. American families living in suburbs without the availability of public transportation have in fact lost their independence.

In *The Geography of Nowhere*, James Howard Kunstler maintains that suburbs lack one of the most important elements which sustains communities: cultural

diversity. He writes, "Where city life optimizes the possibility of contact between people, and especially different kinds of people, the suburb strives to eliminate precisely that kind of human contact."

Public facilities can provide opportunities to encourage cultural diversity by hosting events that may draw people from many and different backgrounds to come together for a common purpose. These may include community, sporting, or cultural events. If the public facility is located in an urban setting, there is an even greater likelihood that people attending the event will interact with others around them, even if this consists of merely walking down the street as an informal group. Accordingly, architecture's ability to encourage cultural interaction in community is largely dependent on locale within the public realm, as well as function or use.

***Fig. 1.16:*** *Campo S. Barnaba, Venice.*
***Source:*** *Lennard (87).*

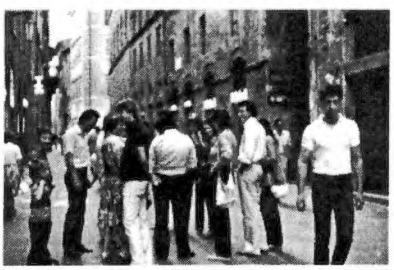


***Fig. 1.17:*** *Siena, Italy.*
***Source:*** *Lennard (87).*

Within the scale of the city, degrees and types of physical diversity can also directly influence the likelihood of social diversity, and therefore, affect the extent to which we encourage community through the built environment. The number of buildings, building use, and building ownership all have a commanding effect on the encouragement of community within a given area. Allan Jacobs writes in *Great Streets*, "...diverse ownership shows in windows, in maintenance, in landscape, in color changes, in minor changes to buildings over time." In addition, he writes, "Generally, more buildings along a given length of street contribute more than do fewer build-

ings. Having more rather than fewer buildings may or may not result in greater diversity of uses and activities. The different buildings can, however, be designed for a mix of uses and destinations that attract mixes of people from all over a city or neighborhood, which therefore helps build community..." Diversity of people, including age, income range or economic background, race, culture, and origin, as well as diversity in buildings, including size, scale, number, and use, helps to encourage and sustain community. Obviously, there are more opportunities to experience diverse cultures within the public realm. The more diverse, the more sustainable if the diversity is mutually supporting.

**Identity and Sense of Place**

Another way to encourage community through the built environment is by creating a distinct identity for a certain area within the built environment. An identifiable community space, public park, or public building within a neighborhood can serve as the foundation for the community, giving its members a sense of place and a feeling of arrival. Peter Calthorpe reinforces the importance of public spaces in a community, and shows that a public building, such as a school or community center, can be that which brings identity and focus to a neighborhood: "We must return meaning and stature to the physical expression of our public life. From street to parks to plazas, village squares, and commercial centers, the Commons

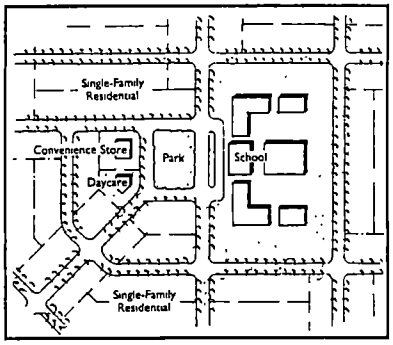



***Fig. 1.18:*** *Schools and community parks can serve as the "Commons" that defines the meeting ground of a neighborhood and its local identity.*
***Source:*** *Calthorpe (88).*

defines the meeting ground of a neighborhood and its local identity. Rather than residual spaces, the Commons should be brought back to the center of our communities and re-integrated into our daily commercial life."

***Fig. 1.19:*** *Piazza Umberto I, Capri, Italy.*
***Source:*** *Lennard (29).*

**Individual and Collective**

Another way architecture can encourage community is by providing a variety of strategies for interaction between the individual and the collective. A public facility usually has the capacity to bring individuals together to form a group, and to allow a great deal of interaction between the individual and the collective, both physically and mentally. A student's place in the classroom, for example, mimics his place in the outside world. Within each confine, he is an individual, yet he is also part of a larger group: in the former, the collective being his fellow classmates, and in the latter, his fellow human beings. This simultaneity inherently necessitates a tension that can educate the student and lead to an awareness of the self and to one's surroundings, either immediate or widespread. With the realization that the relation of individual to collective is relative to scale comes the realization that the actions of the individual are both influenced by and influence the greater whole.

The connection between the individual and group can be expressed in physical terms as well. Providing spaces which consist of a logical sequence for moving through space from public, to semi-public, to private affords a

variety of settings for the relationship of individual to collective on different scales. Providing a variety of type of space allows one to choose the space most appropriate for the specific activity or function. We can also differentiate between public and more private areas. In addition, the possibilities for relating as individual to individual, individual to group, or group to group can be defined through our built environment in a similar way.

**Shelter and Openness**

Individual spaces which allow for shelter or protection of some kind, as well as openness, often permit the possibility for spontaneous interaction from individual to individual, group to group, or individual to group. These conditions can exist in a courtyard-type configuration, in which the sides of a structure provide protection, with openness above, or in a configuration like that of the Primitive Hut, in which the sides are open with protection above. Verticality is emphasized in the courtyard-type configuration; it encourages one to look up, perhaps to the sky, perhaps for guidance. Conversely, the Primitive Hut type of configuration allows one to explore the world in a horizontal dimension.

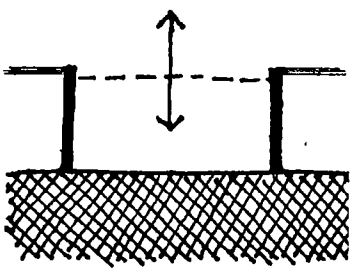


*Fig. 1.20: Courtyard-type of shelter and openness: sides sheltered, open above.*
***Source:** Author.*

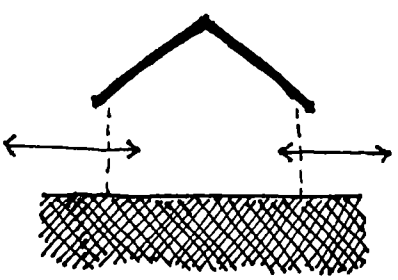


*Fig. 1.21: Primitive Hut-type of shelter and openness: sides open, sheltered above.*
***Source:** Author.*

There also exists the opportunity to combine these conditions, and to form variations of each. The porch, colonnade, arcade, pergola, threshold, balcony, and terrace are all variations; they provide degrees of both shelter and openness, as well as degrees of horizontal and

vertical emphasis. Most important, they all have potential for encouraging community, as they seem to satisfy the psychological needs of our built environment.

Geddes contends that this is because of the clear reference to nature: "...just as man has enjoyed the forest at the edge of the clearing which has offered him both shelter and openness, so today we enjoy being in architecture which recreates similar spatial conditions: arcades and colonnades, loggias and porches, thresholds, cloisters, courtyards, and peristyles - all of which resemble clearings at the edge of the forest." Kunstler also points out that once projecting porticoes and verandas were added to the street facade, these areas soon became the focus of public life: "...visitors flocked here chiefly for the pleasure of sitting on hotel porches, gabbing the hours away. With the portico, civilized public life really stepped outdoors." Experiencing an environment that exists between inside and outside allows one the opportunity to join in at will and become part of the activity which takes place along the edges, either with a horizontal dimension (to or from the street, for example) or a vertical dimension (to or from a few stories up), be they direct connections, visual connections, or both.

***Fig. 1.22:*** *The Grand Union Hotel in Saratoga Springs, New York, encouraged community through its logical progression of public to private spaces, as well as its incorporation of shelter and openness.*
***Source:*** *Kunstler,* Home from Nowhere *(91).*

**Flexibility**

Flexibility in designing our built environment also plays a large role in encouraging community diversity. Individual spaces can be designed to accommodate both large

groups of people and smaller groups, according to specific function, providing greater opportunity for human interaction. Utilizing a limited number of spaces for a variety of purposes may even lead to greater opportunity for direct interaction with nature, as the building will consist of less square footage, providing more room for outdoor spaces and allowing for greater exposure of natural light. Additionally, spaces which are adaptable may ensure their use over a longer period of time, encouraging sustainable design.

Satisfying the human need for diversity in our built environment is a complicated task. As complex beings, we want both forest and grasslands, shelter and openness, natural and man-made elements, city and country, prospect and refuge, tradition and technology. I believe it is possible to utilize this architectural language to link diversity with congruency to encourage community formation. In doing so, we are able to form our physical environments so that the simultaneity and vibrancy of these different elements come together to produce a stronger whole. The process begins with the creation of physical conditions that encourage diversity, so that the diversity, in turn, provides opportunities for the creation of community.

## CHAPTER II: THE PROGRAM

## A MAGNET SCHOOL FOR THE ARTS

### PROJECT RATIONALE

***Fig. 2.1:*** *"School Door," by Klyushkin, Russian, 20th Century, Elvehjem Museum of Art, University of Wisconsin–Madison, Gift of Joseph E. Davis.*

The intent of this project is to design a public facility that provides a setting for interaction within the surrounding environment, with the expectation that it serve as a type of catalyst for the making of a neighborhood. Specifically, this project is attempting to help transform an area that is currently more of a district than a neighborhood, Knoxville's Old City, into a neighborhood. Further, it should take advantage of the existing amenities while providing necessary elements so that the result is a stronger community. A neighborhood has as part of its essential ingredients both an institutional and a civic function. These functions can reinforce and extend its housing component. It is therefore important that the proposed design house an activity which draws people to the area, and that the people it attracts include individuals and groups whose backgrounds differ in a variety of ways: race, origin, culture, or age. A facility like this should encourage diversity, provide enjoyable spaces for humans to experience, and bring focus and identity to the area. For many reasons, an educational facility which combines both academic and community functions is appropriate.

In practical terms, there is currently a need for a school in the downtown Knoxville area. While the area boasts many different uses, education is not among them. This

condition is problematic, not only because the amenities provided by the downtown area are not being utilized, but also because there are not many reasons for young people to go downtown.

Perhaps the most compelling reason that a place of instruction is appropriate is that school facilities, as a type, inherently possess diversity in a variety of capacities, beginning with their emergence in the seventeenth century.

Formal schooling in America had an ambiguous beginning, especially in the South. In *A Common Landscape of America,* John Stilgoe explains that "colonists thought in two traditions, one old — almost ancient — and oral, and one far newer and written. Oral tradition guided the choosing of soil, the felling of trees, the planting of crops; it shaped graveyards and persecuted witches. While far less venerable, the tradition of literacy influenced concepts of government, law, and the celestial spheres, the practice of medicine and surveying, and the accounting of business, particularly commerce." Continuing, he writes, "Seventeenth-century education meant domestic education except in a few New England towns. Parents explained the intricacies of husbandry and housewifery to sons and daughters eager to know about planting times, natural dyes, and kitchen gardens. Craftsmen instructed their sons, and the apprenticed sons of neighbors, in crafts such as milling and shipbuilding, smithing and carpentry. Almost all such teaching was oral and

spiced with countless examples; little of it related directly to the reading and writing taught in the morning and evening by parents and older siblings."

Obviously, there was an immense difference between verbal learning, or learning through experience, and formal schooling, and, as Stilgoe illustrates, "Tradition clashed with innovation everywhere, but within schoolhouse walls the clash was loudest. A ticking pendulum clock regulated the passing hours; time was not marked by a 'moving' sun or the lowing of cows. Printed maps contested with mental images of neighborhoods, counties, states, and nations...almost always tradition lost to the invention and imagination recounted and inspired in books." I believe it is important to remember this tension, and attempt to use it in a way that students gain as much as possible from their education.

While in school, a student's job is to learn. I think that the most complete education includes both types of learning: experiential and prescribed, or, in other words, practical and theoretical. The possibility for students to attain a balance of each should exist; they should have an availability of choices which allows them to gain both practical knowledge in an urban setting (for I believe that in the public realm there are more opportunities to experience both types of learning; there exists more diversity), as well as formal education in the classroom.

Becoming actively involved in the surrounding community can also help to serve as part of a student's well-

rounded education. In turn, an educational facility should continue to accommodate the diverse functions it was able to hold in the past: that of ambivalence, as a place for every member of the community, and that of formal schooling. Ultimately, I believe having a variety of choices leads to an independence which could not exist without both types of education. Learning involves sharing knowledge and gaining knowledge, and although the school classroom is the obvious place in which this happens, it is not the only place it occurs. Learning occurs on all levels; the more diverse a student's education, the better the probability his education has been enhanced.

A middle school for grades 6, 7, and 8 was chosen in particular because the age of students and level of maturity are optimal for this type of facility. Middle school students are literally at an in-between stage: they are between adulthood and childhood, between elementary and high school, and they are too young to drive, yet too old to be constantly monitored. They are at an optimum age for learning about and relating to others, not only peers and teachers, but how to deal with strangers as well. Middle school is a period of exploration, with many simultaneous influences.

If the facility first took on the role of a magnet school, it could inherently bring together people of different cultures. The magnet school program came about to integrate racially identifiable schools and bring them into

compliance with the guidelines of the Office of Civil Rights. In *Different By Design*, Haywood Metz defines magnet schools as "racially mixed public schools which draw students on a voluntary basis by offering educational innovations which are attractive to parents. They appeal to many educational constituencies by simultaneously creating desegregation without mandatory busing and an opportunity to blow a fresh breeze of educational innovation into city school systems."

Knox County's purpose in designing and implementing the magnet program was to voluntarily create programs not found in any other elementary, middle, or high school in the county. These programs involve honors-level academics, fine arts, science, math, and technology. The proposed facility would emphasize the arts, as the north end of Gay Street has a very strong history of supporting the arts and music in Knoxville. (In fact, Tennessee's first radio station, WNOX, was located at Sterchi's in its early days. Even then, variety shows such as "Mid-Day Merry-Go-Round" attracted many people to the area.) Knox County also has a desire to bring technology and integrated hands-on learning into the total focus of each school. Last, and perhaps most importantly, magnet schools bring together students of many different backgrounds, allowing for an exposure to world culture.

***Fig. 2.2:*** *Looking towards Sterchi's and the north end of Gay Street.*
***Source:*** *Author.*

In keeping with this idea, the center would also be available for use as a community center or meeting place for various groups within the area. The notion that the

facility be open for use by the community at large stems from the traditional use of schoolhouses in America: they have always been places where the entire community could gather. Moreover, these additional functions sometimes served as reasons to ensure the buildings were well-built and heated efficiently.

Stilgoe writes, "At Christmas, for example, neighbors celebrated in the only nondenominational heated structure large enough to hold a hundred or more people; benches and tables were pushed to the walls, and people jammed against the blackboard and coatrack. Holding such ecumenical celebrations in the schoolhouse spared the neighbors the difficulty of honoring any particular rural church at the expense of another." Schools were also used for square dances, places in which politicians were invited to speak, traveling lecturers, and even occasional acting performances. In any case, these early structures "served well-defined social purposes as well as educational ones," just as the proposed school's secondary use as a community center could provide opportunities for people to come from different regions or different parts of the world, encouraging a diversity of the facility's users as well as its uses.

According to Knoxville's Downtown Organization, there is a need for a downtown facility which could support the following activities and organizations for nighttime use, thereby providing for the community as well as the school: Boy Scouts and Girl Scouts meetings, City

Council meetings, Knox County School Board meetings, Central Business Improvement District Board and Committee meetings, Knox County Police Department Safety Classes, and Continuing Education Classes. Further, a basketball court, as well as a large open gathering area, could be used by many various groups.

In addition to involving the community directly, a public facility which can be used around the clock encourages a better probability that its surroundings will benefit as well. Buildings which are utilized beyond the nine to five workday promote activity and use within the area, thereby increasing safety and productivity.

Further, the proposed facility should encourage the possibilities of new growth and diversity for the area, while maintaining a healthy ecology in the city. In turn, the city can provide historical and practical knowledge and better opportunities for young people which would not be available to them in the suburbs. The community at large then benefits from an enjoyable, usable, and safe environment created in part by this facility.

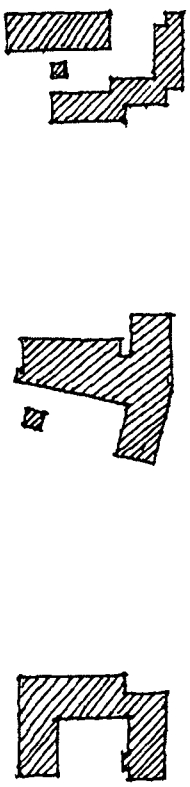


***Fig. 2.3:*** *Typical footprints for school facilities confined to an urban block.*
***Source:*** *P/A Plans (77).*

## ISSUES

The following issues address certain factors which influence the design of a public facility in the urban realm, specifically an educational institution as a type.

**Urban Constraints**

The design of a school within an urban context demands a degree of density that is not comparable to other school building types; there are usually fewer planning options with less buildable space.

Many urban schemes concentrate on the creation of exterior spaces. The courtyard is a common urban form, and from the beginning of the modern school, a recurring plan type. These courtyards are less dense with foliage and are used more intensely that those found in suburban settings. Without the luxury of expansive grounds, many urban schools seem to extract space from the block, as they strive to achieve both spatial identity and variety within their tight envelopes.

Clearly, most urban schools must build up rather than out. See Fig. 2.3 and 2.4 for examples of typical foot-print and section layouts for school designs within the urban context. The overall schemes are compact, not long and linear, for example, and the outdoor spaces are as important as the building forms themselves.

In general, urban constraints affect the form of any building within the city. However, a school, as a type, does not have any set formal requirements. While the first schools in America were school*houses*, each was in-vented. "No tradition of design and material guided the farmers who built them; some structures were almost square while others were rectangular, some in the North were heavily framed, some in the South were built of logs"

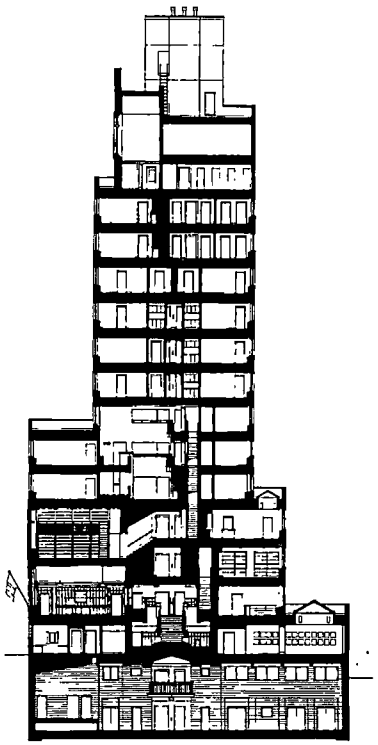


***Fig. 2.4:*** *St. Thomas Choir School in Manhattan is an example of an urban school facility making the most of its available vertical space.* ***Source:*** *P/A Plans (86).*

(Stilgoe, p. 246). Consequently, a variety of building forms has always been acceptable to American communities, as long as functional and site-specific requirements are met.

This is not to say that schools were always well-built. In the country, Stilgoe writes, one "could at once tell a district school house from any other building, by its being the worst-looking house in the neighborhood." This is partly due to the aforementioned tension between experiential education and "book farming". Where formal education was more accepted, more care was taken in the design and construction of the school facility. In fact, "Only in cities, where expanding commerce made clear the growing usefulness of wide learning, were schoolmasters respected and schoolhouses carefully built" (Stilgoe, p. 247). In any case, schoolhouses have always reflected people's assessment of formal education, whether urban or rural.

***Fig. 2.5:*** *Amish farmers raising a schoolhouse in central Pennsylvania.*
***Source:*** *Stilgoe (245).*

**The City as Classroom**

Downtown Knoxville has the potential for becoming a source for learning. If the city were used as a type of classroom, the site and the facility could serve to enrich one another. Part of the school's mission will be to show the students the many opportunities which can be gained by living directly in an urban environment. Becoming actively involved in the surrounding community will serve as part of the students' well-rounded education.

One of the problems with many schools now is that they are large conglomerates that are entirely self-sufficient; they even have their own busing systems. Since all building uses are provided for within this one complex, there are not many incentives for students to learn from and experience their surroundings. School complexes such as these therefore become entirely inward-turning, with no focus on the world around them. In *Between Silence and Light*, Louis Kahn notes "... after all, the bird outside, the person scurrying for shelter in the rain, the leaves falling from the tree, the clouds passing by, the sun penetrating: these are all great things. They are lessons in themselves."

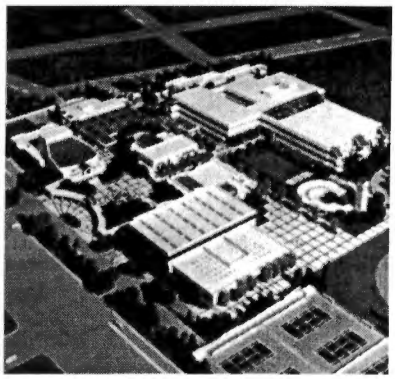


***Fig. 2.6:*** *Lynwood High School, located in Lynwood, CA, is an example of an inward-turning mega-encompassing school facility on a site of 300,000 square feet.* ***Source:*** *P/A Plans (95).*

One way of ensuring that students experience the city actively as users is to provide on site only the amenities which cannot be found elsewhere within the area. There are many existing structures within the downtown area which currently house activities relevant to a middle school curriculum. With this in mind, it is desirable to design a new structure which adds to the infrastructure already in place, without repetition of uses found just down the street. Taking advantage of the amenities the city provides assures that the pedagogical intent of engaging students with the city is met with the program. Additional benefits include the possibility of concentrating often much-needed square footage on new uses for the area. In turn, this could help keep the total square footage down and provide extra flexibility in the design, possibly pro-

viding more outdoor space and allowing better use of natural light for the entire structure.

### Arrangement of Spaces

Another way of getting as much use out of the available square footage as possible is to design in a way that provides flexibility. Spaces which can be used for a number of different functions and those that can be used at different times of the day are essential.

For example, programming and designing the facility so that the spaces which will be used mainly by the school (more private areas) are separated from those spaces which will always be open to the community at large (more public areas), allows the areas designated for daytime school use only to be locked for the evening, and the other areas left open for community use. This arrangement could also help to enforce the various functions of the facility and get better use of its spaces.

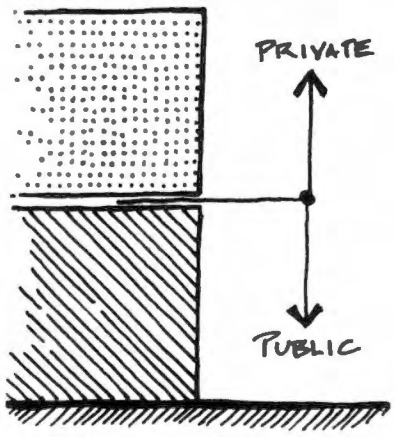



***Fig. 2.7:*** *Vertically separating public areas from more private areas is one way of encouraging use.*
***Source:*** *Author.*

### Safety and Security

There are a number of ways in which the design can help to create a safe environment for students, as well as convey a feeling of security. Because it is an urban location, this concern is certainly a very real one, and there are steps which can, and should, be taken to ensure the safety of all students. Not only should parents be assured of the safety of their children, the students themselves should feel secure in, around, and approaching the school. Pro-

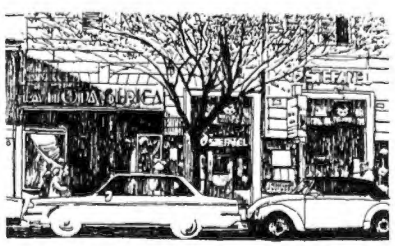


***Fig. 2.8:*** *Shops on the Via Cola di Rienzo, Rome, use glass to give a sense of transparency and activity.*
***Source:*** *Jacobs (285).*

viding a security desk at the main entrance is one way to help ensure safety. However, the building itself can be designed to promote safety if the administration or teacher offices are located to have visual access to entrances. Use of transparent materials, such as glass, can also serve as a deterrent to unwanted behavior because it provides the opportunity for more "eyes on the street." Activity in general tends to make an environment more safe for the same reason. And even the streets themselves play a part in providing safety; those streets that provide parallel parking, trees, sidewalks, and crosswalks are better at protecting pedestrians from fast-moving vehicles.

***Fig. 2.9:*** *Safe Street.*
***Source:*** *Kunstler, Home from Nowhere (128).*

## PROGRAM

The program for the educational facility will necessarily include spaces which serve the academic concerns of the facility, as well as those which serve both the school and the community. The following program was adapted from a program developed for a new magnet school in Knox County. The proposed structure will have a capacity of 500 students, averaging approximately 17 students per classroom. The total square footage equals roughly 75,000 square feet. There are four different types of on-site spaces described: user support spaces, gathering spaces, academic spaces, and building support spaces. See Fig. 2.10 for the program summary.

**A Magnet School for the Arts**
Based on School Capacity of 500 Students

**User Support Spaces**

| | |
|---|---|
| Main Lobby | 750 sf |
| Information/Security Desk | 50 sf |
| Toilets | 3,000 sf |
| Kitchen | 1,200 sf |
| Dining | 1,800 sf |
| Banquet | 1,200 sf |
| Storage | 1,000 sf |

**Community Gathering Spaces**

| | |
|---|---|
| Courtyard/Porch | 10,000 sf |

**Academic Spaces**

| | |
|---|---|
| Classrooms (30 @ 600 sf each) | 18,000 sf |
| Student Lounge (3 @ 500 sf each) | 1,500 sf |
| Teacher Offices (24 @ 100 sf each) | 2,400 sf |
| Administration | |
| Reception Area | 300 sf |
| Secretarial Area | 300 sf |
| Principal | 300 sf |
| Assistant Principals (2 @ 300 sf each) | 600 sf |
| Faculty Lounge | 600 sf |
| Conference Room | 500 sf |
| Mail Room | 100 sf |
| Bookkeeper | 150 sf |
| Attendance Office | 150 sf |
| Records Vault | 100 sf |
| Toilets | 250 sf |
| Guidance Counselor | 600 sf |
| Health/First Aid | 600 sf |
| Library | 5,000 sf |
| Gallery/Gallery Office | 1,800 sf |
| Bookstore | 500 sf |

**Building Support Spaces**

| | |
|---|---|
| Mechanical and Circulation Space | 22,000 sf |

| | |
|---|---|
| **Total** | 74,750 sf |

*Fig. 2.10: A summary of the programmatic requirements and spatial allocation.*

## ON-SITE SPACES

On-site spaces are those which are located on the actual building site – the rectangular lot (approx. 34,000 s.f.) designated as the 200 block of Gay Street and bordered by Summit Hill Avenue to the south and Vine Avenue to the north.

### User Support Spaces

The main lobby should be directly accessible from the main entrance on Gay Street, and should serve as the initial contact point for visitors. The lobby space should also include an elevator to serve the entire facility.

The information/security desk should be adjacent to or a part of the main lobby so that it is visibly accessible from the main entrance, as it will serve the dual function of monitoring visitors, as well as providing information.

The toilets should be centrally located on each floor to serve both the classrooms and community functions.

The kitchen should be adjacent to the main dining area, and should have direct access from the outside for delivery of produce and other supplies.

The dining area should incorporate both formal and informal spaces for dining. The formal space may even become a separate banquet area available for use by various groups. The informal space may become a type of commons for the students, and may include outdoor dining space as well, to provide diversity of experience.

**Community Gathering Spaces**

Gathering spaces consist of those spaces which will be utilized by the school, but are available to the community as well. There will necessarily be a large gathering space, including a stage area, to be used for a diverse array of community events, including: musical productions, book fairs, art shows, concerts, award and graduation ceremonies, and other special events. This area could also incorporate space for recreational activities, including basketball, informal games, and gym class activities.

**Academic Spaces**

Academic spaces include those spaces that are mainly for school use, and are available only to students, faculty, or administration during regular school hours. These spaces should be designed so that it is possible to access the areas open to the community and the academic areas separately.

The classrooms make up the bulk of the square footage allocated as academic. These should allow for flexibility of uses, although some may be designated as specialty or hands-on learning classrooms, such as art or dance. These specialized classrooms may even adjoin their teacher offices for easy accessibility.

The teacher offices should be readily accessible to students, and should therefore be located on classroom floors only. The teacher offices, along with the administrative offices, may also be placed at locations where such

supervisors can be visually connected with normally unsupervised gathering areas, providing greater safety and security.

The administrative offices should be available to parents and visitors of the school. They should necessarily be located on ground-level floors so that visitors and students are easily monitored.

The library should encompass circulation space, meeting space, reading areas, and study carrels, in addition to the stacks. There should also be library offices located near the library entrance. There should be only one main entrance/exit for control of library materials, although there may be additional emergency exits. The collection of this school library need not be extensive, as there are other comprehensive library sources located nearby. However, the integration of Knoxville's city library system with the proposed facility's library system could provide the opportunity for students to access a greater amount and variety of resources, as well as increase the likelihood that they become familiar with those downtown library sources, and in turn, the urban realm.

The library should also incorporate a bookstore that can be used by both students and faculty.

The gallery, or exhibit area, is to be used as documentation of student work throughout the school year. Its main purpose will be to assemble the students' diverse and individual creative work into cohesive exhibits. As it has the potential to draw visitors from the community at

large, it should be easily viewed by the public. The gallery office should be directly adjacent to the gallery in order to maintain and monitor the space.

Urban schools often use the roof of their building for additional recreational or educational space. It is likely that the roof of this facility be used in this manner as well.

**Building Support Spaces**

Building support spaces are those areas designated for circulation, mechanical, electrical, and building maintenance.

Spaces programmed for a changing calendar of use (such as the community spaces) generate the need for nearby storage of a diverse array of equipment needed for intermittent use, such as portable bleachers, chairs, tables, display units, or athletic equipment. This room should be directly adjacent to the large community gathering space to facilitate quick and efficient changes of use.

## OFF-SITE SPACES

There will be an allowance made for additional spaces, called off-site spaces, in the final design of the project. Off-site spaces are those areas or structures within the city, either proposed or existing, which will be available for use by students and faculty, but are not located within the confines of the school complex. Such areas or struc-

tures are therefore considered to be not part of the total square footage of the project. Possible off-site spaces include uses such as a theater-style auditorium, indoor gymnasium, additional outdoor recreational space, and office space.

Programming these off-site spaces contributes to diversity in allowing students to experience a variety of settings, rather than confining them to one building. In using the city as a classroom, they gain exposure to the historic and varied fabric of downtown, contributing to their diversity of education and experience.

## CHAPTER III: THE SITE

## THE 200 BLOCK OF GAY STREET

### DISCUSSION

*It is a decision coming from commonality that you choose a place out of all places to build, a place where others can also settle.*
–Louis I. Kahn

There are a number of requirements for an appropriate site for this project. The site must exist in the public realm, and more specifically, in an urban, historically diverse environment. It should be physically large enough to accommodate a school and community complex. It should also provide the opportunity for a distinct and identifiable neighborhood to develop along with the development of the school, and in doing so, have the capacity to support housing nearby for families with children. Most importantly, the site must possess potential as a place at which there exists multiple opportunities to create a stronger community whole from individual, diverse parts. A suitable site exists along Gay Street in downtown Knoxville, Tennessee (Fig. 3.2-3.4).

This site provides many opportunities to address diversity and congruency. Much of the appeal of this particular site is Gay Street itself. Gay Street is the most significant street in Knoxville's history, both socially and physically, as the city literally grew up around Gay Street. In the late 1800s, the downtown area was bounded by the Tennessee River to the south and the railroad tracks to the north, while the east and west boundaries were First Creek and Second Creek respectively (Fig. 3.1). However, Knoxville's original 64 lots were divided directly in

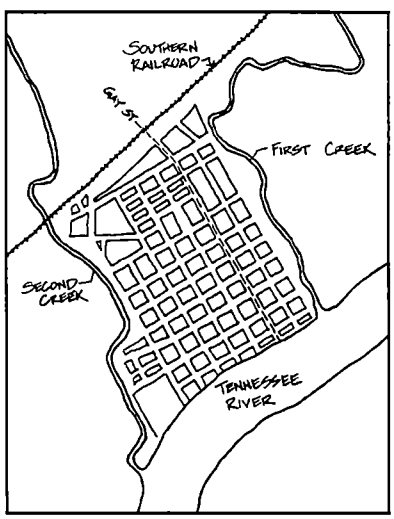



***Fig. 3.1:*** *Downtown Knoxville's boundaries.*
***Source:*** *Author.*

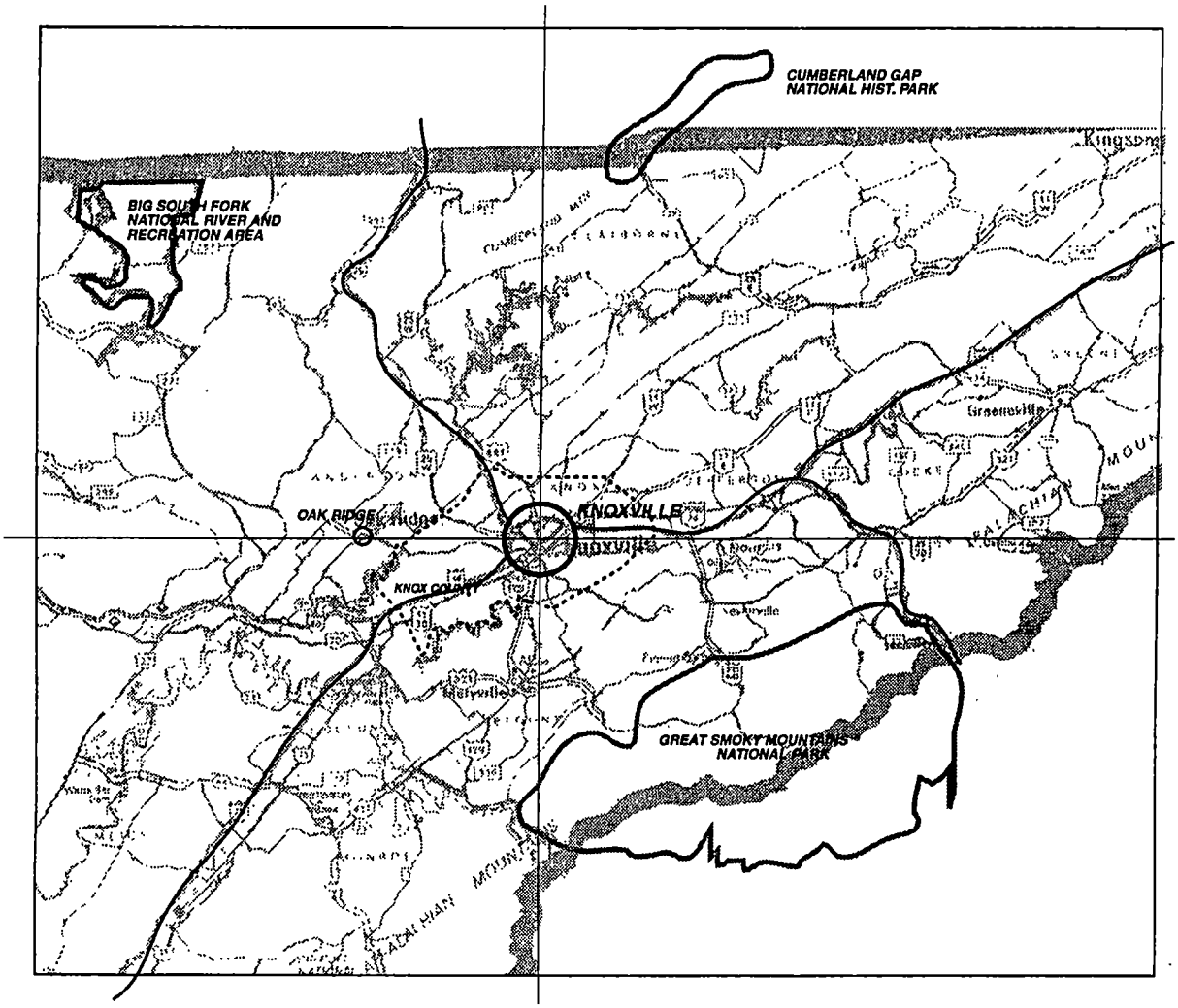



***Fig. 3.2:*** *Regional map.*
***Source:*** *Downtown Organization.*

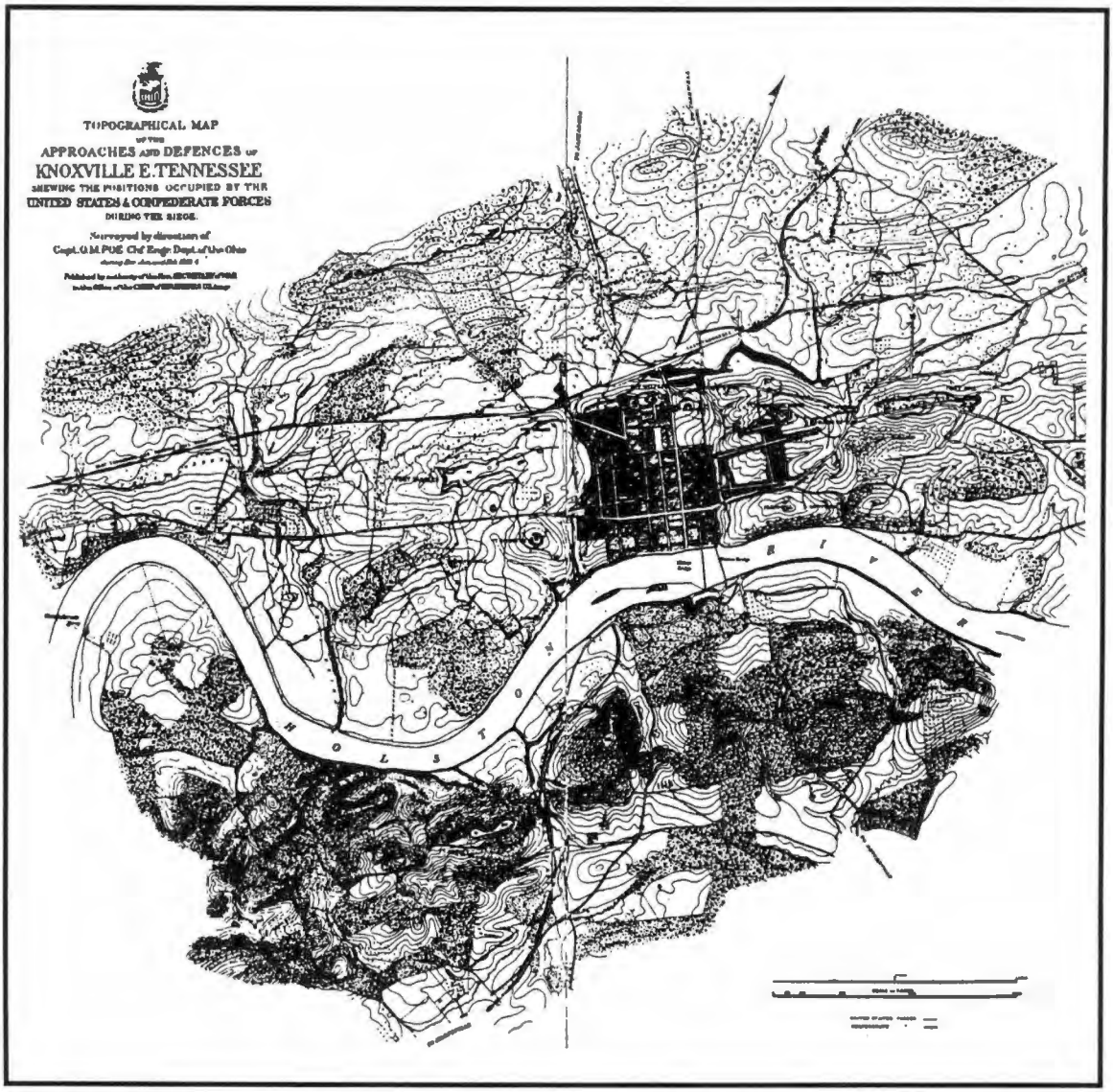



***Fig. 3.3:*** *The U.S. Army Corp of Engineers surveyed Knoxville in 1863-64 and prepared this map showing both topography and military fortifications.*
***Source:*** *Isenhour (34).*

***Fig. 3.4:*** *Current aerial photo of downtown Knoxville.*
***Source:*** *Knoxville/Knox County Metropolitan Planning Commission.*

the center by Gay Street, and Betsey Beeler Creekmore writes that "It was while Knoxville was serving as Tennessee's first capital (1796-1811) that Gay Street, running north from the river in the exact center of the growing town, became the undisputed 'main street'." See Fig. 3.8. During the late 1800s, Gay Street's location enabled it to serve as the major connector between the steamboat terminal on the riverfront and the booming Southern train station to the north. Gay Street literally and physically linked the river and the railroad, while at the same time figuratively and symbolically linking nature and technology. While humans have had a difficult time integrating nature and technology, in a way, Gay Street was able to use the strength of each to balance the two. Most importantly, Gay Street in turn became stronger, growing and thriving as a result. The downtown area became a hub of activity, with a diverse mix of people supporting a variety of building uses. Gay Street was not only the means, but the draw as well.

While Gay still connects the river and the railroad, it actually surpasses these boundaries, continuing south across the river and north past the tracks, and in doing so, acts as a connector between the downtown area and the surrounding communities. Gay Street is still the means by which individuals gather and become a collective whole within the downtown urban realm. For many reasons, it is appropriate that the proposed educational facility be located along what was once, and what can be again, a

***Fig. 3.5:*** *Looking north up Gay Street in the late 1800s.*
***Source:*** *Isenhour (93).*

***Fig. 3.6:*** *A similar view today.*
***Source:*** *Author.*

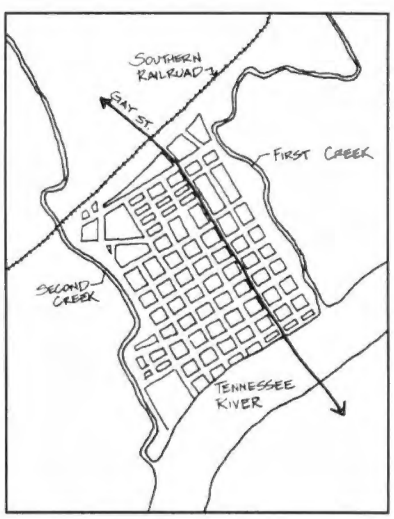



***Fig. 3.7:*** *Gay Street connects the downtown area with neighboring regions and communities.*
***Source:*** *Author.*

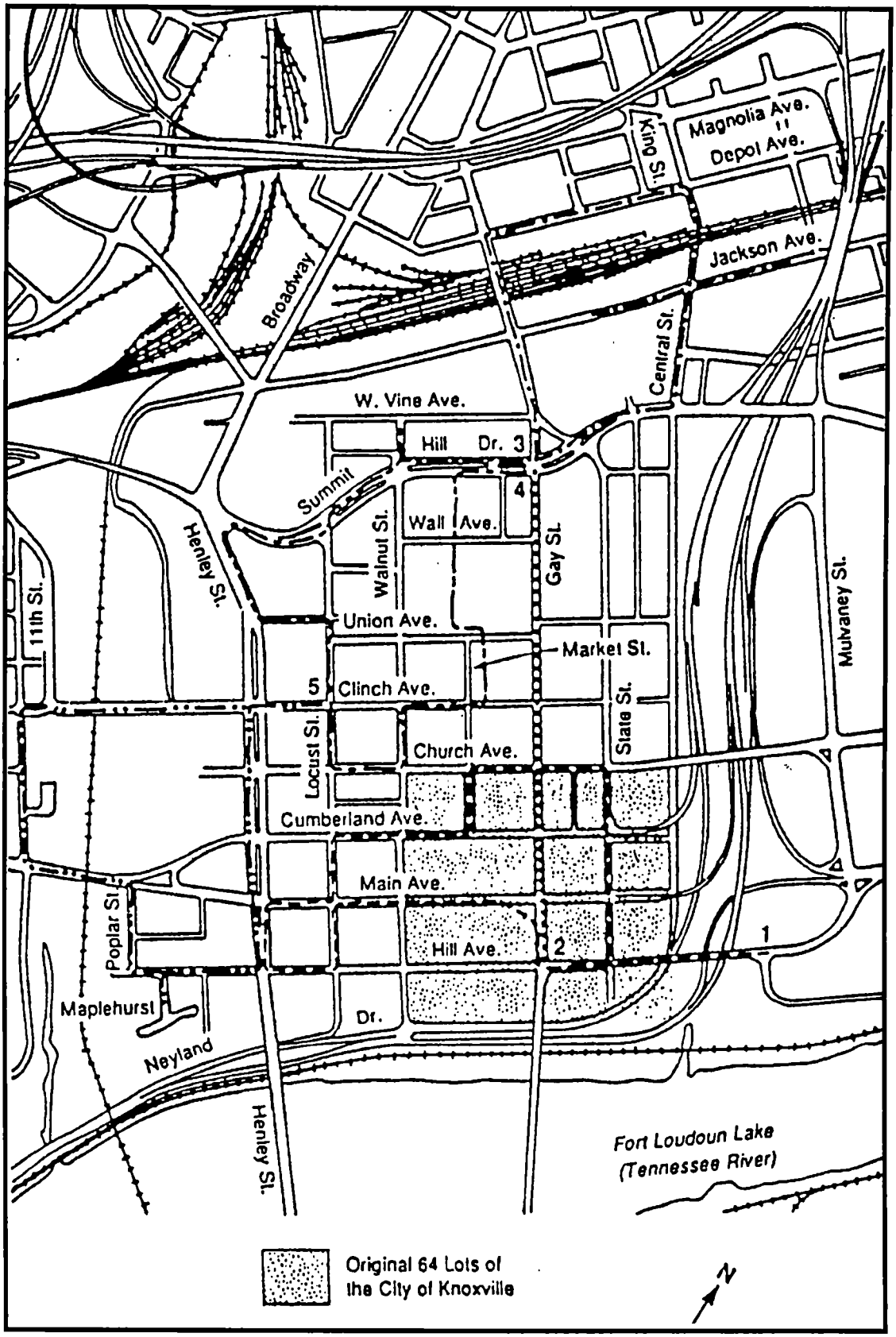



*Fig. 3.8: Map of Knoxville's original 64 lots.*
***Source:*** *Manning and Jamieson.*

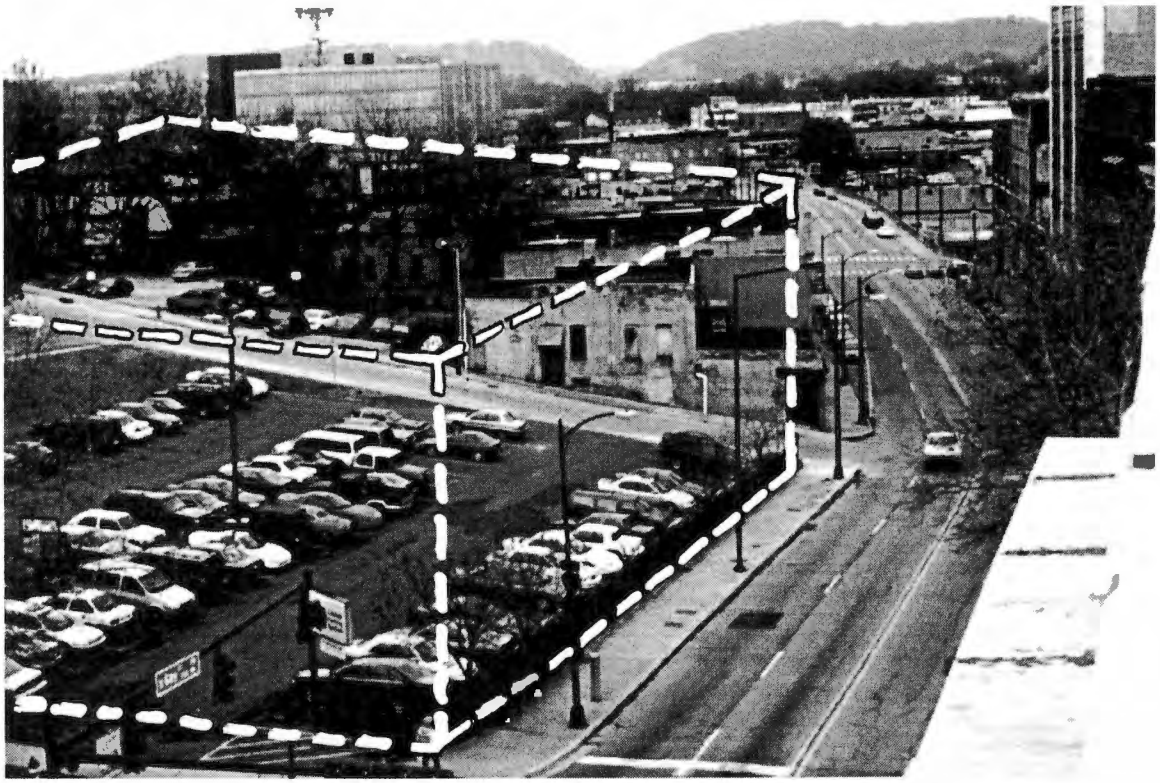


***Fig. 3.9:*** *Looking north up Gay Street.*
***Source:*** *Author.*

***Fig. 3.10:*** *Looking south down Gay Street.*
***Source:*** *Author.*

truly great street.

The physical requirements for the site of the facility itself are as follows: simply put, within the scale of the city, there must exist a large enough site on which a public facility of this nature can exist. Furthermore, the area should afford the possibility for the development of homes nearby. There are quite a few lots along Gay Street that could potentially serve as the setting for a public facility. However, the 200 block stands out in particular as an area with an abundance of dead space which could be better allocated for community functions within the city. See Fig. 3.14-3.15. The 200 block itself is currently being used as a pay parking lot, and is bordered by Summit Hill Drive to the south and by Vine Avenue to the north. Gay Street lies to the east and the Radisson Hotel occupies the lot to the west of the site. See Fig. 3.16-3.19.

Directly across Gay Street is a small triangular space masquerading as a public park. Unfortunately, because of its odd shape and small size, it does not currently serve as either a clearing or a draw to the area. It is ill-used, if at all; however, there is much potential for improvement. This area could become a usable, enjoyable green haven within the urban landscape, and serve as a real community park, not just leftover "dead" space (Fig. 3.20-3.22).

The 200 block of Gay Street comes closest to fulfilling the logistical requirements for the facility. Additionally, perhaps the most compelling reasons for choosing this particular site are the intersections which define it.

***Fig. 3.11:*** *Looking north along Gay Street with site to the left.*
***Source:*** *Author.*

***Fig. 3.12:*** *View of the site with TVA towers and Radisson Hotel in the background.*
***Source:*** *Author.*

***Fig. 3.13:*** *View of site from existing park across Gay Street.*
***Source:*** *Author.*

***Fig. 3.14:*** *Figure-ground of area surrounding site.*
***Source:*** *Author.*

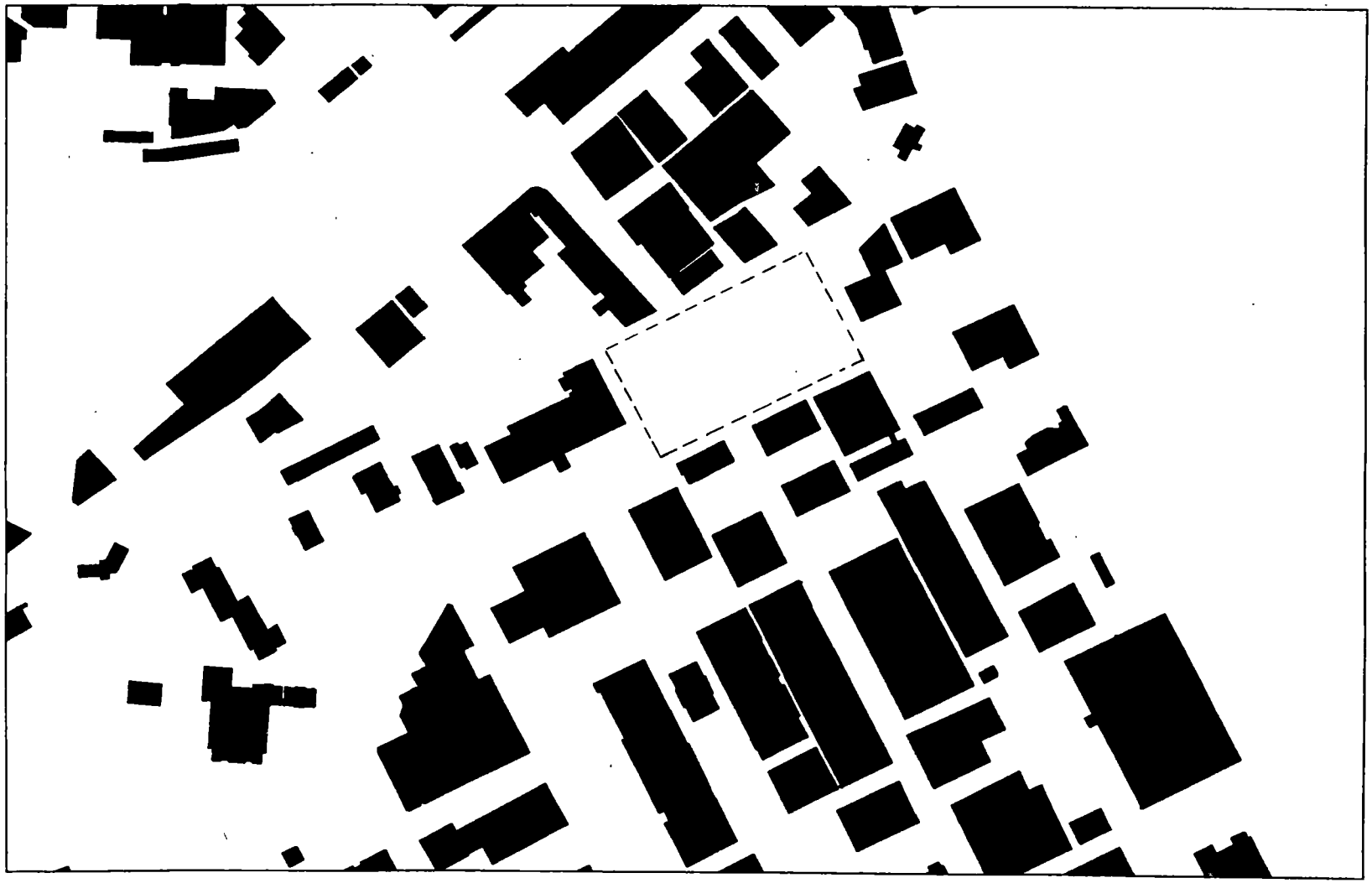


***Fig. 3.15:*** *Diagram showing buildings only indicates space available for the proposed facility.*
***Source:*** *Author.*

***Fig. 3.16:*** *Looking west at skyline of area surrounding site.*
***Source:*** *Author.*

***Fig. 3.17:*** *Looking north from site.*
***Source:*** *Author.*

***Fig. 3.18:*** *Looking south from site.*
***Source:*** *Author.*

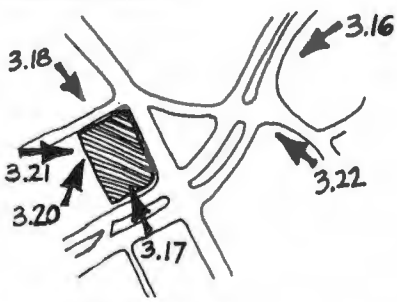



***Fig. 3.19:*** *Photo key.*
***Source:*** *Author.*

***Fig. 3.20:*** *Looking east from site toward existing park across Gay Street.*
***Source:*** *Author.*

***Fig. 3.21:*** *Existing park during winter.*
***Source:*** *Author.*

***Fig. 3.22:*** *Intersection of Summit Hill and State Street shows irregular shape and size of existing park, as well as excessive residual space.*
***Source:*** *Author.*

The first significant intersection is the point at which Gay Street, the original "main street" of downtown Knoxville, meets Summit Hill Avenue, possibly the current "main street." Summit Hill's route has changed from its original placement, and its name has changed as well. In 1917, Summit Hill was called Commerce Avenue, and it followed the block structure set up from the alignment of Knoxville's original 64 lots, reflecting the path of the river. The Sanborn map from 1903 (Fig. 3.25) shows the smaller block structure and interconnecting pattern of streets and alleys that provide multiple vehicular routes.

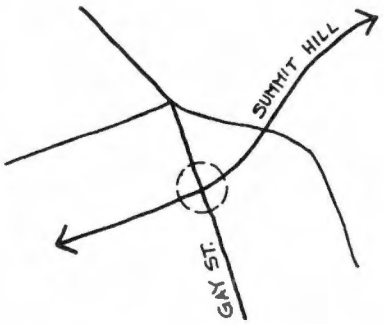



***Fig. 3.23:*** *Intersection of Gay Street and Summit Hill Avenue.*
***Source:*** *Author.*

Unlike Gay Street, Summit Hill is now a major entry to the city. It is a bypass route for moving automobiles as quickly as possible through the downtown area, providing access on either end to the major interstates, I-40 and I-75. It therefore breaks from the grid, cutting through the center of what used to be an ordered street network. Both Gay Street and Summit Hill are very heavily trafficked, and this intersection serves as a major separation along Gay. Whereas Gay Street has always been Knoxville's main street, Summit Hill's vehicular activity rivals Gay Street's today. As a boulevard, it is much wider than Gay Street. In fact, it is so wide that it is not easy for pedestrians to cross, and ultimately serves as a separator between the northern and southern ends of Gay Street. Summit Hill is actually a suburban street form, standing alien and unfamiliar in relation to the city grid form. In removing the original street network, accessibility and

***Fig. 3.24:*** *Intersection of Gay Street and Summit Hill Avenue; view toward site.*
***Source:*** *Author.*

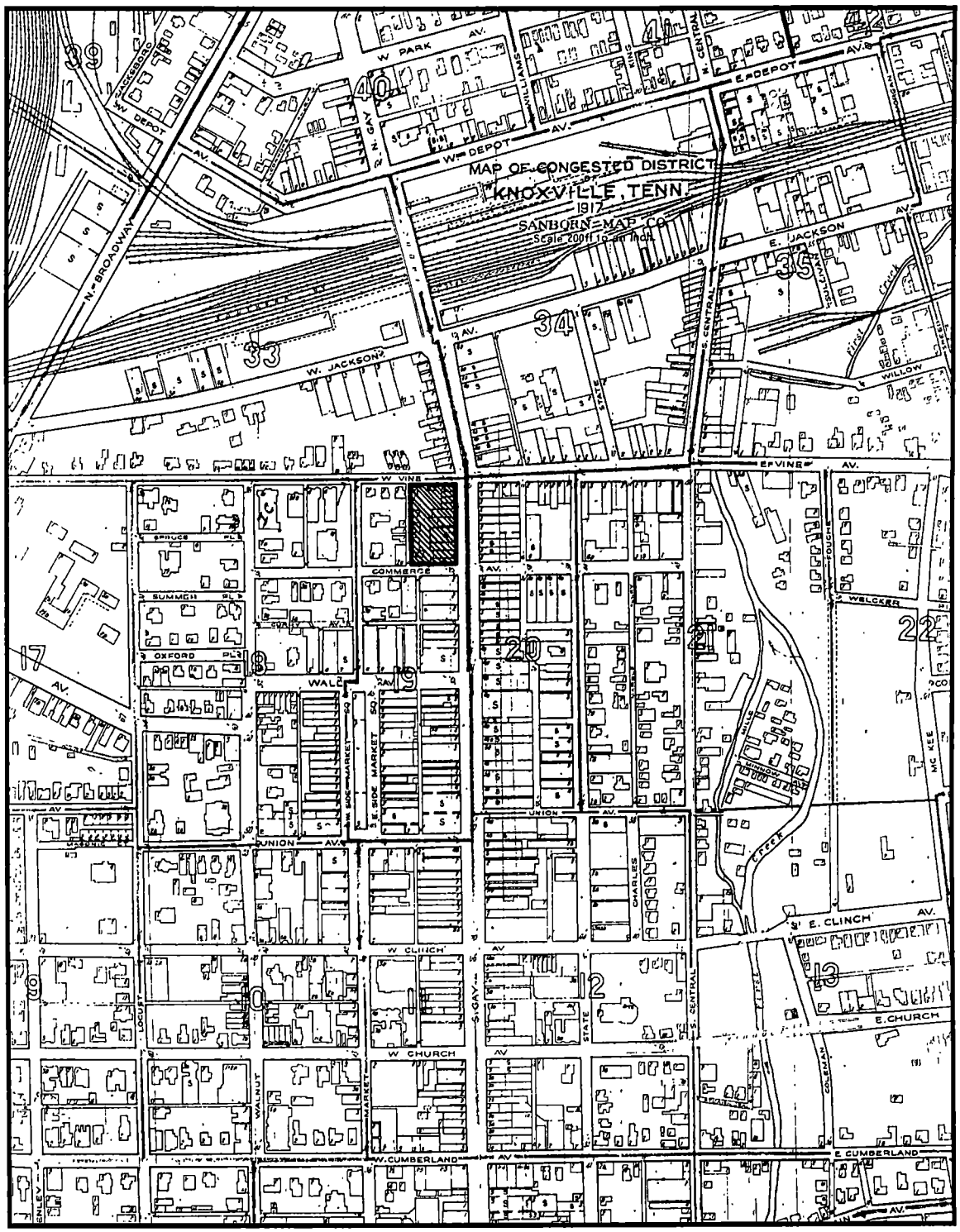



***Fig. 3.25:*** *Street network of area surrounding site in 1917.*
***Source:*** *The Sanborn Map Company, McClung Collection.*

congruency were removed as well. Nonetheless, the intersection of these two streets is a place of distinction within the city.

The intersection of Gay Street and Vine Avenue is the second significant intersection. At the point that these two meet, Gay Street's direction changes. This is because the block structure or grid system set up in reference to the river meets a second street grid. This second grid reflects the path of the train tracks which run at an angle to the river's grid. The north end of Gay Street, therefore, while maintaining the look and feel of the rest of Gay Street, is laid out on a separate grid from Vine Avenue to Jackson Avenue (See Fig. 3.26). At the intersection of Gay Street and Vine Avenue, the two grids intersect, creating an opportunity for the design of the facility to pull from each grid. Linking these two grids represents the union of the historic downtown (original grid) with the proposed neighborhood (second grid). In doing so, there is potential for the diverse attributes of each to come together, bringing tradition and innovation, new and old, together to form a more comprehensive design.

This site occupies a very special place in the city, first because of its opportunity to simultaneously contribute to and draw from Gay Street's vibrant history, and also because it lies between two very significant intersections. The 200 block is like no other site in the downtown area; it is arguably irreplaceable as the setting for accommodating a facility informed by diversity and congruency.

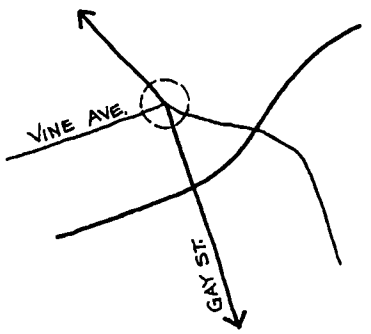



***Fig. 3.26:*** *Intersection of Vine Avenue and Gay Street.*
***Source:*** *Author.*

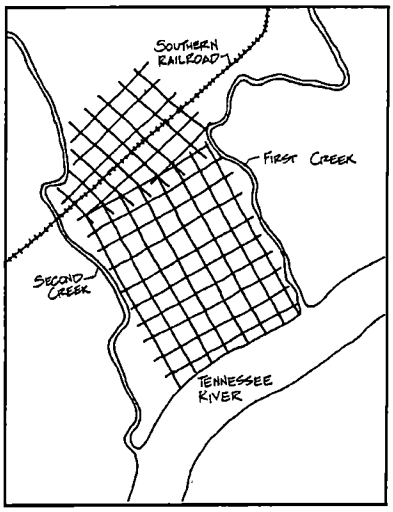



***Fig. 3.27:*** *The original city grid is aligned with the river, while the second city grid is aligned with the railroad.*
***Source:*** *Author.*

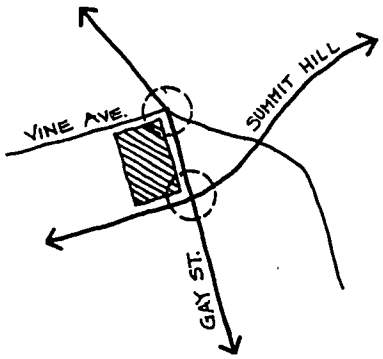



***Fig. 3.28:*** *The site lies between two significant intersections.*
***Source:*** *Author.*

## NEIGHBORHOOD REQUIREMENTS

Part of the assumption of this project is that the chosen site will provide the opportunity for a distinct neighborhood community to develop within the urban environment. Todd Bressi states in *The New Urbanism* that planning and design concepts for neighborhoods are based on one main principle: that the importance of public values over private values must be asserted in all community design. Specifically, Andres Duany and Elizabeth Plater-Zyberk define neighborhoods as "urbanized areas with a balanced mix of human activity." In addition, they suggest that the physical composition of a neighborhood be regulated by five distinct principles. Below, these principles are used to assess the current potential of the 200 block and its surroundings, and following, the action(s) required in order for this area to achieve neighborhood status are defined.

### Center and Edge

The first principle states that a neighborhood has a center and an edge. Currently, the proposed site lies near the edges of three separate areas identified by The Downtown Organization as the Old City, the Business Core, and Summit Hill (See Fig. 3.29). The location of the 200 block has the advantage of being able to draw from these very distinctive surrounding areas to potentially form one cohesive neighborhood center. As the neighborhood de-

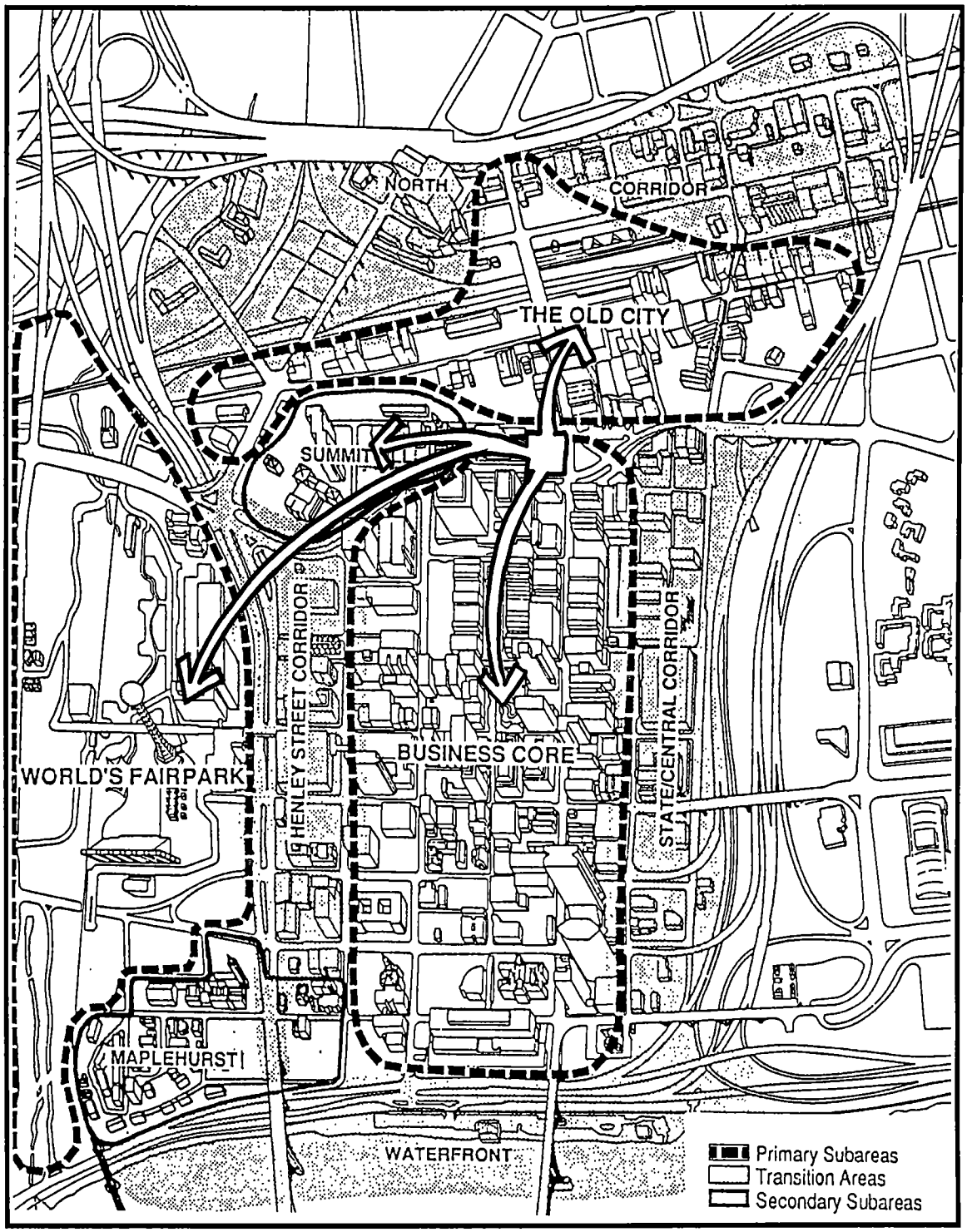



***Fig. 3.29:*** *Proximity of proposed site to sub-areas in downtown Knoxville, as identified by The Downtown Plan.*
***Source:*** *Knoxville/Knox County Metropolitan Planning Commission.*

velops, so would its boundaries, forming a new identifiable neighborhood with center and edge. Furthermore, a facility such as the proposed school could act as a catalyst for the development of homes and the creation of neighborhoods near this area. The Old City is a generally affluent area, and many of the residents are young professionals who may have a need for such an educational complex in the future. Additional residential growth could occur in the area north of the Old City. There are also a number of buildings along Gay Street which are being remodeled for residential use, including the Sterchi Building, and these would be extremely convenient to the center and the park. Likewise, these buildings would benefit greatly from such an incentive for people to form a real neighborhood within this downtown area.

***Fig. 3.30:*** *Buildings along the east side of Gay Street's north end.*
***Source:*** *Author.*

**Size**

The second principle states that neighborhood edges are defined by a 1/4 mile radius from center to edge. This distance is defined as that which a pedestrian can walk easily at one stretch, usually within five minutes. From our proposed center, the defined neighborhood edges include easy walking distance to Market Square and the Old City (Fig. 3.32).

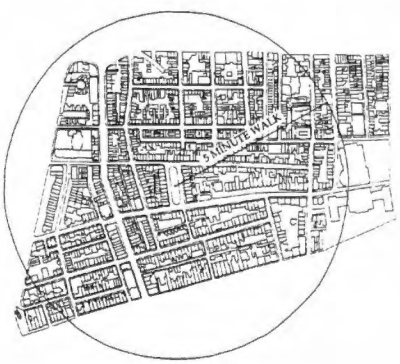



***Fig. 3.31:*** *A five-minute walk from edge to center defines the area of this city neighborhood, Beacon Hill in Boston. This amounts roughly to an area of half a square mile*
***Source:*** *Kunstler,* Home from Nowhere *(116).*

**Mix of Activities**

The proposed area already has a variety of building uses and activities within a relatively small zone, and comes

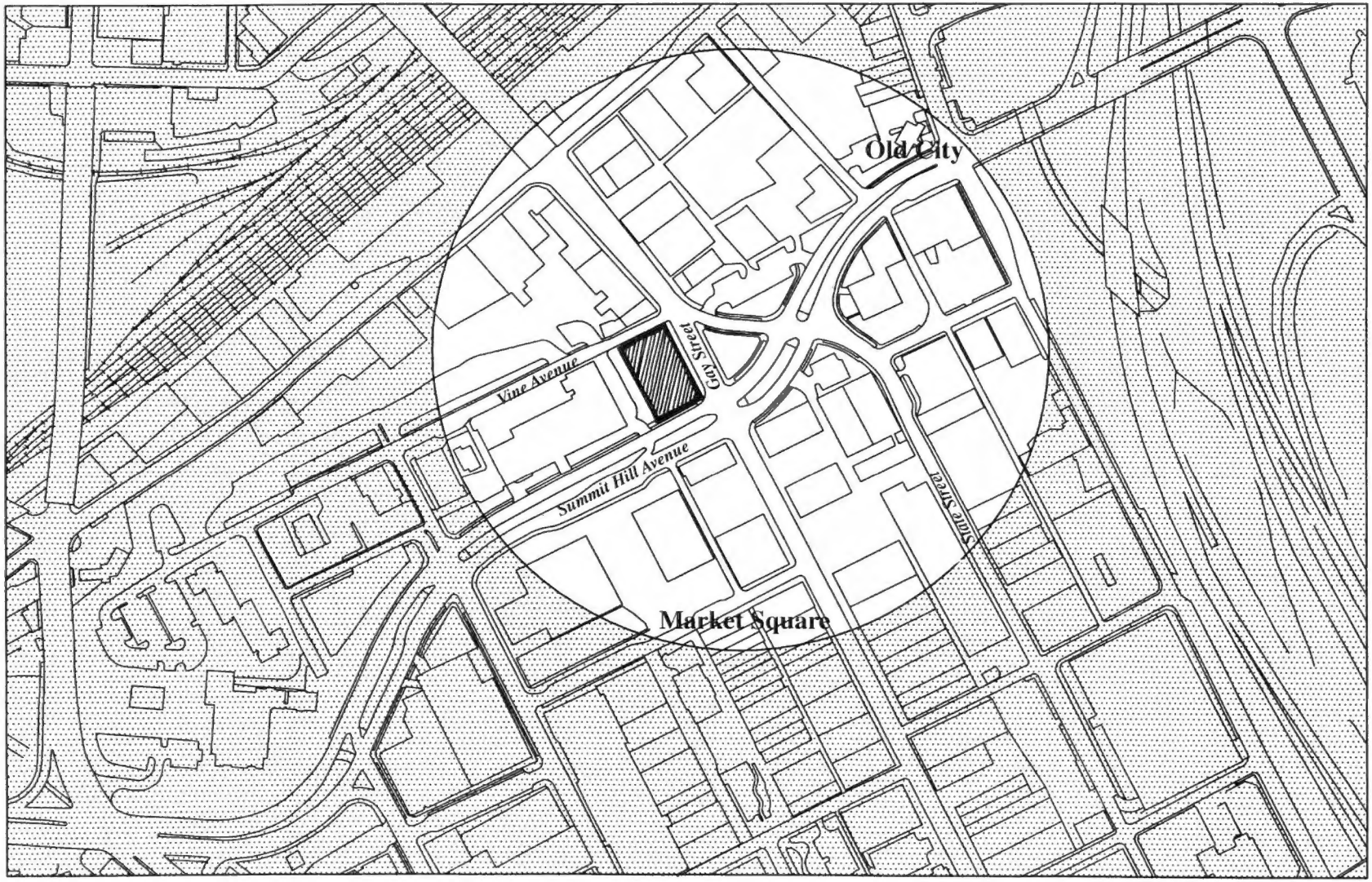



***Fig. 3.32:*** *Many of the surrounding amenities are comfortably accessible within a five-minute walk.*
***Source:*** *Author.*

close to fulfilling the requirement for the third principle, which states that a neighborhood has a balanced mix of activities – dwelling, shopping, working, schooling, worshipping, and recreating. Historically, this area has accommodated diverse building uses, supporting both the individual and the collective. "In 1903, downtown Knoxville was a fascinating collection of buildings...And although Gay Street was well established as the business area, the great number of houses shows how the commercial and the domestic existed at one time in agreeable proximity" (MacArthur, p. 75). See Fig. 3.35.

In particular, the north end of Gay Street (from the Southern train station to Knoxville's central business district), including the proposed site, "was often a visitor's first sight of Knoxville during the Victorian era. Perhaps because of its excessive amount of activity, the north end of Gay Street became a diverse, lively spot unlike any other in Tennessee. From the late 1800s through the mid-20th century, the north end remained very culturally diverse. At various times it was home to Knoxville's Jewish community, the Catholic community, the black community, the wealthy business community, and the white working-class community; in the mid-20th century, it was home to all of these concurrently" (*MetroPulse*).

***Fig. 3.33:*** *Southern railroad tracks in the late 1800s.*
***Source:*** *Isenhour (195).*

***Fig. 3.34:*** *Buildings along the west side of Gay Street's north end.*
***Source:*** *Author.*

Today, the area still provides a diverse mix of activities, including dwelling, shopping, working, and worshipping. Market Square and the Old City are in close proximity, and provide a mixture of shopping, dwelling, and

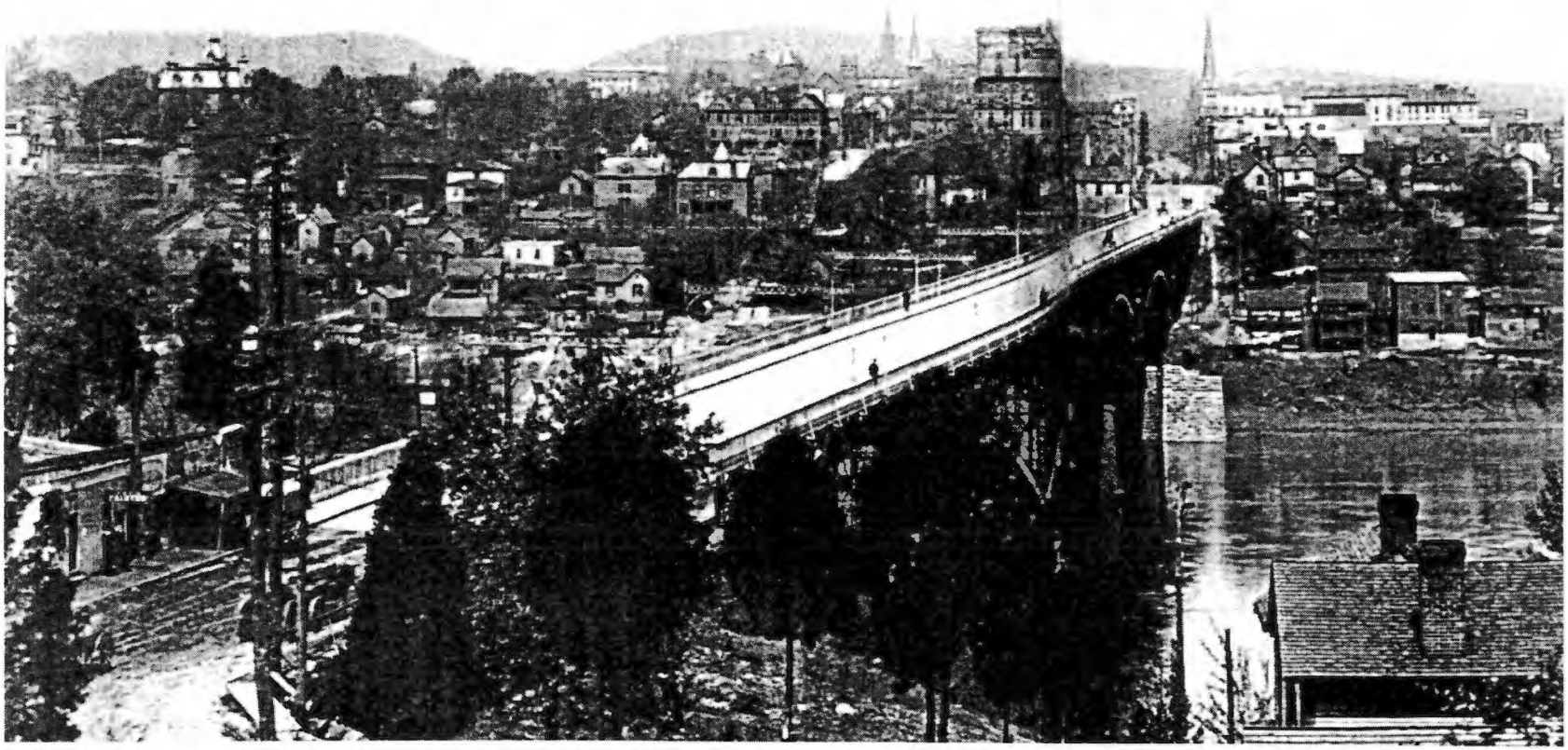


***Fig. 3.35:*** *In 1903 downtown Knoxville was a fascinating collection of buildings.*
***Source:*** *Isenhour (74-75).*

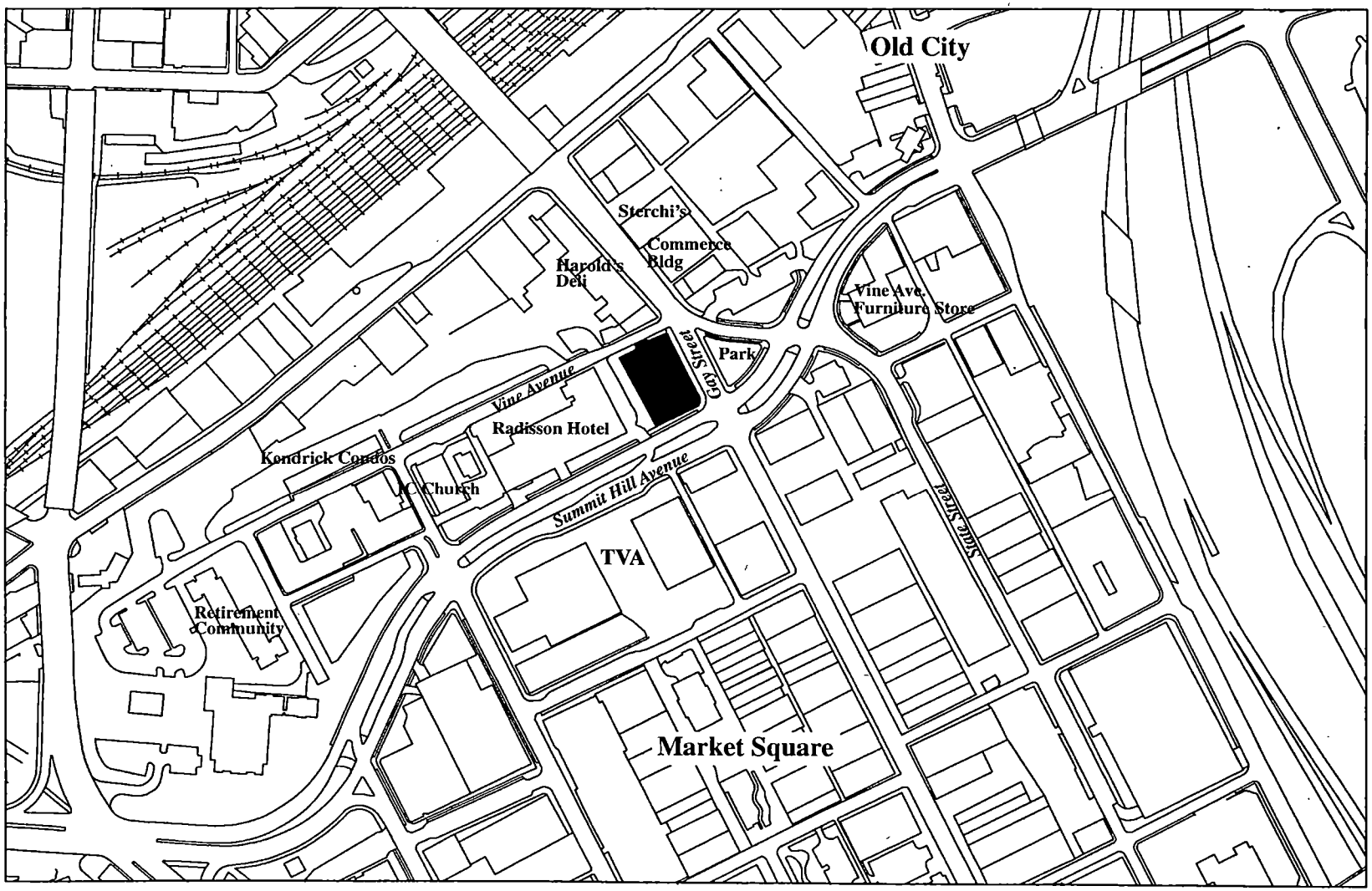



***Fig. 3.36:*** *Building uses and landmarks of area surrounding site.*
***Source:*** *Author.*

working. Harold's Deli, just north of the site along Gay, is a Knoxville landmark. The TVA towers are located across Summit Hill, and further west along Vine Avenue are Immaculate Conception Catholic church, residential units for the elderly, and Knoxville developer Kristopher Kendrick's condominiums. These elements which surround the site all contribute to the diversity necessary for the successful creation of a neighborhood.

There are, however, two important activities not present within the area: schooling and recreating. In order for a neighborhood area to survive and prosper, all of these components should be present, as they play an important part in sustaining the area. If there exists a variety of building uses, then a variety of people with diverse backgrounds will most likely be drawn to the area, thereby sustaining the businesses. In *Great Streets*, Allan Jacobs writes, "Diverse uses enliven the area and the street, bring different people for different purposes, help to keep it going. The Via dei Giubbonari, in addition to its stores and apartments, has a school, offices, headquarters of a political party, a movie house, two churches, and restaurants on a street that is not very long. The Paseo de Gracia, Boulevard Saint-Michel, the Ramblas, the Grand Canal, and the Cours Mirabeau have diverse uses and are situated in areas of variety as well. On most of these streets, there exist many different kinds of buildings designed for their uses - cinemas, theaters, or schools - or for earlier uses no longer present but adapted to present occupants -

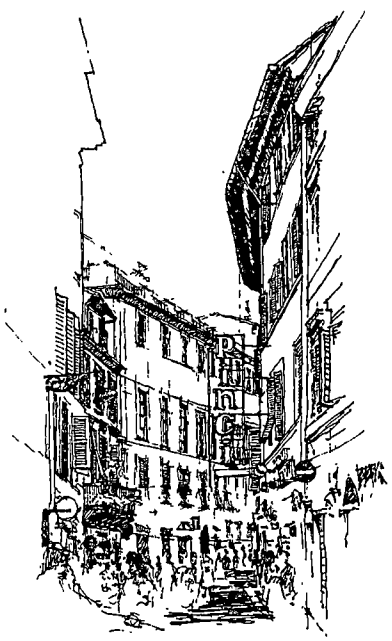
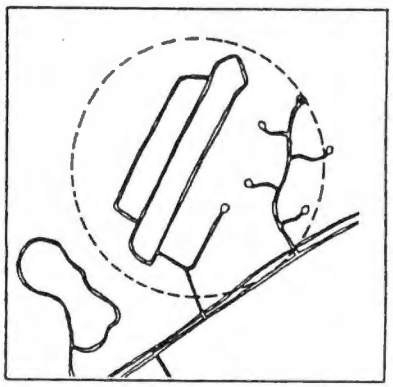


***Fig. 3.37:*** *Via dei Giubbonari.*
***Source:*** *Jacobs (cover).*

movie houses that became restaurants or stores - all of which add to interest and activity. Variety, activity, liveliness of physical place are all likely effects of diversity of uses." The more diverse, the more self-sustaining, and the more enjoyable for people to experience.

The north end of Knoxville's Gay Street has great potential for recovering the lively, diverse atmosphere it possessed in the past; providing a complete mix of activities is an important step toward that end.



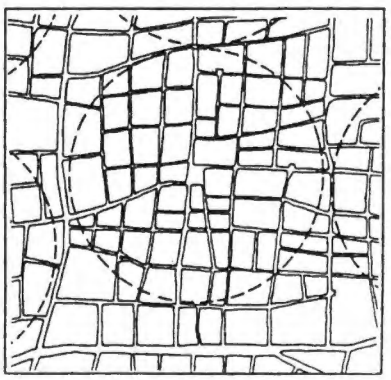


***Fig. 3.38:*** *A grid of streets (lower diagram) demonstrates multiple routes that provide choices and diffuse traffic congestion, instead of collector streets, such as arterial and cul-de-sacs (upper diagram).*
***Source:*** *Kunstler,* Home from Nowhere *(120).*

**Street Network**

The fourth principle is important especially to a city like Knoxville. It states that a neighborhood structures building sites and traffic on a fine network of interconnecting streets.

As discussed earlier, Summit Hill's placement destroyed the smaller, interconnected street grid previously in place. In fact, the success of the recommendations for this area relies heavily on the reinstatement of the regular grid of streets.

The proposed street network remedies three of the most problematic site concerns: the current street network is geared toward moving automobiles as quickly as possible straight through the center of the city, which does little to accommodate or encourage pedestrian traffic or a variety of other modes of transportation. Thus, the choices are limited, in terms of both mode of transportation and route. The proposed street network provides for *both* pe-

***Fig. 3.39:*** *Looking east at intersection of Summit Hill Avenue and Gay Street.*
***Source:*** *Author.*

destrian comfort and vehicular movement. Rerouting traffic onto connector streets would slow traffic and encourage a variety of transportation modes, perhaps providing greater independence for neighborhood inhabitants. Second, only two streets in the current street network provide major circulation, Gay Street and Summit Hill Avenue, and the others are used less frequently. The proposed plan consists of a network of interconnecting streets which provide a number of available choices for driving downtown. Furthermore, diminishing Summit Hill's scale would provide safer crossings for pedestrians, linking the isolated north edge of downtown with areas to the south. Finally, there is currently a lack of neighborhood focus, and I believe that the proposed block structure and street network would encourage identity and give one a sense of arrival as the area is approached. See Figures 3.42 and 3.43 for existing and proposed street networks.

***Fig. 3.40:*** *Looking west up Summit Hill Avenue with site to the right.*
***Source:*** *Author.*

**Public Space**

The proposed plan also provides an opportunity for the incorporation of much-needed green space. This public area would be available for use by the entire community within the urban realm. In providing for a public gathering space, the proposed block structure satisfies the fifth principle, which states that the neighborhood gives priority to public space and to the appropriate location of civic buildings. The proposed design affirms that the city begins with the public realm, as this public space is one of

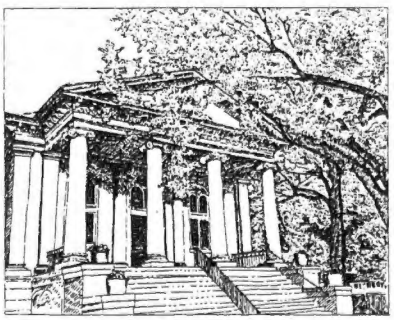


***Fig. 3.41:*** *Public buildings deserve architectural embellishment in order to express the dignity of the institutions they house and to honor the public realm of the street. They also deserve important sites.*
***Source:*** *Kunstler,* Home from Nowhere *(122).*

***Fig. 3.42:*** *Existing street network and block structure.*
***Source:*** *Author.*

***Fig. 3.43:*** *Proposed street network and block structure.*
***Source:*** *Author.*

the first thing one sees arriving into the city on Summit Hill. It sets the precedence for other areas and entries to the city.

Public spaces are intended to create a sense of identity and distinctiveness that makes the neighborhood special for its users. In fact, the proposed public green space is now surrounded with a variety of uses, including civic, living, commercial, office, and park. It is diverse yet congruent, and as a microcosm of the neighborhood, reinforces the importance of public space. Peter Calthorpe maintains, "Public spaces should provide the fundamental order of our communities and set the limit to our private domain. Our public buildings should be proudly located to add quality, identity, and focus to the fabric of our everyday world." And in fact, this plan dramatically demonstrates the allocation of public over private values; rerouting Summit Hill removes the priority given to individuals rather than the collective, which are better served by the availability of choices provided in the proposed network.

Part of this structure necessitates that civic buildings be placed in appropriate locations. I believe the proposed site is such a location for a number of reasons. First, it can be approached from all four sides, something which its storefront neighbors cannot do. It is appropriate for a public facility to encompass a space like the 200 block. Summit Hill and Vine could serve as small breaks in the long line of buildings down Gay Street, therefore allow-

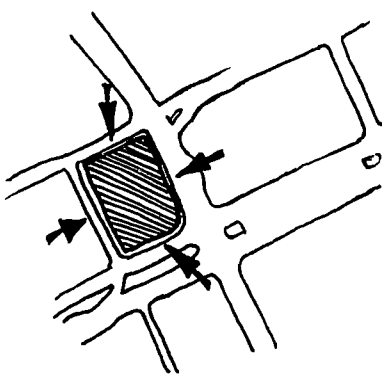


***Fig. 3.44:*** *The proposed site allows the civic building to be approached from all four sides.*
***Source:*** *Author.*

ing the facility to stand on its own, yet still participate as one of the elements which makes Gay Street the vibrant and diverse place it is. This simultaneous position is another illustration of tension which creates the opportunity for something special here; the opportunity for edge conditions to flourish are numerous. The site naturally lends itself toward accentuating a public facility.

The existing topography also helps establish the site's magnitude. The site is very close to the highest point in downtown Knoxville, and looks out over the green space. This configuration is similar to the placement of Thomas Jefferson's library rotunda on the UVA campus, which sits at the head of the large open green space, increasing its importance within the scheme. The added benefits of this particular site, however, are that "topography and slope help by increasing views and adding drama" (Jacobs, p. 305).

Additionally, there is opportunity for another civic building, perhaps as part of the Justice Center, to be placed at the other end of the public green space. While this site is currently occupied by the Vine Avenue Furniture Company, the possibility exists that a civic building could occupy this site in the future. While the design of such a facility is beyond the scope of this project, these two facilities could serve as monuments on either end of the green space, acting as focal points and identifying the neighborhood. This way, the green space could be better defined by the buildings which form a hard edge around

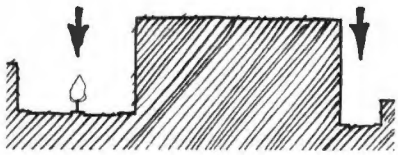


***Fig. 3.45:*** *Summit Hill and Vine Avenue serve as small breaks in the long line of buildings down Gay Street.*
***Source:*** *Author.*

***Fig. 3.46:*** *The library rotunda on the University of Virginia campus is the dominant figure at the head of the Lawn.*
***Source:*** *Smith (597).*

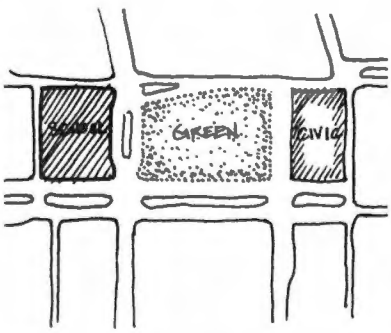



***Fig. 3.47:*** *Proposed configuration for civic buildings and green space.*
***Source:*** *Author.*

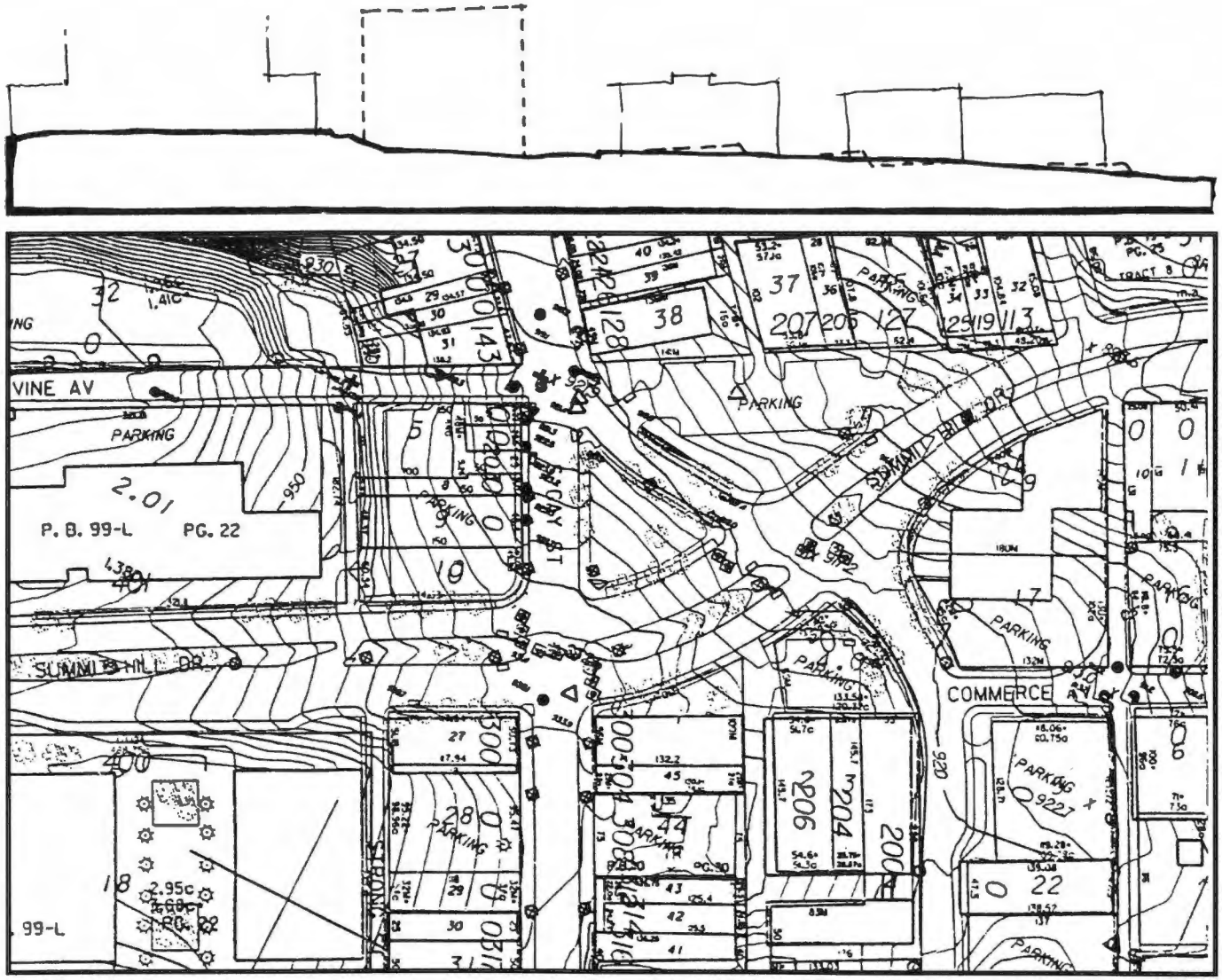



***Fig. 3.48:*** *Topography map of site. At two-foot intervals, the site slopes roughly 20' from the west toward Gay Street.*
***Source:*** *Knoxville Geographic Information Survey Sheet #650800.*

it, as they would emphasize its status as a clearing within the city.

## SUMMARY

Because of its many amenities, the 200 block of Gay Street seems a logical location for a facility which can be used by the community at large. The changes in street network and allocation of former dead space proposed here are positive steps in remedying the few problems which do exist. This site clearly exhibits potential for both social and physical diversity to exist in conjunction, increasing the effectiveness of its entirety.

Eventually, this area could provide a place of identity, life and civic value around which the future of a truly urban, and urbane, city may be realized. And although the revitalization process has already begun, this educational facility could be the driving force necessary to help continue the creation of a usable and safe, livable downtown neighborhood.

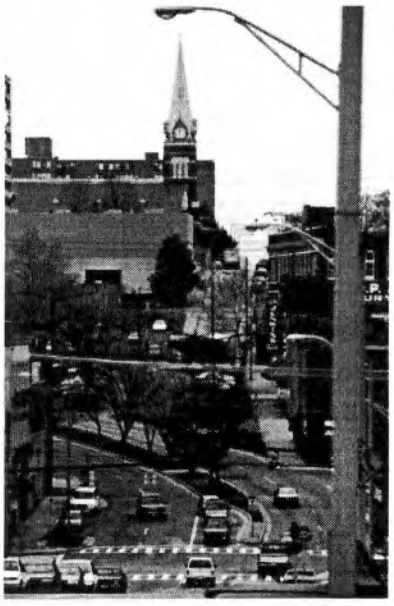


***Fig. 3.49:*** *View toward site from Summit Hill viaduct.*
***Source:*** *Author.*

# CHAPTER IV: THE DESIGN

## CREATING THE PHYSICAL REALITY

### BUILDING DESIGN

*A thing long expected*
*takes the form of the unexpected*
*when at last it comes.*
–Mark Twain

There are three major components to the building design: the academic core, the library, and the court. This parti incorporates the two grids of the downtown area, reflecting orientations of both the river and the railroad. Linking the two grids reflects the diversity of downtown Knoxville's history, as the proposed design utilizes elements from each area to compose a cohesive project.

The U-shaped structure serves as the academic core and houses the classrooms, as the two academic wings are linked by the service core and grand staircase. This part of the structure is aligned with the river, and therefore with most of the original downtown structures.

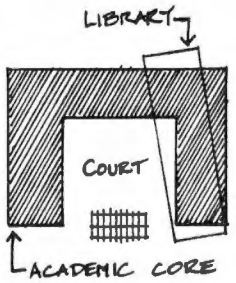



***Fig. 4.1:*** *Basic parti.*
***Source:*** *Author.*

The library's alignment, in contrast to the main structure, reflects the angle of the railroad. This angle is important for a number of reasons. First, it designates the library as a special space within the structure, which is appropriate because the library serves as the source for knowledge and gives perspective to historical thinking. In addition, the angle helps to visually connect the new facility with those buildings at Gay Street's north end as one turns the corner of Vine, giving an easy reference point with these neighboring structures. (The balconies facing Summit Hill echo this intent as well.) The library's location also reflects the placement and angle of the site

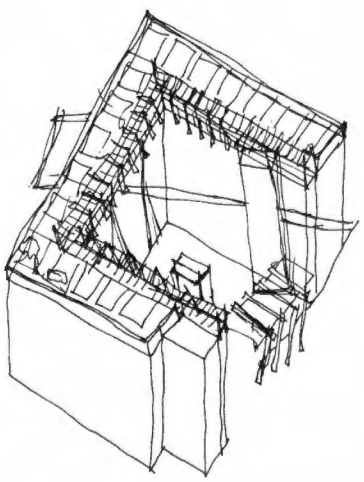


***Fig. 4.2:*** *Early sketch of parti.*
***Source:*** *Author.*

of Knoxville's first public library, located diagonally across from the proposed location on the northeast corner of Vine and Gay. Historically, this has been an appropriate location for a public learning facility. In addition, the library's penetration of either end of the main structure indicates the need for and the balance between a student's choice of experiential learning and theoretical learning. As one moves through the library space, it is necessary to periodically move beyond the envelope of the main structure, confronting or contemplating the outside world, before moving back in.

The classroom wings make up the school's "arms," forming a courtyard between them which provides shelter on three sides and openness above. Its form creates an appropriate and enjoyable space for humans to gather and interact, with the flexibility to accommodate either large or small groups, in both formal and informal configurations. During school hours, the courtyard can serve as space for all-school assemblies, basketball games, or just a place to gather with friends and eat lunch. Outside of school hours, the courtyard could host a diverse array of special exhibits, book fairs, or community sports leagues. In essence, it is an outdoor room, with the opportunity to play host to numerous activities in a comfortable setting. See Fig. 4.7.

Within the building design, there is both vertical layering and horizontal layering. Vertically, the lower floors are generally given over to the public, accommodating

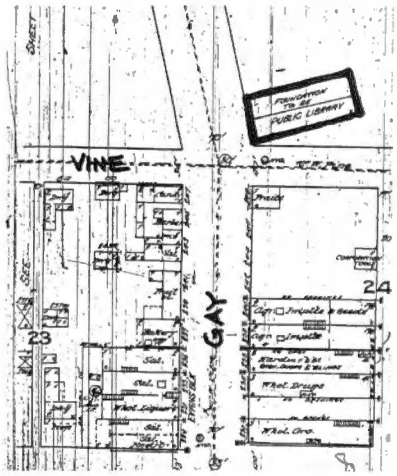



***Fig. 4.3:*** *1884 Sanborn map illustrates historical precedent for the library's placement and angle.*
***Source:*** *The Sanborn map company, McClung collection.*

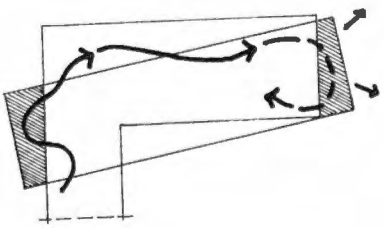


***Fig. 4.4:*** *The library protrudes from the envelope of the main structure at either end, allowing its users to periodically confront the outside world.*
***Source:*** *Author.*

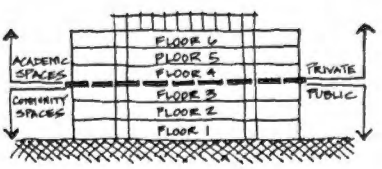



***Fig. 4.5:*** *Building section diagram of academic/community spaces and public/private.*
***Source:*** *Author.*

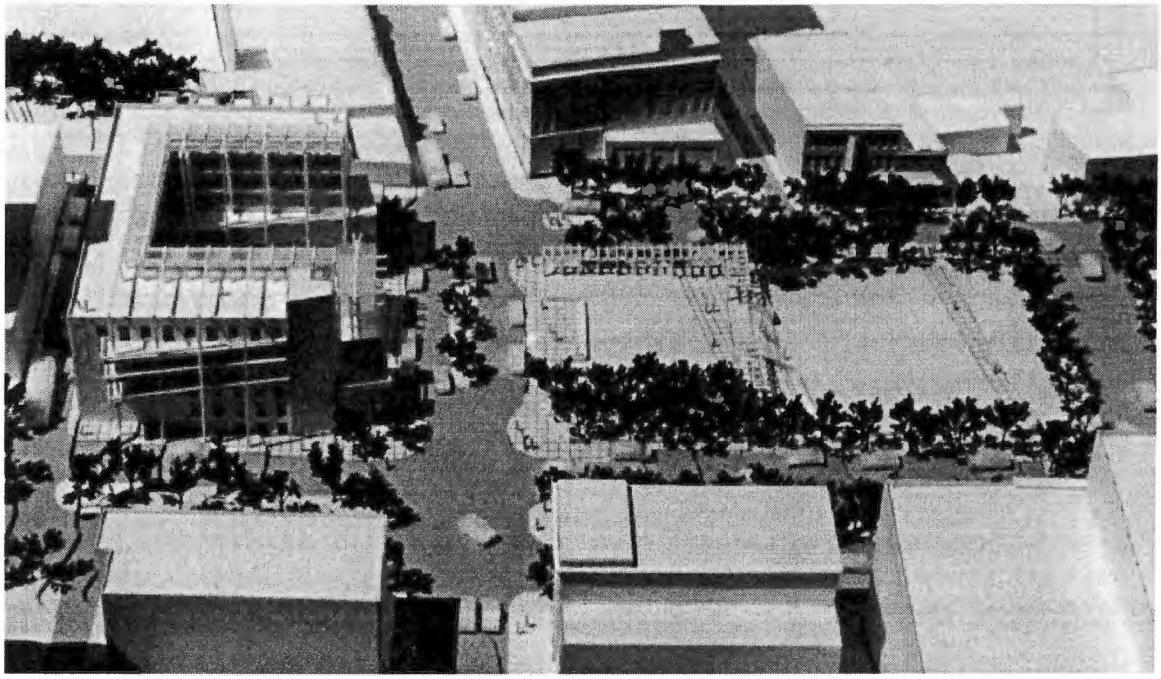


***Fig. 4.6:*** *Image of model looking toward Summit Hill elevation.*
***Source:*** *Author.*

***Fig. 4.7:*** *Image of model showing Gay Street elevation.*
***Source:*** *Author.*

gathering spaces such as the porch, courtyard, and cafeteria, while the upper floors are more private and individualized (Fig. 4.5). On these upper floors, however, there is also horizontal layering of community space to individual space as one moves from the interior of the court toward the street. This is demonstrated in the ways that the spaces function, as well as in building form and materials. See Fig. 4.9. From the courtyard, the first consistent interior layer is the circulation core, which affords direct views to the court (and beyond), yet exists within the building envelope as a semi-public space. This core is consistent from one floor to the next, (even continuing to the roof where it becomes a protected walk), and is open to the facility's users, who make up one collective group. The classrooms form the next layer, separating this one large group into smaller, individualized groups. The final layer consists of additive elements: balconies and teacher offices. These spaces are specifically accessible from the classrooms, and are more suited to the individual rather than the collective. As such, they are also more private.

There are also layers of materiality consistent throughout the design. While the circulation core is transparent (glass), the academic core is solid. For the most part, elements which face the court are transparent, providing any number of opportunities to relate to the outside world as part of a group; on the other hand, components which face the facility's surroundings are mainly solid with

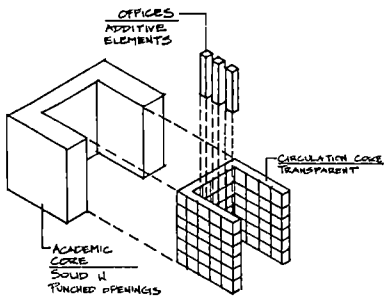



***Fig. 4.8:*** *Layering of materiality.*
***Source:*** *Author.*

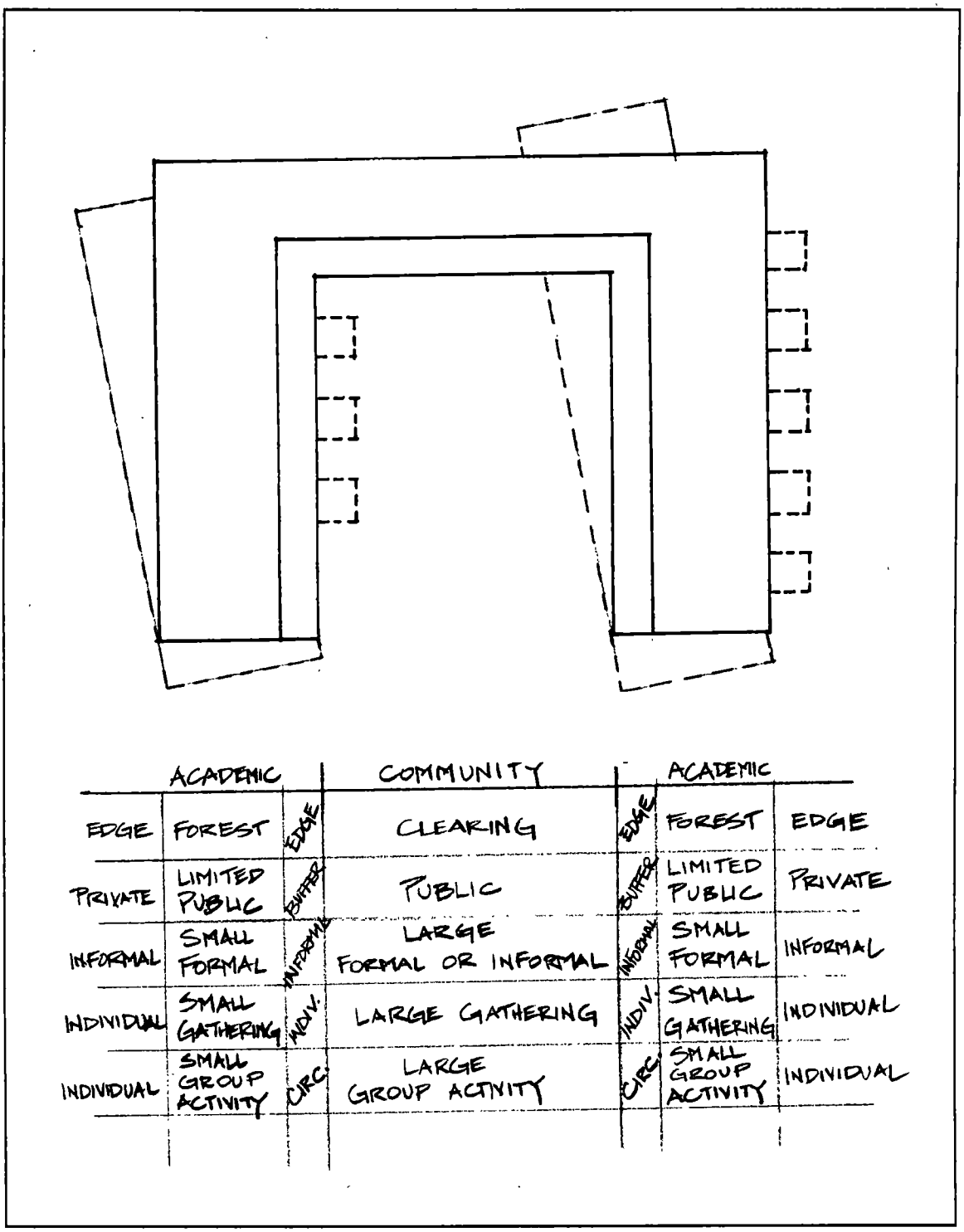



***Fig. 4.9:*** *Layering diagram of community space to individual space.*
***Source:*** *Author.*

punched openings, providing individual opportunities to relate directly with the outside world. The transparency of the elements facing the courtyard lends itself to the purpose of creating a kind of community of spaces, in keeping with the intent that the courtyard become a type of outdoor room to be utilized for community functions. This transparency also helps to increase safety and security for the facility. In addition to the circulation core, the library as well as the teacher offices look directly into the court, where there is better opportunity to monitor unwelcome behavior. While the facility is to be used by the community at large, certain types of behavior are never acceptable in our society, and it is necessary do what we can to minimize these occurrences. Designing in such a way that these factors are taken into consideration can go a long way in preventing them.

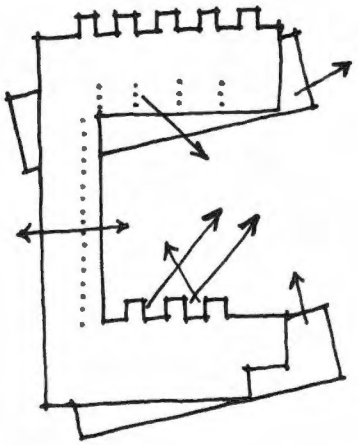


***Fig. 4.10:*** *Transparency and a community of rooms helps to increase safety and security.*
***Source:*** *Author.*

The parti also expresses both New Urbanist and Modernist characteristics. The academic core forms a hard edge which strongly defines the street and corners, as advocated by the New Urbanists. In this way, public space is really defined. Yet, at the same time, the U opens up toward the city (and specifically towards areas designated as community or public space), allowing the landscape to come in and have a place within the city as well, fulfilling the design criteria for the open plan advocated by Modernists such as Le Corbusier. This open plan accommodates flexibility, allowing for changes in use, without compromising the form of the facility. In essence, this

***Fig. 4.11:*** *The parti expresses both New Urbanist and Modernist characteristics.*
***Source:*** *Author.*

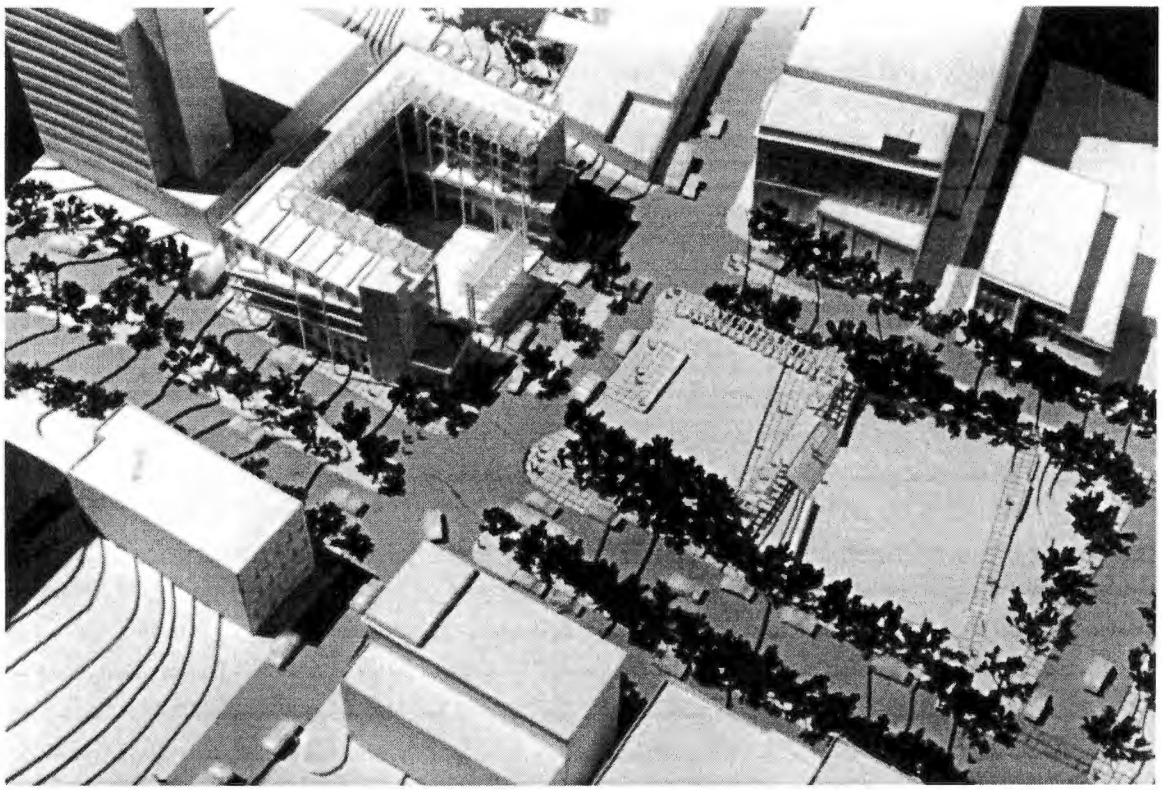


***Fig. 4.12:*** *Transparency helps to increase safety and security for the facility.*
***Source:*** *Author.*

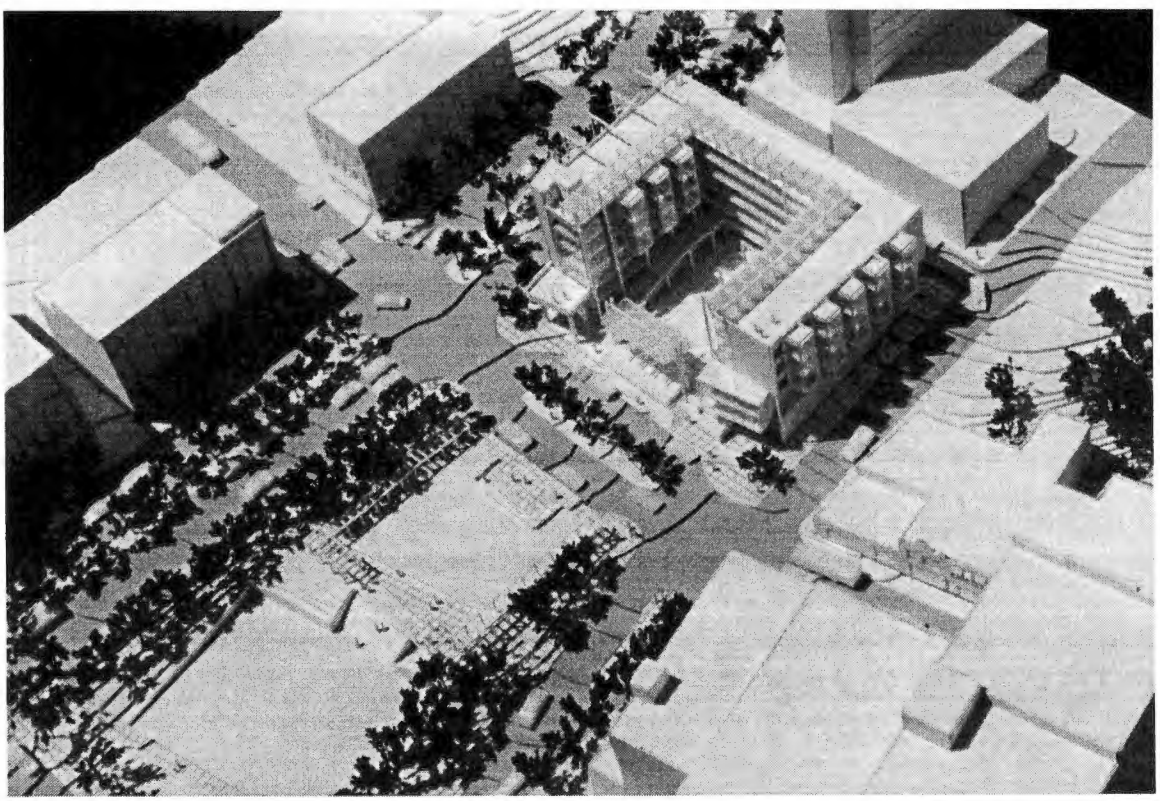


***Fig. 4.13:*** *The design allows the natural world to come into the man-made world.*
***Source:*** *Author.*

design allows the natural world to come into the man-made realm, and the two to co-exist in a way which strengthens the overall scheme. While the front steps allow the landscape to become part of the floor of the courtyard, both the porch and the front steps are actually part of the ground. Further, the ramp, while not made of earth, nonetheless acts as a hill, continuing the feel of the natural slope which existed in the past.

Along Gay Street, the porch and courtyard give life and internal character not just to the facility, but to the entire block as well; people walking along the street can easily get a sense of the activity within the school's confines. This facade functions as a street wall that is both active and permeable, allowing and perhaps even providing opportunities for interaction.

While the court provides opportunities for vertical exploration, the porch functions with a kind of horizontal focus and acts as the true "edge" structure. It is an actual threshold. It is able to serve as a filter at times, or as a mediator between the outside world and the facility's interior world, drawing from either side to provide a logical sequence for moving through space. From the porch, one can simultaneously see and be seen. The porch also provides shelter at a scale comfortable to humans and appropriate to Gay Street, and is at once part of the street life and the facility. This capacity is enhanced in the way that the roof of the porch functions. It is made up of two distinct structures: one that is static, and one that is dy-

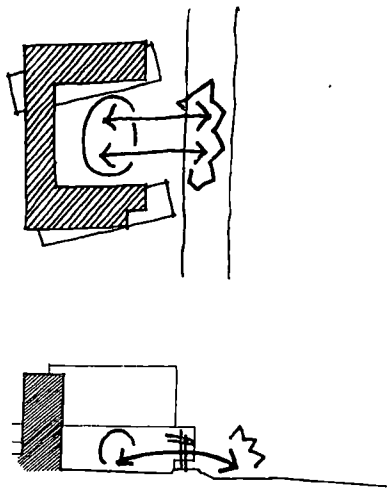


***Fig. 4.14:*** *The porch and courtyard give internal character to the facility and the streetwall.*
***Source:*** *Author.*

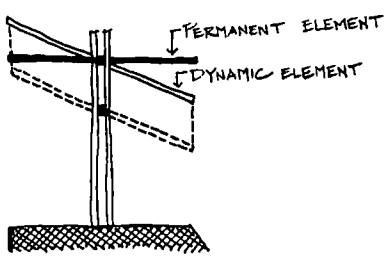



***Fig. 4.15:*** *The dynamic porch element can be raised or lowered according to use.*
***Source:*** *Author.*

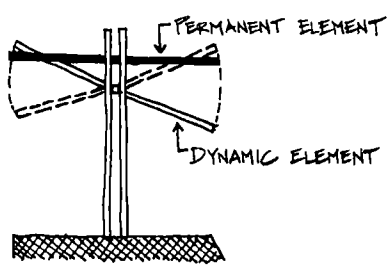



***Fig. 4.16:*** *The dynamic porch element can also rotate to open either out toward Gay Street and the city, or in toward the school facility.*
***Source:*** *Author.*

namic. The movable roof structure can be manipulated in such a way that it can move up and down vertically, providing flexibility of height. Most importantly, however, it can also be manipulated so that it opens either out toward Gay Street and the city, or in toward the school facility. It therefore possesses the ability to function as part of the school only, or to serve the entire community. With this capacity, it is also able to behave not only as a porch, but also as a stage for the school's musical and dance performances. For smaller audiences, the courtyard can suffice as the viewing area. For city-wide performances, it is envisioned that Gay Street be blocked off from Summit Hill to Vine, and that the street as well as the park serve as open space for concert-goers.

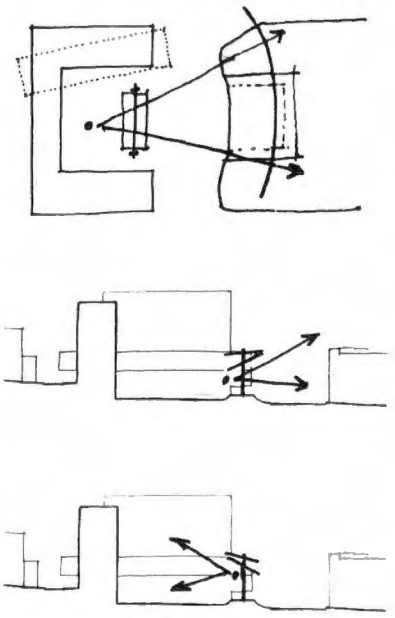


***Fig. 4.17:*** *The porch/stage has the ability to function as part of the school only, or to serve the entire community.*
***Source:*** *Author.*

The porch/stage therefore affords the facility's users true flexibility in a very dramatic way. The static roof structure provides the permanent shelter, while the movable structure provides the aesthetic openness. Its position can also serve as an indication of whether the function is to be private or school-related versus purely public.

Either way, it encourages interaction among humans, and provides opportunities for a wide variety of users to come together and relate on both large and small scales. Further, as a multi-functional device, its flexibility helps to ensure its usefulness over an extended period of time.

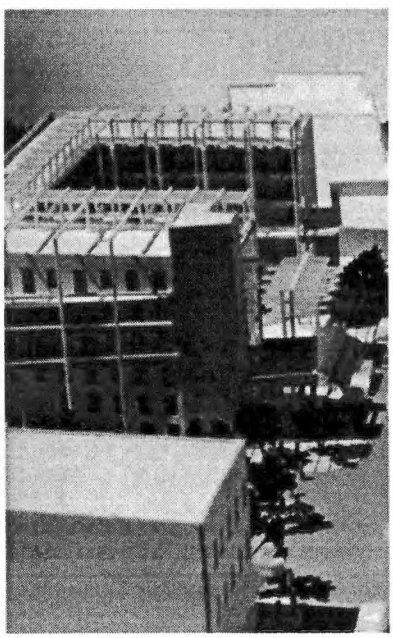


***Fig. 4.18:*** *Image of model showing main entrance at corner of Summit Hill and Gay.*
***Source:*** *Author.*

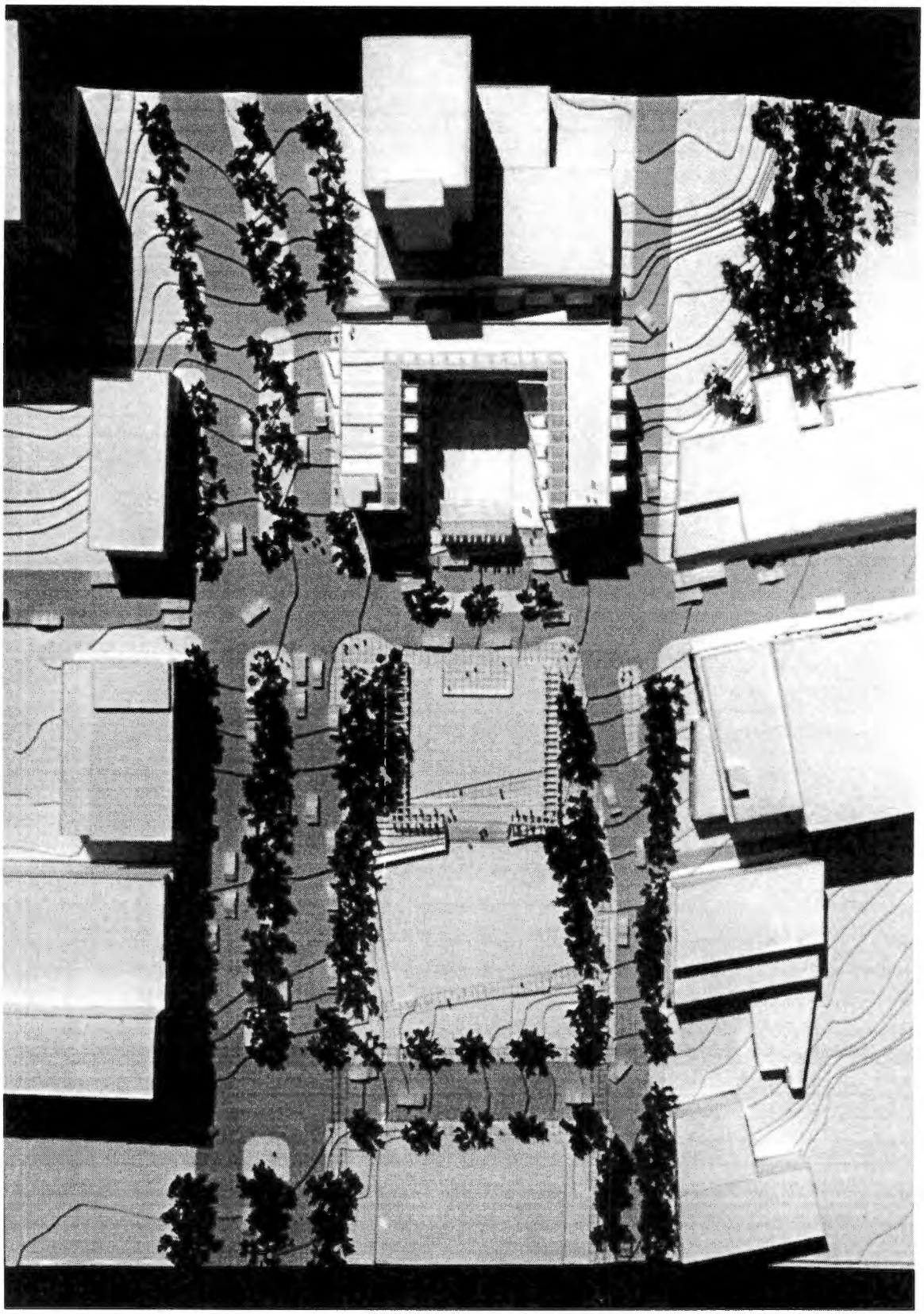


***Fig. 4.19:*** *Image of model showing master plan of immediate site.*
***Source:*** *Author.*

## SITE DESIGN

While the specifics of the site requirements were discussed in Chapter III, this section should make clear the immediate importance of the site design in the overall scheme for the facility, as well as the surrounding community. The master plan encompasses much more than just a single building, as the entire green space across Gay Street is designed to be inhabited, not just viewed. There are many elements of the site design, in addition to the proposed changes in street network, which should be noted. For example, the creation of the median along Gay Street, as well as the crosswalks and changes in paving pattern, helps to enforce safety for pedestrians by slowing vehicles and providing designated areas for drop-off and pedestrian crossing. As the only stretch of Gay Street where this occurs, it is obviously a special place.

***Fig. 4.20:*** *Image of model looking east down Summit Hill.*
***Source:*** *Author.*

Perhaps most significant, however, is the grading plan. The new grading provides the desired views as one approaches the facility, works with the new street network, and provides level play areas. See Fig. 4.22 for grading plan and Fig. 4.23 for sectional site studies reflecting new grading. The park has been divided into three level areas. From the top level, one can view activities taking place on the lower levels, with the opportunity to utilize the slope between levels for seating.

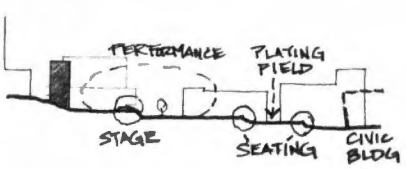



***Fig. 4.21:*** *The new grading provides opportunities to utilize the slope for viewing and seating.*
***Source:*** *Author.*

The upper-most area is meant to be utilized as a direct part of the school facility. The continuation of the

*Fig. 4.22: Grading plan.*
*Source: Author.*

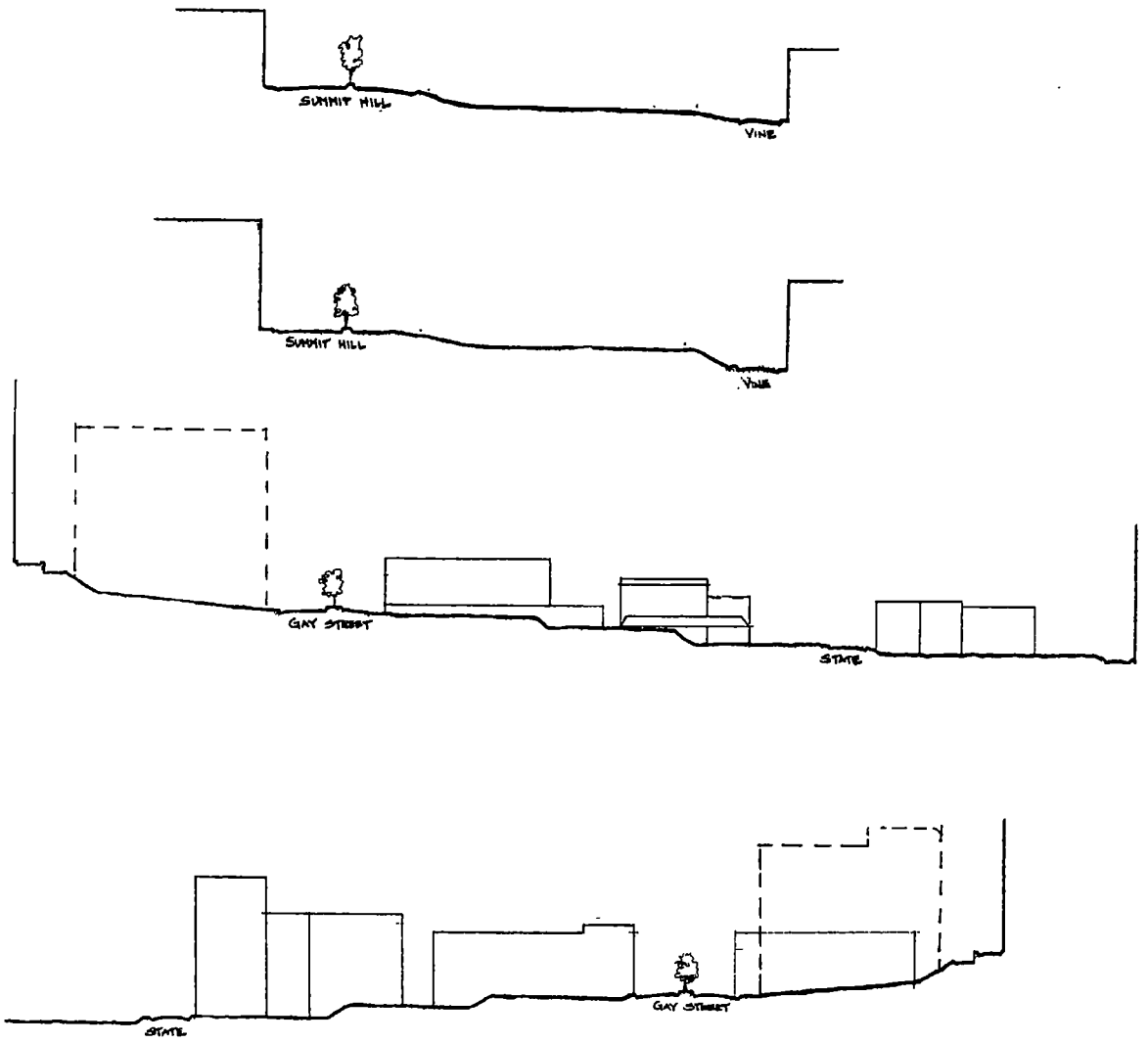



***Fig. 4.23:*** *Sectional site studies reflecting new grading.*
***Source:*** *Author.*

pergola, from the building's rooftop to ground and back again, serves to define the gathering space, through (despite?) vertical height variation and despite the interruption of Gay Street (Fig. 4.24 and 4.25). In addition, the park spaces mimic those of the facility in that the central space is open, community space, which graduates to more individualized, private space as one moves from the center to the edges. This configuration allows one to be both an observer (along the edge) and a participant (in the middle). The trees along Summit Hill and Vine form a canopy over the sidewalk and serve as a filter along the edges. See Fig. 4.26 and 4.27. As with the building itself, both city grids have also been incorporated into the design of the park, intersecting through orientation of tree pattern, walkways, and even the middle playing field. This middle level is intended to be the main playing field for soccer and other sports, and is to be available to the facility during school hours, and open to the public at other times. See Fig. 4.28. The lower level is envisioned as being given over to the Justice Center (or some public facility on the site opposite the lower green space), while open to the public as well.

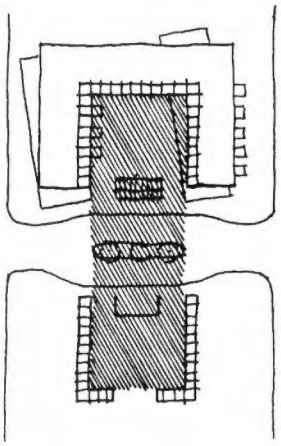


***Fig. 4.24:*** *The pergola defines community gathering space.*
***Source:*** *Author.*

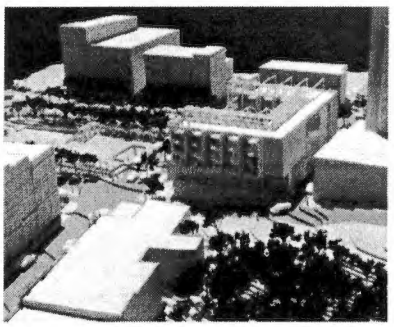


***Fig. 4.25:*** *View of model showing continuation of pergola from roof to ground.*
***Source:*** *Author.*

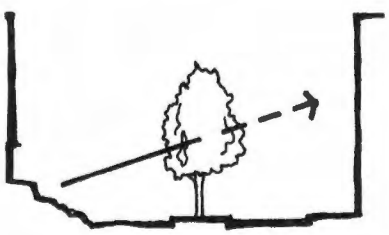


***Fig. 4.26:*** *Trees along major streets form a canopy and serve as a filter along the edges.*
***Source:*** *Author.*

## CITY AS CLASSROOM: OFF-SITE SPACES

While the proposed design allows for flexibility and therefore a multitude of uses, it is not self-sufficient or all-encompassing. Part of the basic assumption is that the

***Fig. 4.27:*** *The trees along Summit Hill form a canopy over the sidewalk and act as a filter.*
***Source:*** *Author.*

***Fig. 4.28:*** *The new grading plan provides a level playing field for both school and community use.*
***Source:*** *Author.*

surrounding city and its existing amenities will be used as a classroom. Namely, available spaces and structures within the city that already serve specific purposes appropriate for schoolchildren and/or teachers should be utilized, rather than duplicating those same uses within the school structure. In addition, the city itself can serve as a learning tool, as students have the opportunity to discover how to get about and how to function safely in an urban environment, as well as discovering Knoxville's history. Using the city as a classroom in this way could contribute to the larger ramifications of the design in a beneficial way, and lead to a more productive and easily sustainable community as a whole.

The Tennessee Theater, the YMCA and YWCA, and the Commerce Building are all existing recreational/cultural use structures that are viable for use as extensions of the facility. These off-site spaces are within walking distance of the school complex, or could also be reached by public transportation systems such as bus or trolley. See Fig. 4.31.

***Fig. 4.29:*** *The Tennessee Theater.*
***Source:*** *Author.*

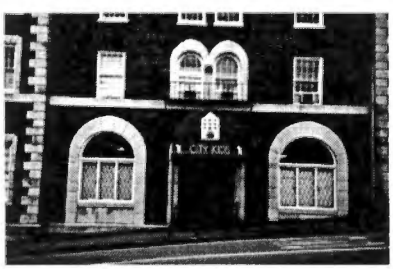


***Fig. 4.30:*** *The Knoxville YMCA.*
***Source:*** *Author.*

The Tennessee Theater, located south of the school facility along Gay Street, could be particularly useful in both its use and as a tool for learning. As Knoxville's oldest grand theater, it has seen a variety of performances, both live and filmed (and continues to function as such). The availability of this large, theater-style auditorium could be useful at times when performances or meetings call for more seating space than is available within the

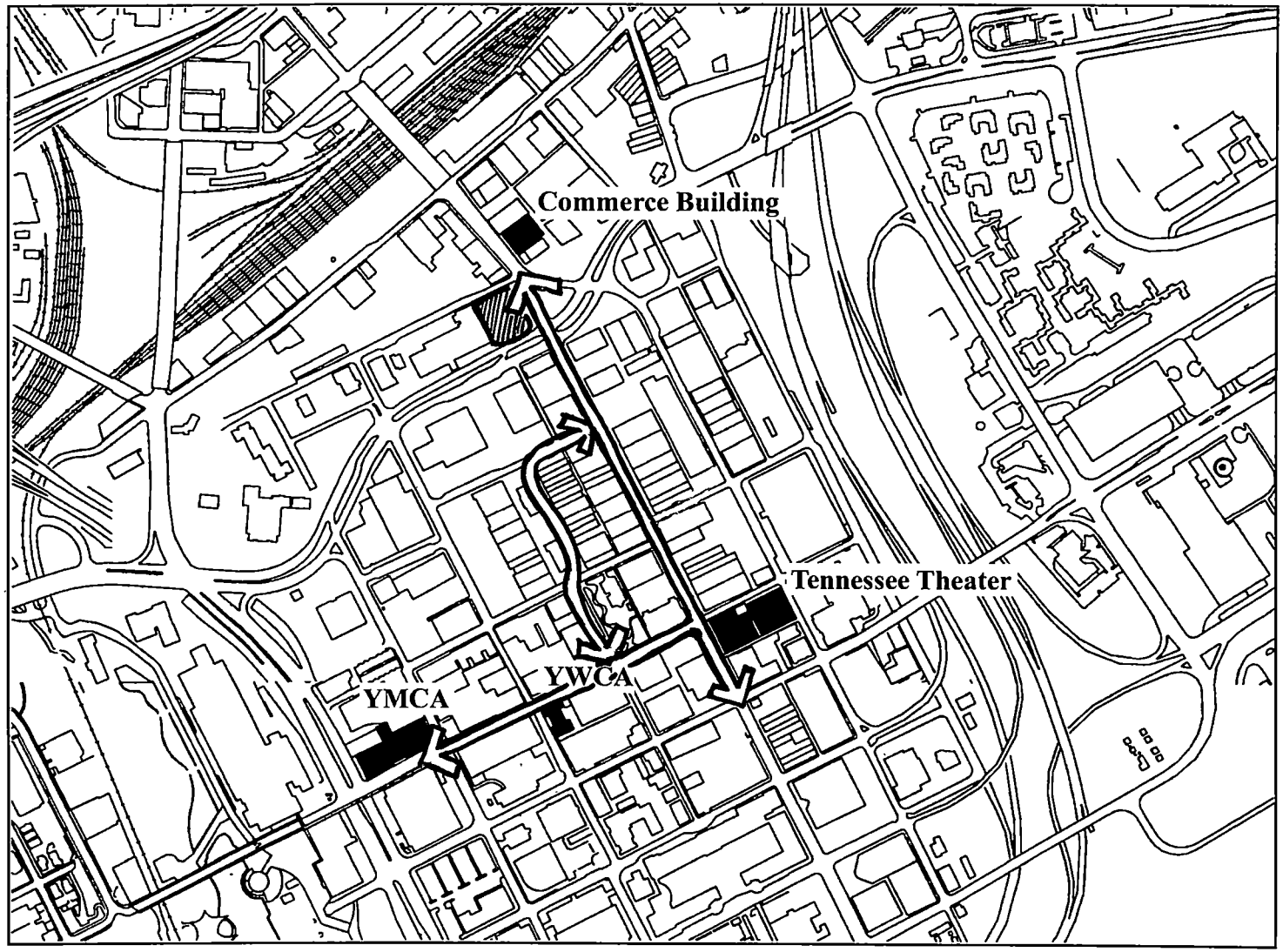



***Fig. 4.31:*** *Diagram illustrating proximity of possible off-site venues to proposed site.*
***Source:*** *Author.*

school complex, or at times when an indoor setting is preferred.

The YMCA and YWCA are similar in that they house amenities which can further the benefits of physical education for young people. Swimming pools, large indoor courts, and a multitude of equipment could be utilized on certain days of the week, or for special competitions which take place outside of school hours. In fact, these buildings have served in academic capacities for years.

Like the Tennessee Theater, spending time in these spaces, as well as getting to and from them, also increases the likelihood that its users will experience interactions with others outside of the school facility.

The Commerce Building, only a few buildings up Gay Street from the Vine Avenue intersection, could be used for additional office space for those teachers who do not need an office which adjoins a particular classroom. Utilizing this building helps to increase the students' awareness of their surroundings, allowing the city to serve as their own type of school campus.

Using these existing structures allows the proposed school facility to add to the historic infrastructure already set up within downtown; in doing so, new and old can work together to form a stronger community. The educational facility conforms to the city's guidelines, so as to be unobtrusive in its placement and form and comprehensiveness, while simultaneously serving as a monument and place of identity within the public realm, and thereby

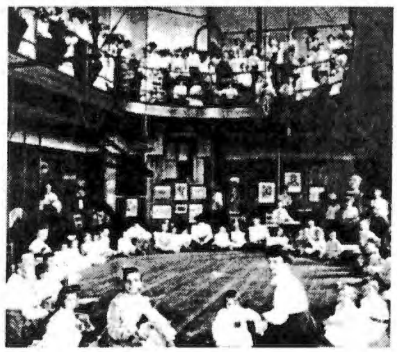


***Fig. 4.32:*** *The kindergarten class in Summer School of the South was held in the YMCA gym.*
***Source:*** *Isenhour (75).*

***Fig. 4.33:*** *The Knoxville YWCA.*
***Source:*** *Author.*

***Fig. 4.34:*** *The Commerce Building.*
***Source:*** *Author.*

influencing the entire community.

Furthermore, not only does utilizing the city's existing structures contribute to the pedagogical goals of the project, it encourages sustainability in the broadest sense: as designers, and as inhabitants of the earth, often the most sustainable thing we can do is not build.

## CHAPTER V: THE PROJECT

*We shall not cease*
*from exploration*
*And the end of all our exploring*
*Will be to arrive where we started*
*And to know the place*
*for the first time.*
–T.S. Eliot

The following is a presentation of the project, expressing in graphic form the arguments set forth in the preceding pages. It is important to note that even in choosing the presentation methods, a combination of both technologically-advanced (computer aided drafting) and traditional methods (rendering by hand) were used to produce the drawings and model, with the intention of creating a stronger and more cohesive presentation than might have been possible had not both methods been employed.

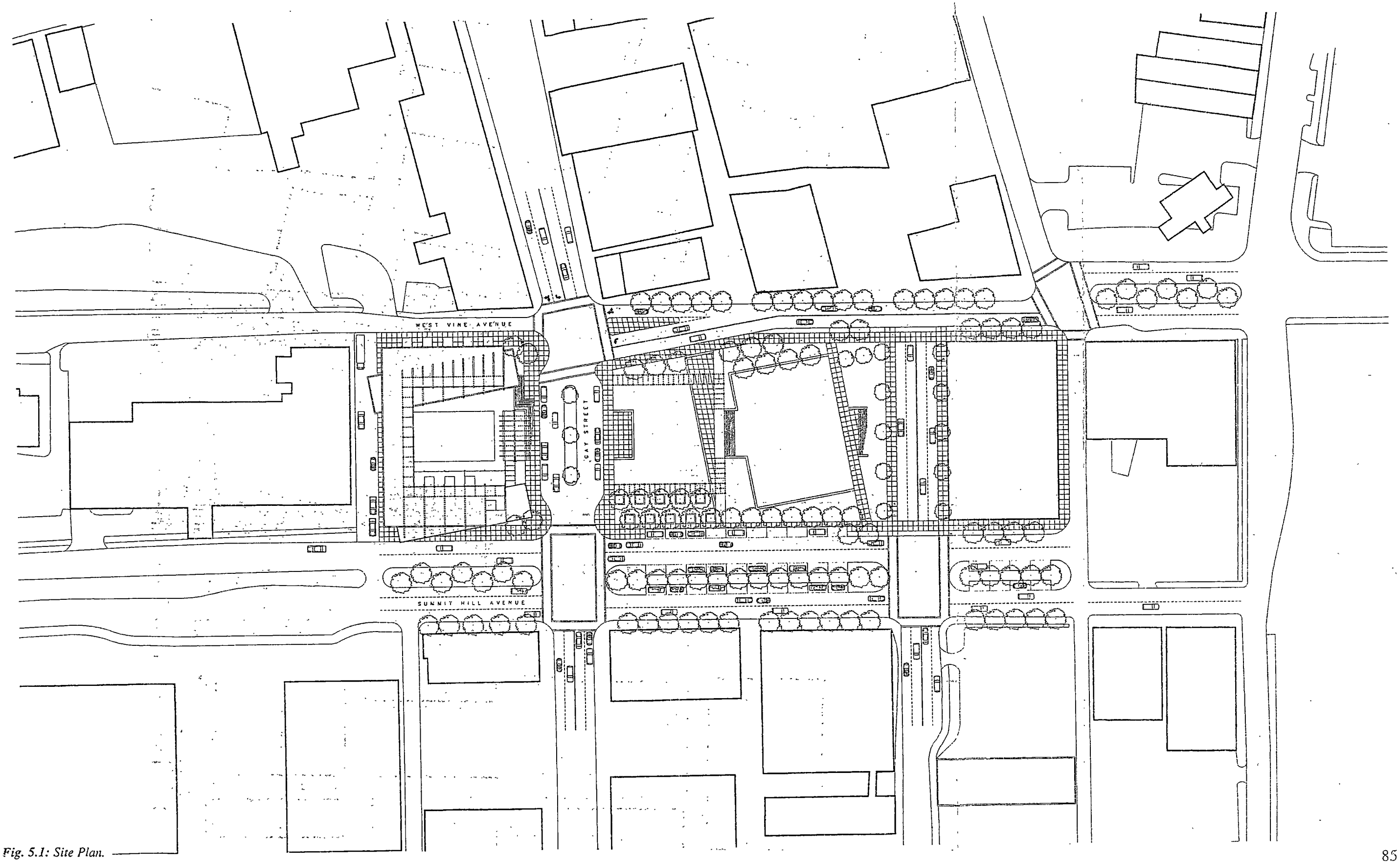



*Fig. 5.1: Site Plan.*
*Source: Author.*

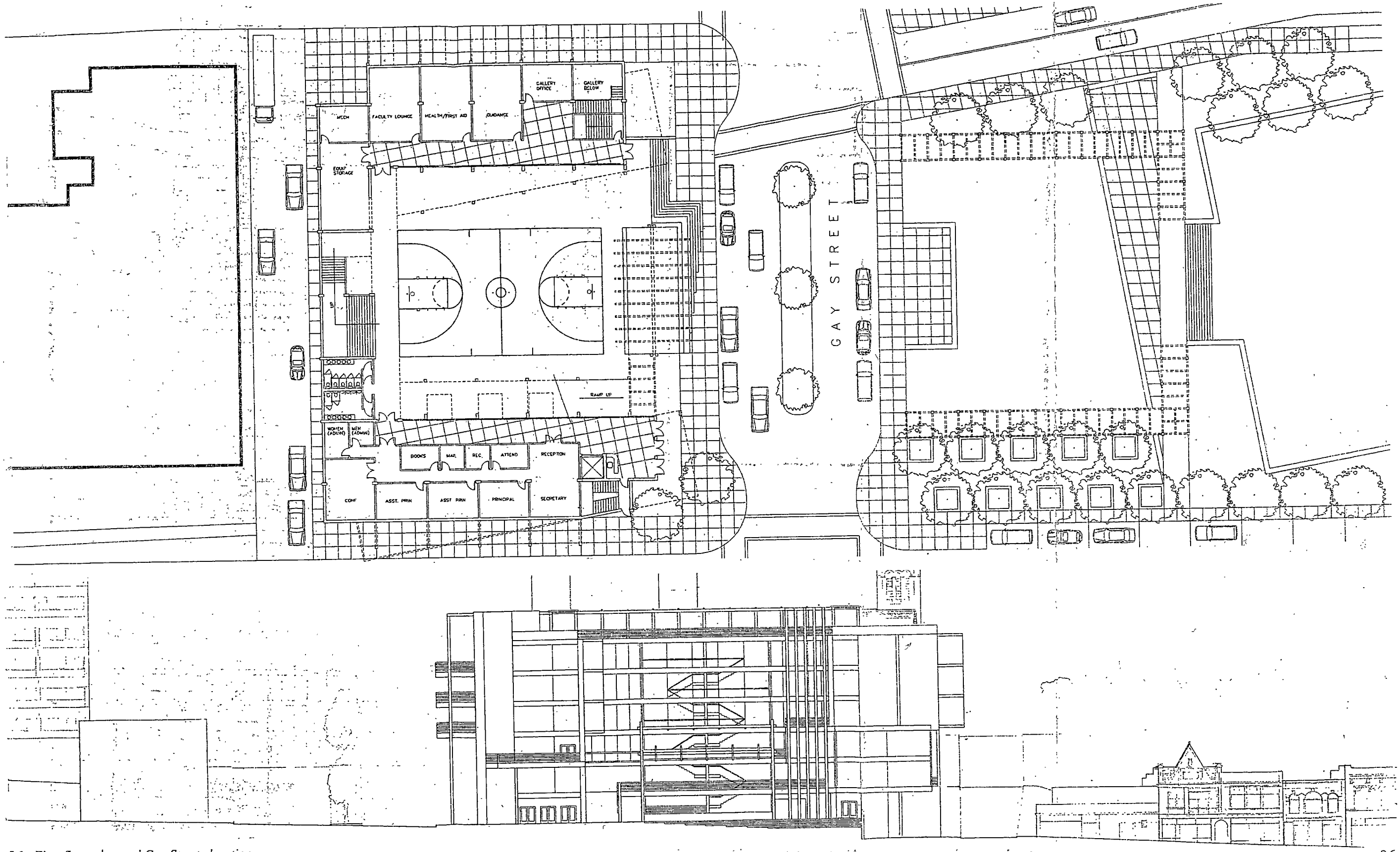



*Fig. 5.2: First floor plan and Gay Street elevation.*
*Source: Author.*

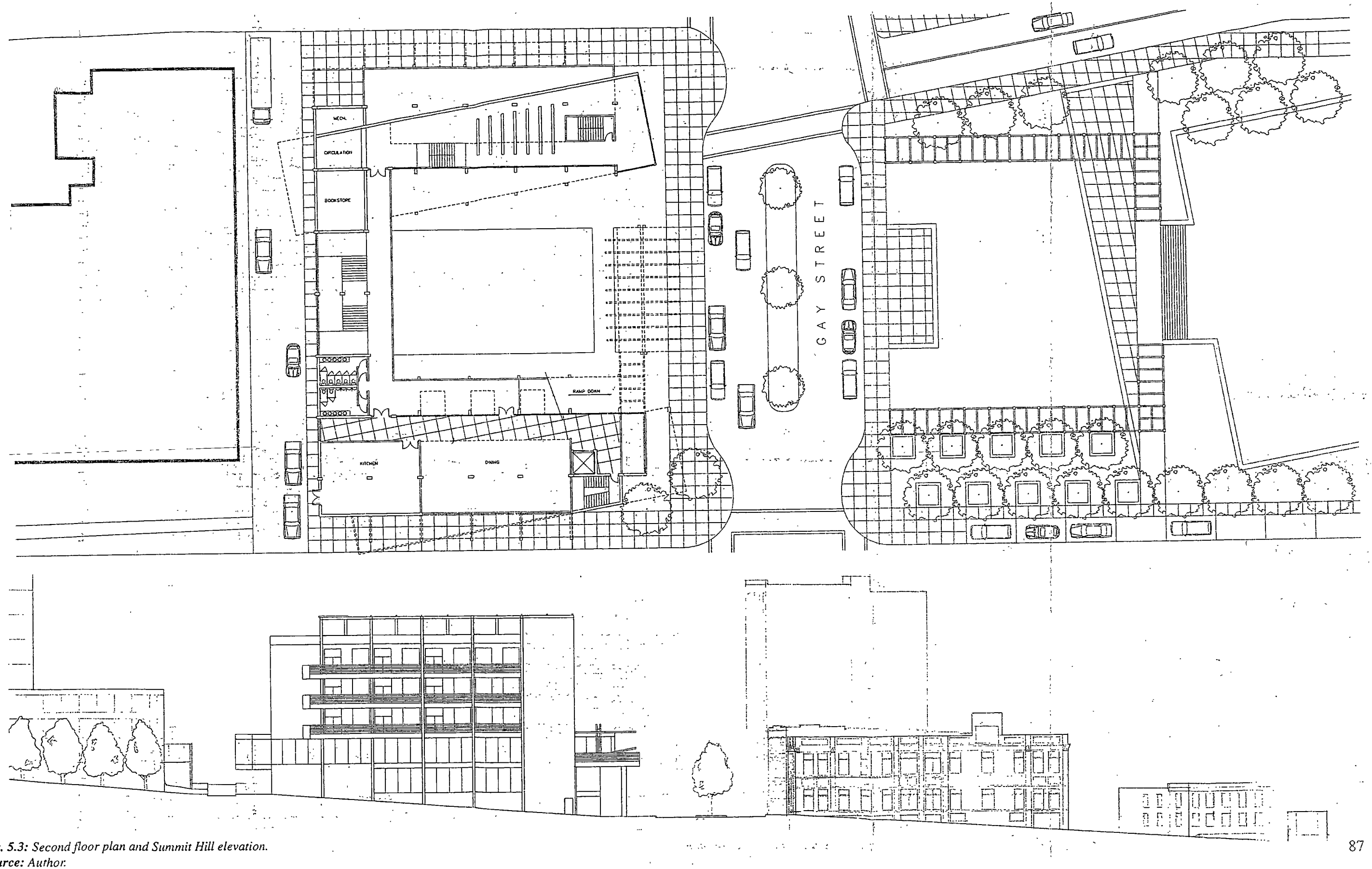



*Fig. 5.3: Second floor plan and Summit Hill elevation.*
***Source:*** *Author.*

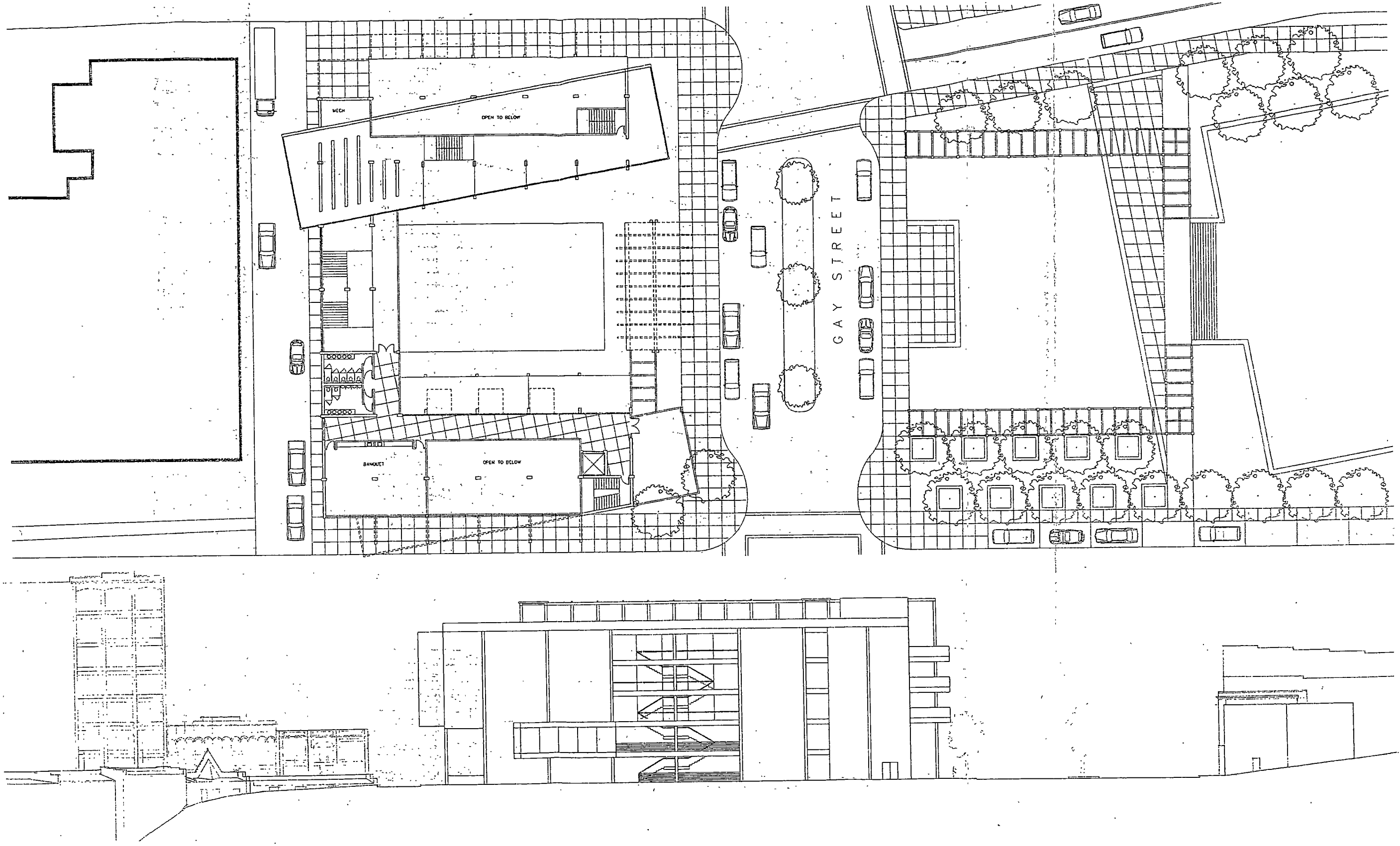



*Fig. 5.4: Third floor plan and rear elevation.*
***Source:*** *Author.*

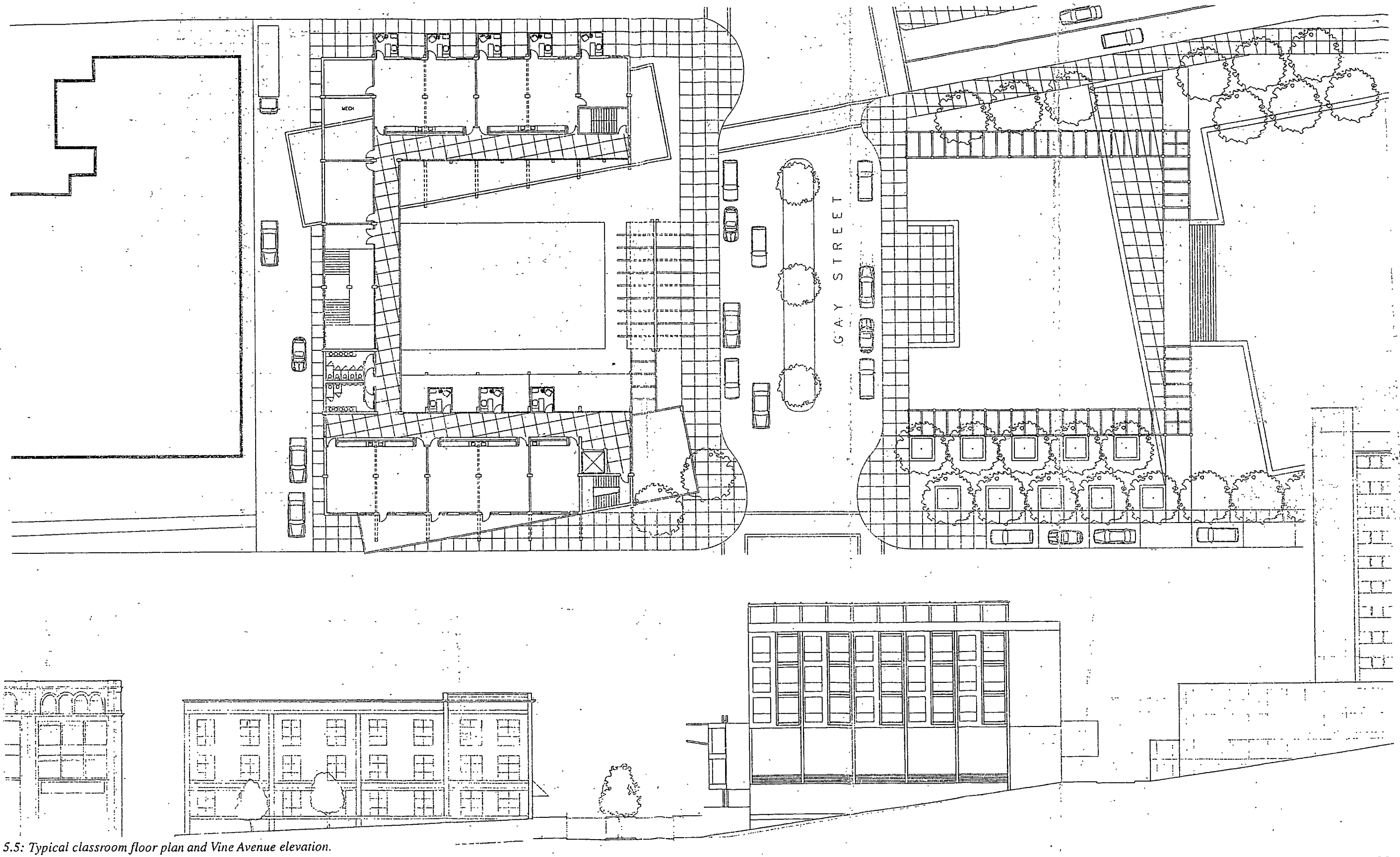



*Fig. 5.5: Typical classroom floor plan and Vine Avenue elevation.*
*Source: Author.*

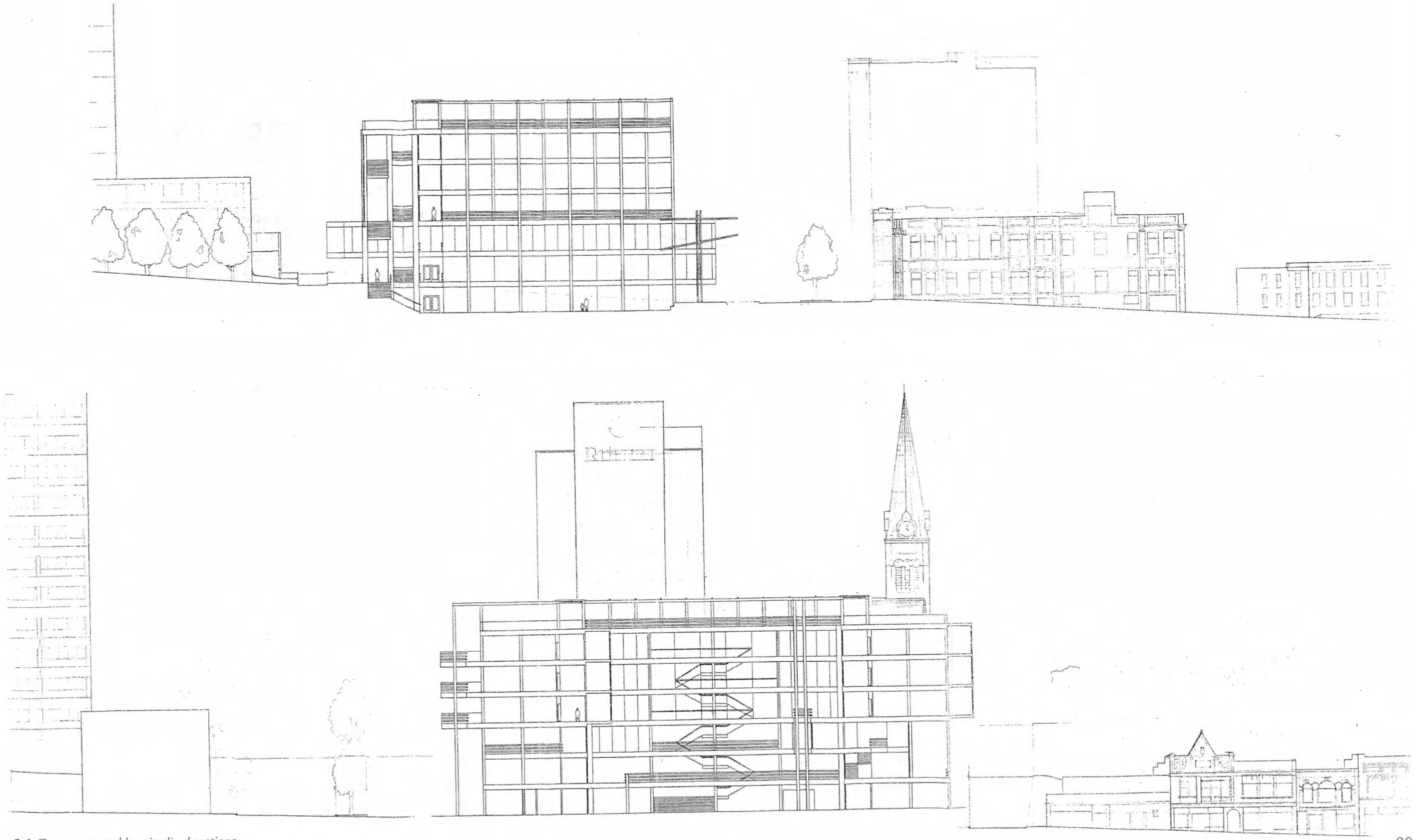


*Fig. 5.6: Transverse and longitudinal sections.*
***Source:** Author.*

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## BIBLIOGRAPHY

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*The Letters of F. Scott Fitzgerald*


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## VITA

*Goodbye said the river.*
*I'm going downstream.*
–Howard Nemerov

Ellen Scanlan Cathey grew up in Knoxville, Tennessee and graduated from the Webb School of Knoxville in 1987. She began her studies at Indiana University, Bloomington, during August of the same year, and received a Bachelor of Arts degree in English, as well as the Certificate in Business Studies, in 1991. As the daughter of an engineer and an artist, however, she was interested in pursuing a vocation which combined both technical and artistic abilities. Accordingly, she returned to Knoxville and entered the Master's program in Architecture at the University of Tennessee. Upon graduation, she plans to continue working in and contributing to the field of architecture in a position in which both her writing and architectural skills are utilized in conjunction.