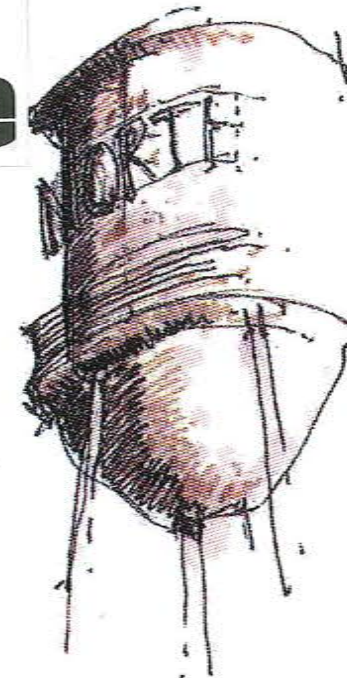


**For** Not to be taken  
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## DEVELOPMENT PLAN AND STANDARDS FOR NORTHSHORE

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## PROJECT OVERVIEW

The goal of the Northshore development plan and standards is to provide a framework to create a cohesive, distinctive, and highly identifiable mixed-use project. The standards are not intended to limit creative design or require that all buildings look the same. Rather they seek to enhance the area by creating an aesthetically-pleasing, well-designed and functional environment. The examples and ideas given in the following pages are meant as a reference in defining a flavor or general design style for the development.

The Northshore mixed-use development shall have a dense, central core surrounded by a lower-density area that is within walking distance of the core.

The core area of the development shall include:

- Office & residential above ground-floor retail
- Restaurant and entertainment establishments
- Retail establishments - large anchors, service and specialty/boutique stores
- Public spaces including plazas, courtyards, a lake-front promenade and pedestrian walking paths

The periphery of the development shall include:

- Single-family housing
- Multi-family housing - apartments and townhomes
- Public spaces, parks, walking paths and pedestrian connections to the core

The intent of the mixed-use development is to create a vibrant community environment of continual activity and overlapping use. Daytime office and commercial uses would cycle into evening dining and entertainment uses. Locating stores, offices, residences, public services and recreation spaces within walking distance of each other in one development promotes:

- A sense of place and interaction with people during the course of one's daily activities
- Independence of movement, especially for the young and the elderly
- Safety through around-the-clock presence of people
- A pedestrian friendly environment, which may lead to a reduction in auto use
- Support for those who work at home via nearby services and amenities
- A variety of housing choices to accommodate a range of incomes and family sizes

The development plan and standards provides a model of the planning, landscape, streetscape, architecture and signage that Northshore will feature. In addition to these guidelines, consult the site engineering documents and traffic impact study prepared by Barge Waggoner Sumner & Cannon, Inc.



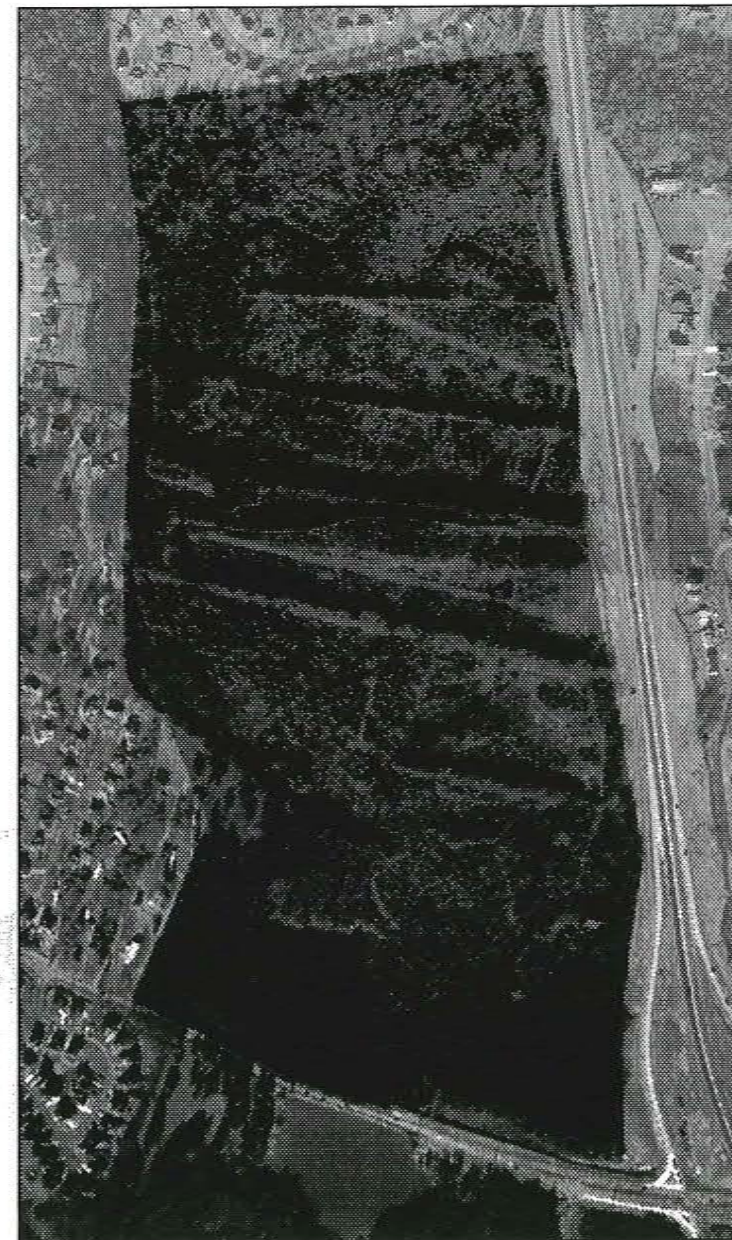
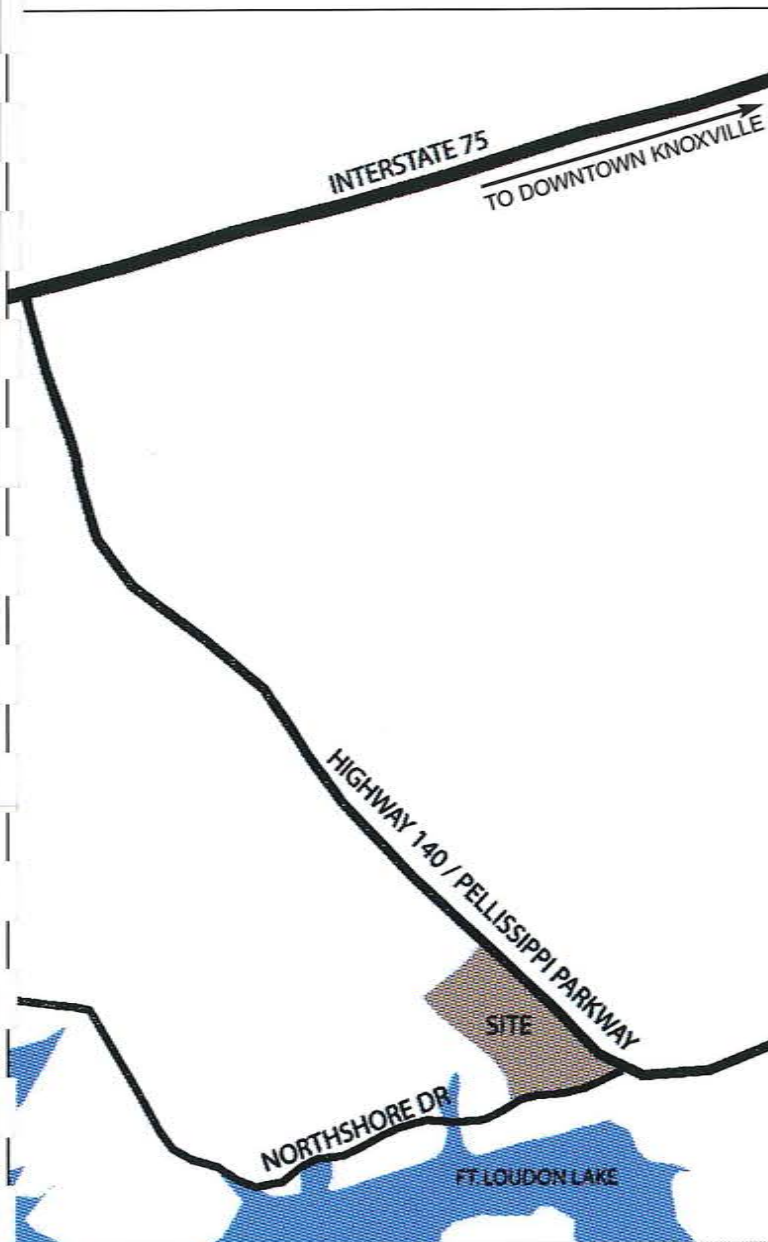


## PROJECT LOCATION

The Northshore mixed-use development will be located at the intersection of Interstate I-140 (Pellissippi Parkway) and Northshore Drive. The site is situated southwest of downtown Knoxville, Tennessee.

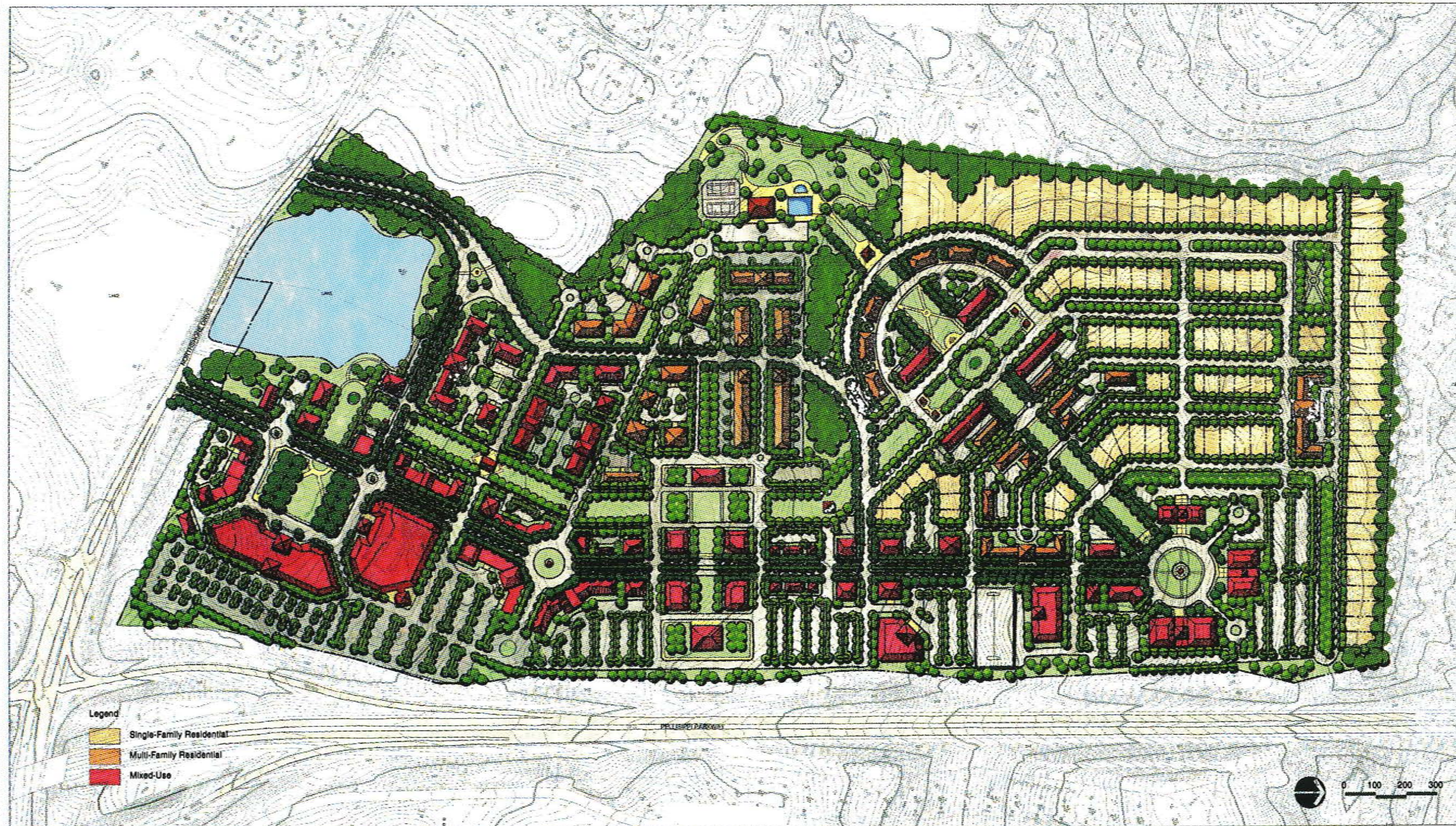
The site encompasses 141 acres including a 5 acre natural lake which ties into the Tennessee River. Lake Ft. Walton can be seen from the higher elevations at the north end of the property. In general, the ground falls in elevation from north to south. There are several sink holes located on the site which will remain as open park areas.

The site is bordered by residential developments to the north and west, Pellissippi Parkway to the east, and Northshore Drive to the south. There are commercial developments located across Pellissippi Parkway, further to the east.





# ORIGINAL MASTER PLAN



SITE CONCEPT PLAN

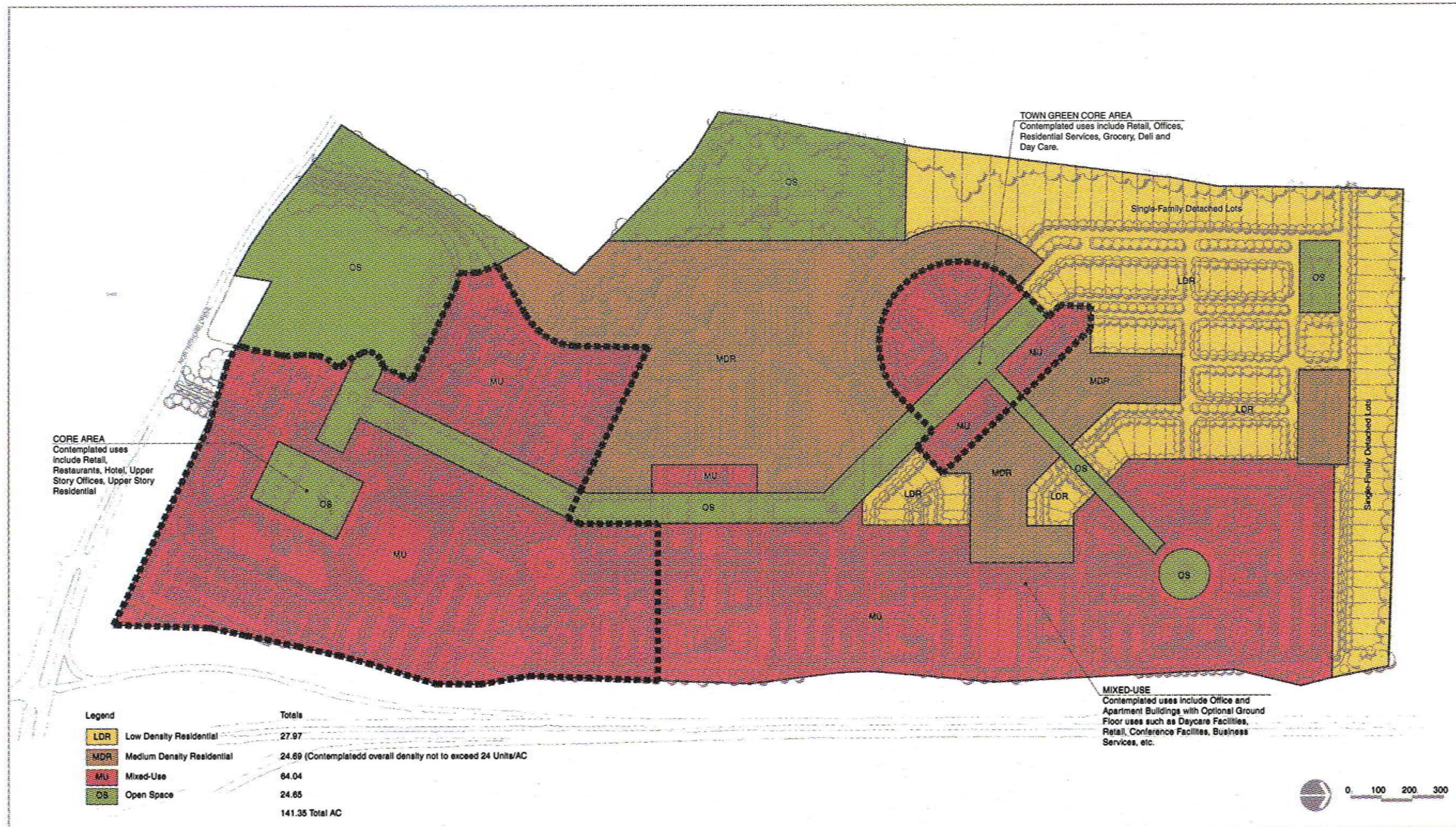
## STERCHI • PROPERTY • MASTER • PLAN

ROSS FOWLER P.C. KNOXVILLE, TENNESSEE





## ORIGINAL CONCEPTUAL SITE PLAN



## STERCHI • PROPERTY • CONCEPTUAL • SITE • PLAN

• The height of the buildings in this development will not exceed scenic highway guidelines.  
 Note: Final development plan may include public or quasi-public uses such as a fire station or church.

ROSS FOWLER P.C. KNOXVILLE, TENNESSEE





## ILLUSTRATIVE MASTER PLAN



## Schedule of Accommodations:

Theater	60,000 SF
Big Box Retailers	225,000 SF
Small Shops	175,000 SF
Office	300,000 SF
Restaurant	40,000 SF
Apartments	450 Units
Townhouses	150 Units
	Single-Family Lots

120 Lots

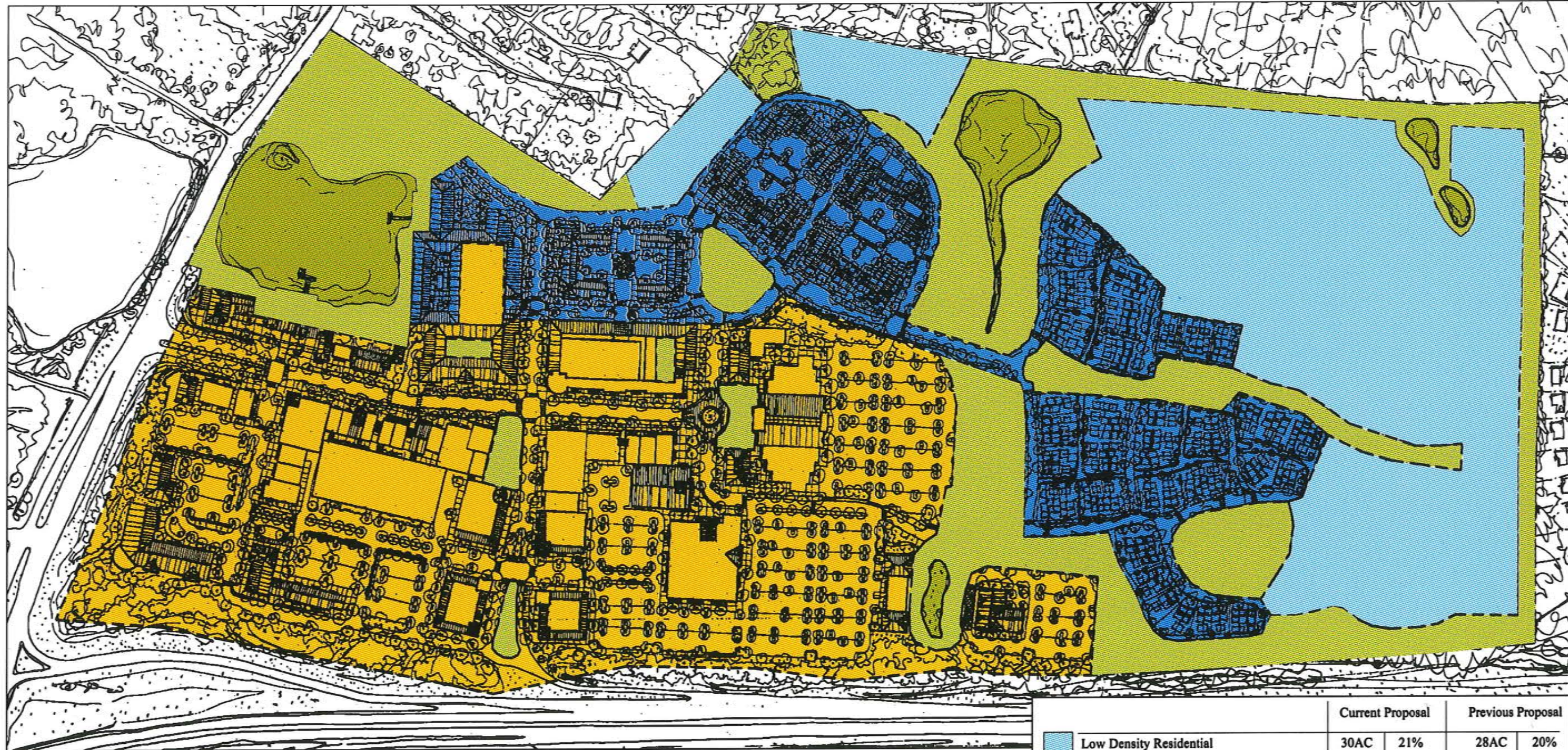


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## LAND USE PLAN



	Current Proposal		Previous Proposal	
Low Density Residential	30AC	21%	28AC	20%
Medium Density Residential	25AC	18%	25AC	18%
Mixed Use Core	58AC	41%	64AC	44%
Open Space (including 6.46 acres of lakes and waterways)	28AC	20%	25AC	18%
<b>Total</b>	<b>141AC</b>	<b>100%</b>	<b>141AC</b>	<b>100%</b>

Note: Mixed-use core to include all allowable uses as described in Article 4, Section 24, Paragraph C of the Knoxville Zoning Ordinance.





## OPERATIONAL STANDARDS

Compatibility of mixed uses in a vibrant community environment of continual activity and overlapping use can be achieved through the combination of careful selection of tenants for commercial areas adjoining residential use areas, special design criteria for residential construction, careful architectural review and retention of the legal right to impose specific operational standards to the extent necessary.

The right to impose operational standards within the core area will be retained by the developer in lease provisions and/or deed restrictions applicable to particular parcels. The need for extensive operational standards will be reduced through (a) careful tenant selection for spaces below second floor residential, (b) design criteria for soundproofing, wall openings and similar building elements for residential uses adjoining commercial uses and (c) architectural review of lighting plans, emission controls, solid waste disposal facilities and similar design elements which could adversely impact residential use.

The entire development lies within the City of Knoxville, and the City of Knoxville Code of Ordinances will be applicable to the development. Applicable ordinances include, without limitation, the noise ordinances set forth in Section 18 and the solid waste ordinances set forth in Section 13 of the Code.

The lease provisions and/or deed restrictions will reserve to the developer the right to impose additional operational standards, which could include the following:

- Time restrictions on operations. Limitations on hours of operation, hours for commercial deliveries, hours for solid waste removal, and hours for externally amplified sound for commercial businesses adjoining residential uses within the core area.
- Construction periods. Limitation on days and hours of construction in commercial and office areas adjoining residential use areas within the core area.
- Lighting. Prohibition on flashing, blinking or high intensity lighting adjacent to residential use areas. Requirement for placement and shielding of outdoor lighting fixtures to direct light away from residential use areas.
- Emissions. Requirements that odor, dust and fumes from commercial operations be effectively contained and processed to prevent the release of noxious, toxic or offensive fumes or smells within residential use areas.
- Noise. Prohibition on artificial noise or sound that is objectionable to neighboring residential uses due to intermittence, frequency, shrillness or loudness. This may include specific prohibition on amplified music audible to neighboring residential use areas after designated times.





## JOINT PARKING ANALYSIS

**Table 1**  
Parking Needs Analysis, Without Joint Use  
Northshore, Knoxville, Tennessee

Land Use	Intensity	ITE Code <sup>1</sup>	Weekday		Saturday	
			Rate	Spaces	Rate	Spaces
Theater	60,000 SF (2400 seats, 25 sf per seat) <sup>2</sup>	443	0.19/seat	456	0.26/seat	624
Big Box Retail	225,000 SF	820-828	3.23/KSF	727	3.97/KSF	893
Small Shop Retail	175,000 SF	820-828	3.23/KSF	565	3.97/KSF	695
Office	300,000 SF	711-716	2.79/KSF	837	0.28/KSF <sup>4</sup>	84
Restaurant	40,000 SF	831.835 <sup>3</sup>	11.30/KSF	452	12.77/KSF	511
<b>Total</b>	<b>800,000 SF</b>			<b>3037</b>		<b>2807</b>
Total, Adjusted for Parking Space Occupancy <sup>5</sup>				3573		3302

<sup>1</sup> Parking Generation, 2nd Generation, Institute of Transportation Engineers (ITE)

<sup>2</sup> From industry guidelines.

<sup>3</sup> 65% in "Quality Restaurant," ITE #831 and 35% in "Family Restaurant," ITE #835

<sup>4</sup> No ITE Saturday rate available; estimate 10% of weekday rate.

<sup>5</sup> Based on maximum practical occupancy of 85% of total spaces.

### Parking Requirement without Joint Use

The *ITE Parking General*, Second Edition, issued by the Institute of Transportation Engineers, is considered to be the definitive source of estimating parking demand. Table 1 summarizes the application of the *ITE Parking General* ratios to the proposed program of 800,000 square feet of mixed commercial for the Northshore Town Center.

The maximum demand for parking, under the ITE guidelines is 3,037 vehicles. Assuming an 85% maximum occupancy of spaces, the parking demand of 3,037 vehicles translates to a needed supply of 3,573 spaces. This parking supply assumes that there is no joint use of space. The resulting overall parking ratio is 4.47 spaces per thousand square feet.

### Daily Parking Profiles, without Joint Use

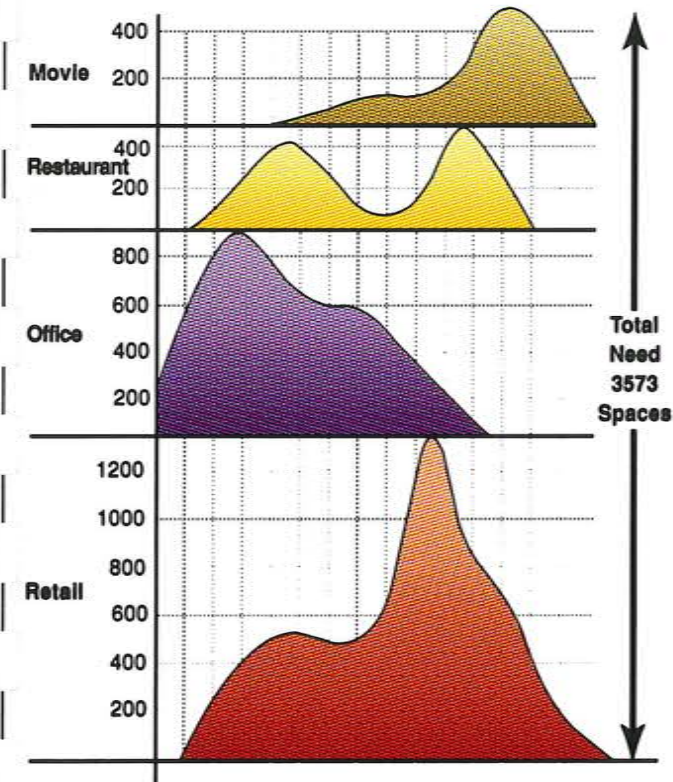
The daily profile of parking for the four land uses in the development program are shown in *Figure 1*. Without any joint use of parking ("exclusive" parking), the total parking requirement for the Northshore Town Center is simply the sum of all the individual needs. This total parking need, itemized in *Table 1* above, is 3,573 spaces. Graphically (in *Figure 1*), the total need appears as the individual land use needs "stacked" on top of each other. Without joint use, spaces not needed at some times of the day by one use (for example, for office in the evening) cannot be used by another land use (for example, the movie theater). The "white space" in *Figure 1* represents the unused parking. During most of the morning, for several mid-afternoon hours and most of the evening, therefore, around one-half of the total spaces are empty.

### Parking Profile, with Joint Use of Spaces

*Figure 2* shows the parking need with joint use of the parking supply. With joint use, the plot of the total parking need assumes the form of a "dove tailing" among all the uses, in contrast to the "stacked" configuration of the needs with exclusive parking (*Figure 1*). With joint use, the parking need is computed for each hour, and the total need is the sum of the individual needs for that hour. By contrast, the parking need with exclusive parking takes the daily maximum need for each use, and combines them.

The efficiency of joint use parking derives from the simple fact that each land use has a distinctly different peaking pattern, with periods of peak parking demand distributed at different times of the day. Importantly, the office demand, peaking in late morning, diminishes considerably by the time the retail peak occurs in late afternoon. The restaurant peaks occur at noon (slightly after the employment peak) and in early evening (slightly after the shopping peak but before the movie peak). The movie peak occurs in early to mid-evening, clear of the peaks of all other land uses. The period of maximum demand, 2,181 spaces, occurs on a weekday, during the 5 - 6 p.m. hour.

**Figure 1**  
Weekday Parking Profile, Exclusive Use



**Figure 2**  
Weekday Parking Profile, With Joint Use

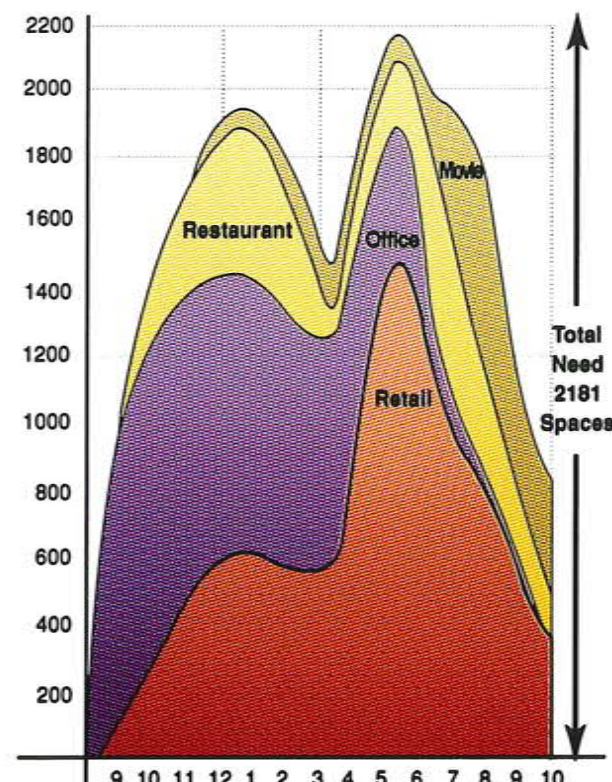




Figure 3  
Comparison, Exclusive vs. Joint Use

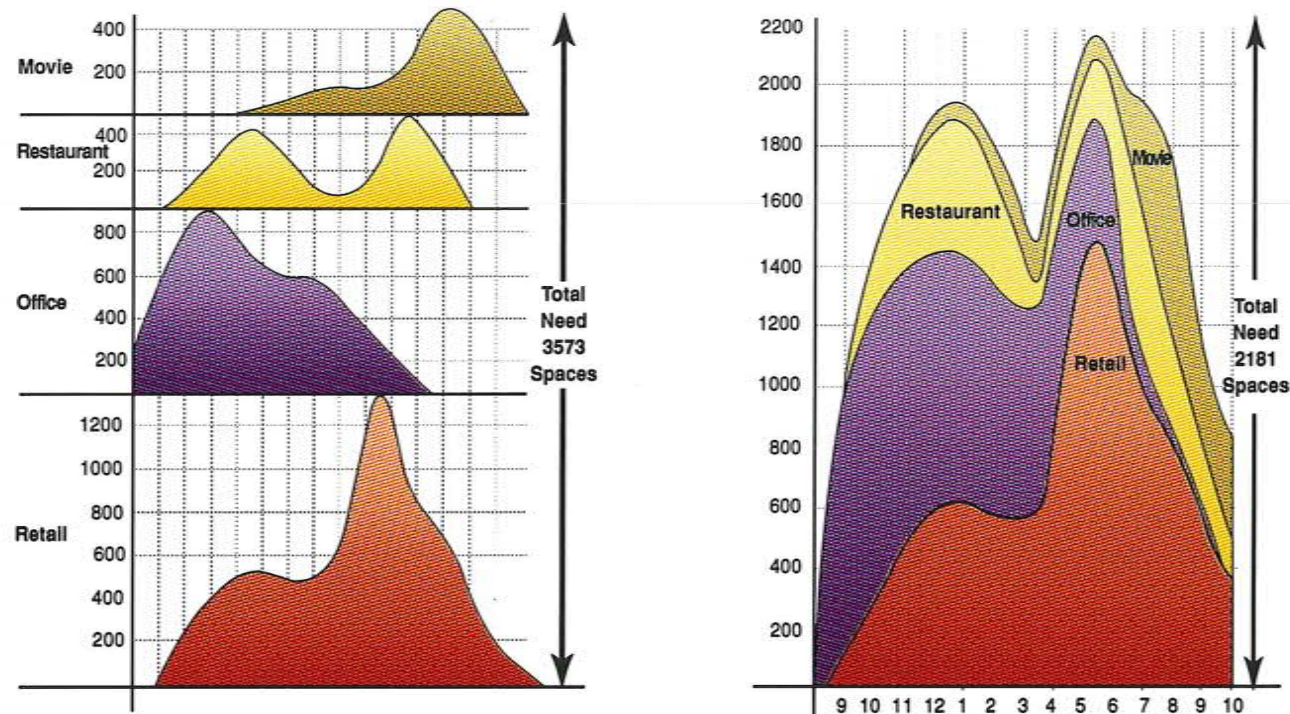
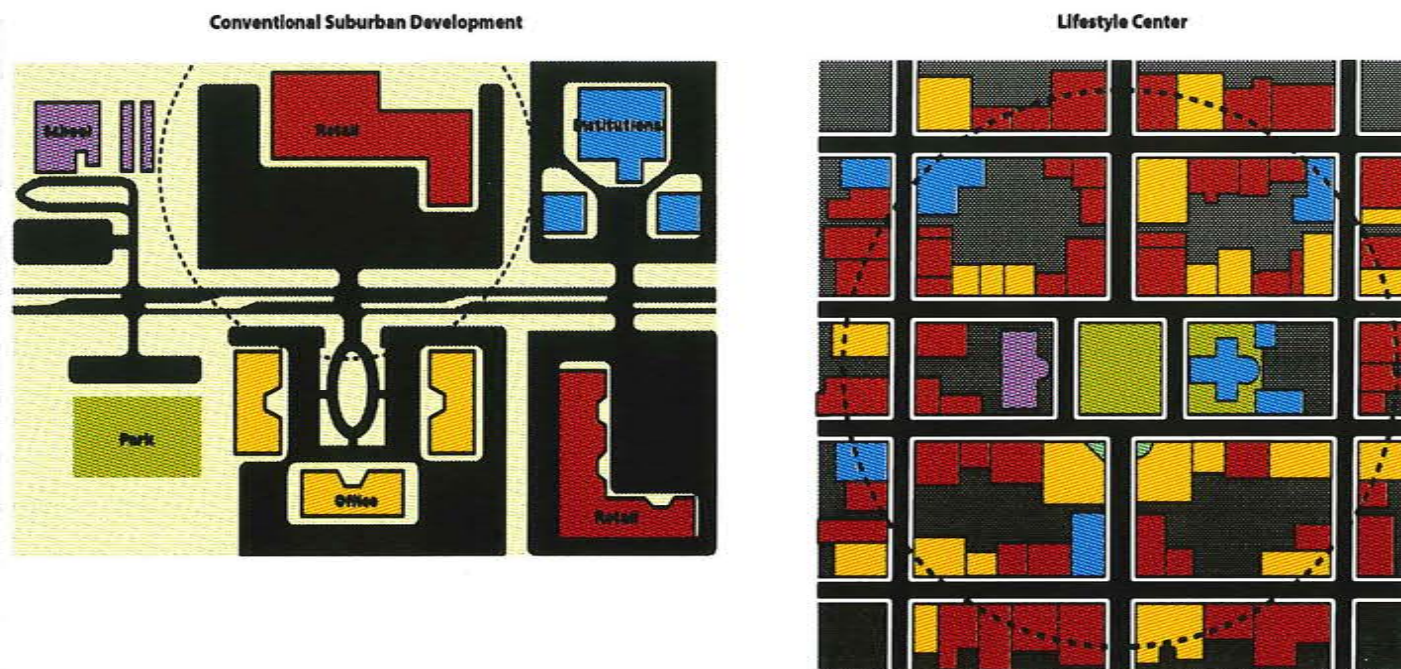


Figure 4  
Comparison of Conventional Suburban vs. Lifestyle Center Development



## JOINT PARKING ANALYSIS

### Comparison of Parking Profiles, with and without Joint Use of Spaces

Figure 3 compares the daily parking supply need, under both the assumptions of exclusive use as well as joint use of spaces.

With exclusive use, the parking need is 3,573 spaces. With exclusive use, this need is constant throughout the day, since each individual land use must provide for its maximum daily peak need.

With the joint use of parking spaces made possible by the proposed design of the Northshore Town Center, a total of 2,181 spaces is required. This peak need occurs during the 5 - 6 p.m. hour on weekdays.

With joint use of spaces, the overall parking ratio is 2.73 spaces per thousand square feet. With joint use, the total parking need is 1,392 spaces less than the 3,573 spaces needed with exclusive use. With joint use, the parking ratio of 2.73 is 61% of the ratio of 4.47 that would be required in the absence of joint use parking.

### The Northshore Town Center Land Use Pattern Strongly Supports Joint Use Parking

Figure 4 compares schematic diagrams for commercial areas with conventional and joint use parking, and illustrates the fundamental difference in land use arrangement and the ability to share parking.

Under conventional suburban development (left-hand side of Figure 4), individual destinations are widely separated by major arterial streets and parking lots in front of the

destinations. Consequently, walking to multiple destinations from a single parking space is unlikely, or even impossible, given the distances involved and the hostility of the walking environment (consisting of parking lots and major arterial street crossings). Further, the design of the parking implies that it is to be used exclusively for the immediately adjacent destination. On-street parking is not present in this environment. Even if it were, it would be of little use, being the least accessible parking spaces in the entire layout.

With the Northshore Lifestyle Center development (shown schematically in the right-hand side of Figure 4), these conditions are reversed in every respect. Rather than being widely separated by arterial streets and parking lots, the individual destinations (retail, restaurants, most offices) are tightly grouped along the streets. Consequently, walking to all destinations from most parking places is likely and encouraged. The walking environment, rather than blighted by parking lots and major arterial street crossings, is vibrant with real streets including interesting and engaging street frontage. The design of the parking, rather than implying that it is to be used exclusively for the attached destination, signals instead, to the driver, that it is useable for any destination within the Center. On-street parking, rather than being eliminated, as in conventional suburban development, is located wherever physically possible along the retail and commercial blocks. This parking serves multiple purposes: to advertise the presence of the Town Center as a commercial destination; to provide a significant number of spaces at the highest level of convenience and accessibility; to "frame" the sidewalks, greatly improving the pedestrian atmosphere; to animate the street with people and vehicles; and to "calm" traffic on streets within the Center.





## JOINT PARKING ANALYSIS

### Number of Planned Spaces Comfortably Exceeds the Parking Demand

The planned supply of parking space for the commercial uses within the Northshore Town Center is 2,400 spaces, consisting of 1,924 surface parking (lots and street) and 476 spaces in structures (309 on first level and 167 on second level). All of the spaces designated for commercial use are highly convenient to the commercial destinations, either located in the interior of blocks of commercial buildings, on streets fronting commercial buildings or in surface lots bordered on at least two sides by commercial buildings. In general, the walking environment between parking space of any type (i.e., street, surface or deck) and the ultimate destination is generally in a superior walking environment, typically consisting of a pedestrian-scaled street bordered continuously by frontage with appeal to pedestrians.

The proposed supply of parking (i.e., 2,400 spaces) for the commercial uses in the Town Center is comfortably in excess of the estimated peak usage of 2,181 spaces. The planned supply of 2,400 parking spaces yields an overall parking ratio, for the commercial district, of 3.0, some 10% greater than the 2.73 needed with joint use of the spaces.

The number of needed spaces with exclusive and joint use, and the proposed supply of parking are summarized as follows:

Spaces needed with exclusive use:

3,573 spaces; 4.46 spaces per KSF

Spaces needed with joint use:

2,181 spaces; 2.73 spaces per KSF

Spaces planned to be provided:

2,400 spaces; 3.0 spaces per KSF

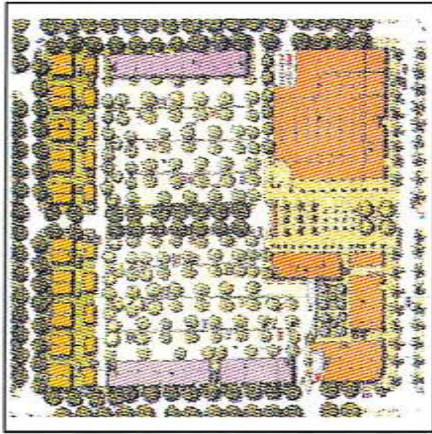
### Walking Distances, Parking to Final Destination

With joint use parking during the period of peak parking demand (5 - 6 p.m. weekdays), some 84% of all visitors to the commercial destinations in the Town Center will find a parking space equivalent in service and location, to that which would have occurred with exclusive parking, and with a parking ratio of 4.46. Thus, some 16% can be expected to park in a location more distant than under the assumption of exclusive parking.

For that 16% of visitors incurring an "increment" of walking distance (due to joint use parking versus exclusive parking), the average walking distance is around 600 feet, requiring around 3 minutes of walk time. The largest source of such parking demand is likely to be retail and restaurants fronting the southern part of the main entrance street. The major source of supply for such users is likely to be the parking area north of the movie theater.

Every important design feature of the Town Center works toward reducing the perceived walking distance between parking, and therefore increasing the propensity to walk to shared use parking spaces. The more important among these features are:

- On-street parking, presenting the perception (if not the reality) of more convenient parking.
- A walking environment bordered almost all of the way by appealing street front elements, among them highly articulated store frontage, multi-story buildings, a distinctive plaza in front of the theater, short blocks fostering a source of rapid walking progress, and a level of streetscape not found in other suburban commercial areas.
- The possibility of intermediate destinations, such as shopping and personal services (ATM machines, etc.).



With shared parking, it is possible to completely enclose the parking with the development generating the need for parking, thereby simultaneously creating a solid and interesting frontage along the street, while also concealing the parking from view of the passing motorist and pedestrian. Scene is from the Baldwin Park lifestyle center in Orlando. The large building is a Publix neighborhood grocery store.



With joint use parking in the rear, however, the street front appearance and function of the store is vastly improved. This sidewalk café scene is located at the rear entrance of a Barnes and Noble store.



Parking in interior courts, framed by buildings lining the street, is now the practice for hundreds, perhaps thousands of new town centers and lifestyle centers throughout the U.S. This aerial view, for a project developed in California, shows intense mixed-use activity, but without visible parking.



On-street parking, a critical element of the lifestyle center, not only provides the most visible and convenient parking possible, but also encloses the sidewalk, separates pedestrians from moving vehicles, and animates the street as pedestrians walk between vehicle and destination.





## PEDESTRIAN CIRCULATION



## LEDGEND

-  Primary Pedestrian Circulation : Main Street
-  Secondary Pedestrian Circulation : Sidewalks
-  Bike/Walking Trail
-  Public Gathering Spaces / Focal Points
-  Passive Recreation Parks
-  Connections to Surrounding Neighborhoods



## PLAN VIEW OF PLAZA

N.T.S.



## SECTION A-A

N.T.S.



## PLAZA SECTIONS & PLANS

The Pedestrian Circulation Plan represented in the previous drawing portrays the interconnected grid of streets, parks and plazas that form the framework of Northshore. Each element of the framework is designed to provide the best pedestrian experience possible, thus encouraging a high level of pedestrian activity.

There are three main gathering places, in addition to the streets, which occur within the core. These include the Water Front Promenade, which embraces the edge of the existing pond and features outdoor terraces for dining and entertainment, the Theater Court, which likewise supports outdoor dining, and entertainment uses, now associated with the theater, and lastly the Central Plaza.

Central Plaza occurs at the intersection of the two main shopping streets within the core. It is envisioned that several restaurants and small food shops will form the edges of the Plaza. In addition to private seating, there will be ample opportunity for shoppers to stop for a moments rest or large groups to gather for impromptu street performers. The Plaza steps down toward Main Street following the cascades of a fountain. The elevation change provides an ideal venue to view entertainment.

A series of built in steps provide a great setting to watch people stroll by on the sidewalks of Main Street, a favorite activity in Northshore. Trees, lights, beautiful paving and benches furnish the space.

The intersection at Main Street will be treated with pavers. This will both send a clear message to vehicles that they are in a pedestrian dominated place and provide an improved surface for pedestrians to cross the street.





## MAIN STREET SECTIONS & PLANS

Main Street at Northshore begins at Northshore Drive and terminates at the Theater Court. The street draws inspiration from the great shopping streets of the world. Three story buildings frame and enclose the space. Shops with large plate glass windows that bring the merchandise out to the streets line the ground floor on both sides of the street. A mix of residential uses and professional office uses occupy the upper floors.

The street supports generous sidewalks suitable for strolling and sidewalk dining with a single table depth. In addition to colorful awnings that shade both the sidewalk and reduce glare on the shop windows, high branching street trees will also shade the walks and reduce the perceived width of the street.

Angled on-street parking lines both sides of Main Street (section A-A), occurring in a zone defined by a stand-up curb and a valley gutter. The valley gutter helps define the vehicular travel lanes and again reduces the perceived width of the street. In some cases street trees will occur within islands within the parking zone. The angled parking may occur as either front pull in or rear back in.

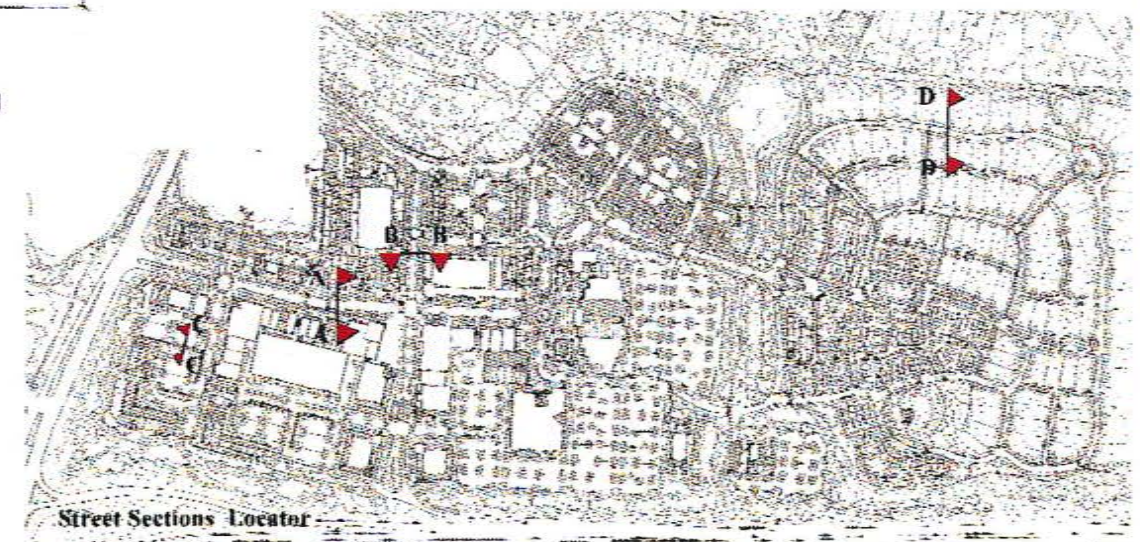


**Main Street - Angle Parking**  
Street Section A-A



**Main Street - Parallel Parking**  
Street Section B-B

The other Main Street (section B-B) runs from Philissippi Parkway to an intersection with at the Central Plaza. This street is organized in a similar manner to the other shopping street with the exception of parallel parking and a slightly narrower sidewalk.





## PARKING SECTIONS & PLANS

Parking Fields are located behind the shops that front on the main shopping streets. These Parking Fields will be landscaped to provide a positive pedestrian experience for those headed to the shopping streets and to improve their overall visual experience from surrounding public right-of-ways. The site topography may require retaining walls to produce fairly level terraces suitable for surface parking.



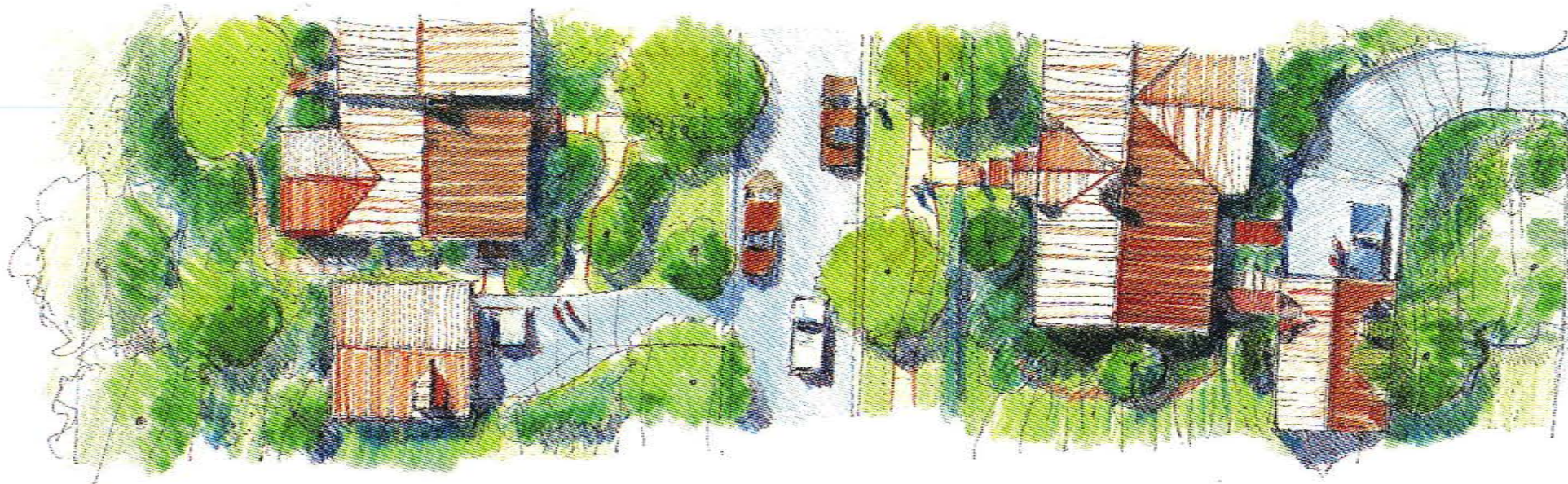
**Tiered Parking**  
Street Section C-C





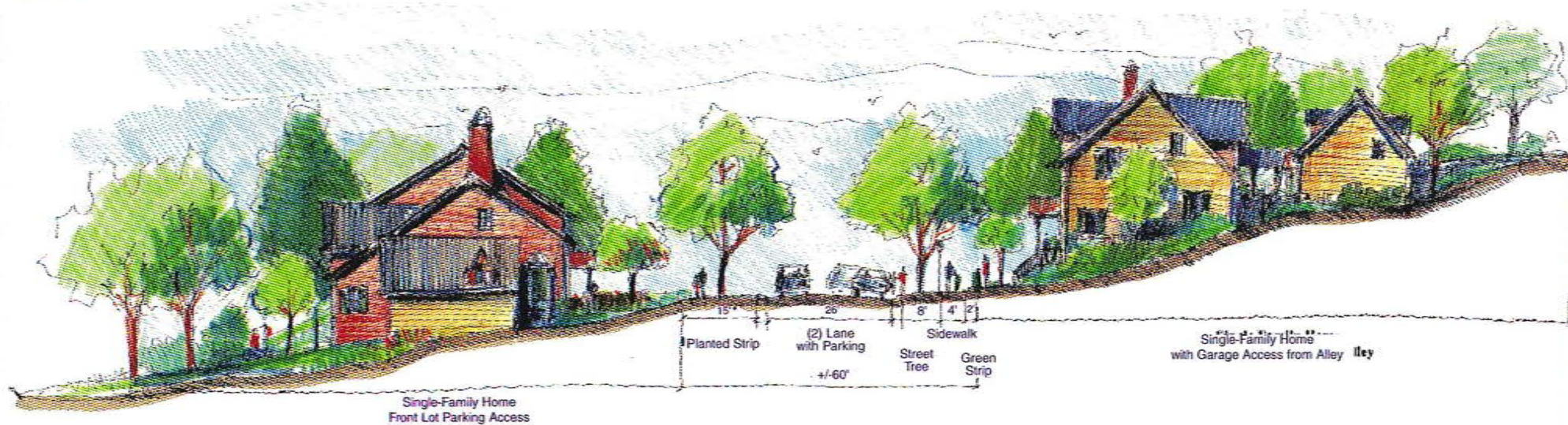
## PLAN VIEW OF RESIDENTIAL LOTS

N.T.S.



## SECTION

N.T.S.



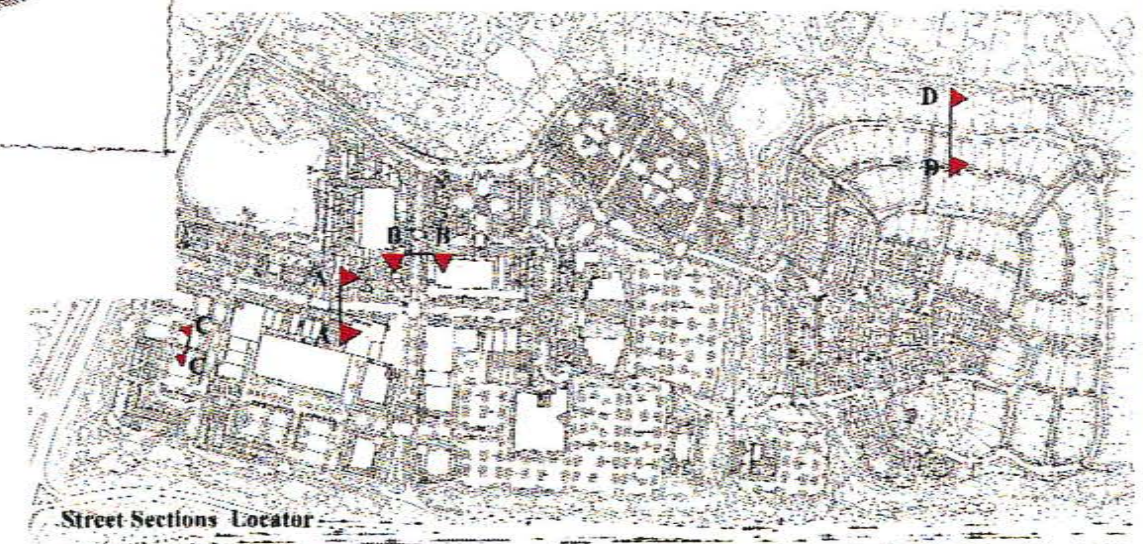
**Residential Streets**  
Street Section D-D

## RESIDENTIAL STREET SECTIONS & PLANS

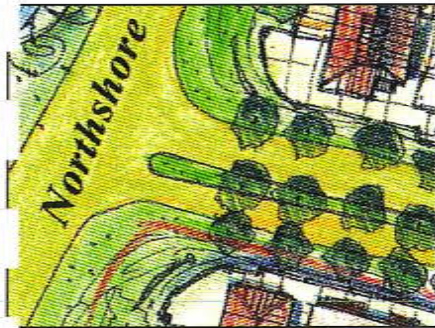
The Residential Streets (section D-D) draw their inspiration from the streets of the great inner suburbs that were built in major American cities during the late 19th and early 20th centuries. The neighborhoods are designed to respect the existing topography by minimizing cut and fill. Most lots will be alley served, although the topography prohibits this in some instances. The alleys will provide access to garages that occur in the back portions of the lots.

The streets will have at least one sidewalk, separated from the curb by a generous 8' planting strip, filled with street trees. When sidewalks do not occur on both sides of the street, the street trees will.

The streets will be 26' from curb to curb, which allows travel in two directions with on street parking occurring on one side of the street. The narrow width is critical to achieving the proper feel for the street and slowing the traffic to a speed suitable for residential neighborhoods. When two cars encounter each other near a parked car, one must pause, with courtesy, to allow the other to pass.







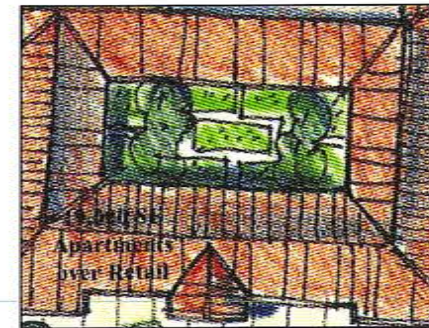
### Entry Landscaping

A tree lined boulevard shall be provided at the entry from Northshore Drive. The second entry on Northshore shall have trees on either side.



### Residential Parks

Open green spaces in the residential area provide a place for neighbors to meet and talk, for children to safely play, and for holiday gatherings. Consisting mostly of lush grass, the parks will also feature a variety of trees and foliage. These parks create an identity for the residents of the community.



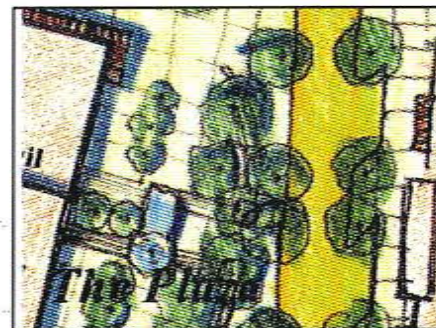
### Residential Courtyards

The multi-family housing will feature semi-private courtyards for the residents of the buildings to enjoy. A combination of landscape and hardscape is important to make the courtyards friendly and useful. Benches, planters and water features draw residents to the spaces and shade trees and colorful landscape keep them comfortable.



### Highway Buffer

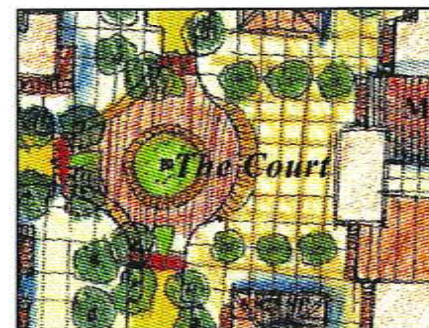
Trees and landscaping shall provide a screen along Pellissippi Parkway. Buildings and signage will be visible but controlling the automobile noise is an important issue.



### The Plaza

The plaza will serve as a public gathering area. Projected uses include a café or restaurant which will allow indoor activity to spill outside. A fountain will provide the focal point of the space visually while the sound of water produces a calming effect.

The plaza shall have shade trees and colorful foliage in addition to well planned out hardscape. A variety of levels and pockets of space accommodate a variety of activities- from quietly reading book to a large outdoor gathering.



### Theater Court

The area in front of the theater will serve as a gathering space before and after shows and as an outdoor eating area for surrounding restaurants. The event of going to the movies becomes an entire evening with spaces to meet people, enjoy food or drink, or shop.

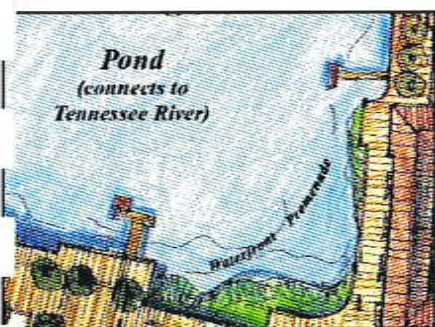


### Parking Landscaping

Shade trees in the surface parking areas will provide comfort and visual interest. They will be located to break up the monotony of a typical asphalt parking lot.

## LANDSCAPE & HARDSCAPE

The integration of open and public spaces and green spaces is crucial to the success of the mixed-use development. The location and frequency of these spaces directly contributes to the liveliness of the area and the degree to which the development is used. People need green places and open places to go to. When these spaces are close, people use them. If they are located more than a few minutes walk away, the distance overwhelms the need and the open spaces become stagnant and dead. In order to activate plazas, public squares and parks, uses shall be provided at the edges. In an urban or mixed-use setting, the life of a public space forms naturally around its edge. If the edge fails or is not used, then the space never becomes lively.

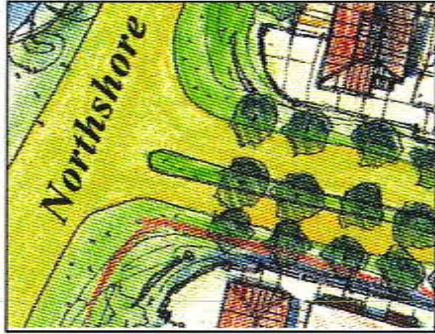


### Lake-front Promenade

The existing lake adjacent to Northshore Drive will feature a boardwalk style promenade. Retail shops and restaurants will open onto an elevated wooden platform that borders the edge of the lake. Pedestrian furniture and lighting will create a zone conducive to walking or relaxing.





**Typical Entrance / Median Landscape:****Evergreen Trees:**

- Broadleaf American Holly
- Foster Holly
- Magnolia

**Deciduous Trees:**

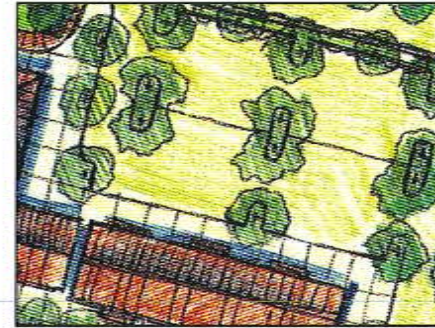
- Red Maple
- Sugar Maple
- Willow Oak
- Red Oak
- Lace Bark Elm
- River Birch
- Yellowwood

**Shrubs/Small Trees:**

- Azalea
- Crape Myrtle
- Holly
- Yew
- Mountain Laurel
- Viburnum
- Spirea
- Hypericum
- Liriope (groundcover)
- Daylily (bulb)

**Concept:**

Single row of trees for marking entrances to be located on each street side and in the median. Thick buffers to hide back of buildings and low shrubs to complement trees and accent signage and traffic flow. Trees to be, on average, 40' o.c.

**Typical Parking Lot Landscape****Evergreen Trees:**

- Broadleaf American Holly
- Foster Holly
- Japanese Pine

**Deciduous Trees:**

- Green Ash
- River Birch
- Red Maple
- Sugar Maple
- Southern Red Oak
- Shumard Oak
- Tulip Poplar
- Zelkova
- Willow Oak

**Shrubs/Ornamental Trees:**

- Dogwood
- Crape Myrtle
- Redbud
- Holly
- Mountain Laurel
- Otto – Luyken Laurel
- Spirea
- Azalea
- Hypericum
- Liriope (groundcover)
- Daylily (bulb)

Note: A minimum of 1 tree per 2000 sf of pavement to be provided. Trees shall be planted within parking lot or within 15' perimeter. No parking space shall be greater than 60' from a tree.

**Concept:**

Drive lanes in parking to be marked by single species of trees while landscape islands should be a variety of species. Trees need to have large enough clear trunk height to not obscure important views. Buffering between parking and at tiered retaining wall areas to be mix of evergreen and deciduous trees with shrubs to create sufficient screen and provide pedestrian safety as "landscape guardrail".

**Typical Open Space / Park Landscape:****Evergreen Trees:**

- Broadleaf American Holly
- Deodar Cedar
- Eastern Red Cedar
- Atlantic White Cedar
- Southern Magnolia
- White Pine
- Loblolly Pine
- Shortleaf Pine

**Deciduous Trees:**

- Green Ash
- American Beech
- Bald Cypress
- Ginkgo
- White Oak
- American Basswood
- Bur Oak
- Tulip Poplar
- Sweetgum
- Yellowwood
- Sugar Maple
- Sycamore
- River Birch
- American Hornbeam

**Shrubs/Small Trees:**

- Redbud
- Dogwood
- Serviceberry
- Carolina Silverbell
- Sourwood
- Carolina Cherry Laurel
- Red Buckeye
- Blackhaw

**Concept:**

Interior area of park needs to feel natural and in harmony with any existing landscape (ie. sinkhole) while their perimeter needs to maintain their surrounding streetscape design and sidewalk layout. Accent trees and shrubs need to be located at focal points and based on park programming.

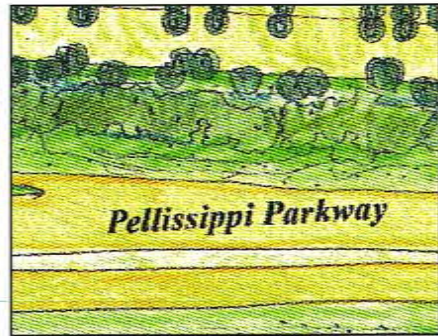
## LANDSCAPE DETAILS

**Irrigation**

- All new plants shall be irrigated by underground automatic irrigation system.
- Irrigation system design shall be approved by Landscape Architect or Certified Irrigation Designer/Consultant.
- New, commercial grade equipment shall be used.
- System shall provide 100% (head to head) coverage.
- Lawns shall not be zoned separately from trees, shrubs and flowers.
- Flowers shall be zoned separately from others.
- System shall be designed to be efficient. Rain gauges and/or moisture meters shall be installed.
- Rotors shall be used for large planting masses and lawn areas.
- Bubblers shall be used in tree pits and raised planters. Also, use bubblers in small beds where over spray is likely.
- Sprinklers shall not over spray onto paved surfaces.
- Pressurized piping shall be rated 200 Class minimum strength.
- Sleeves shall be Schedule 40 minimum strength.





**Typical Buffer Landscape:****Evergreen Trees:**

- Broadleaf American Holly
- Southern Magnolia
- White Pine
- Loblolly Pine
- Shortleaf Pine
- Eastern Hemlock

**Deciduous Trees:**

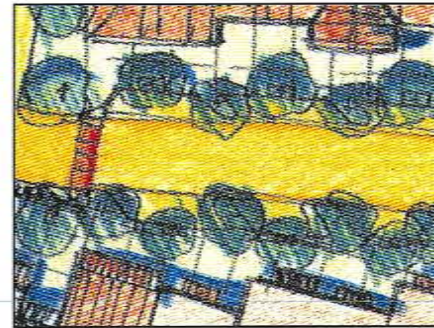
- Southern Red Maple
- Black Gum
- Sweetbay Magnolia
- Bald Cypress
- Pin Oak
- Fruitless Sweetgum
- Sassafras
- Sourwood

**Shrubs/Small Trees:**

- Mountain Laurel
- Viburnum
- Yew
- Holly
- Hydrangea
- Azalea
- Rhododendron

**Concept:**

Buffer areas to achieve at least 80% opacity. Arrange trees in a natural grouping, and understory to be left natural. The street trees on the buffer edge to be part of the overall street tree composition.

**Typical Retail Street Landscape****Deciduous Trees:**

- Lace Bark Elm
- Southern Red Oak
- Shumard Oak
- Red Maple
- Willow Oak
- Zelkova

**Shrubs/Ornamental Trees:**

- Dogwood
- Serviceberry
- Redbud

Note: Ornamental trees to be used where height restrictions exist and where they are not confined to small planting wells.

**Concept:**

Each street to have a single species of tree marking that street. Each tree should have a minimum of 8' clear trunk height and be planted 25-45' o.c. depending on tree variety and street conditions (parallel/angled parking, slopes, etc.). Accent trees should be planted in focal points and pull out areas.

**Typical Residential Street Landscape:****Deciduous Trees to be used in yards and to delineate property:**

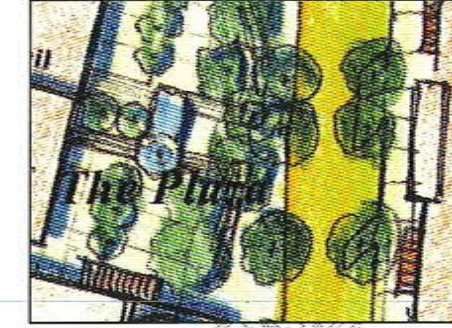
- Sugar Maple
- Red Maple
- Southern Red Oak
- Sycamore
- Tulip Poplar
- Little Leaf Linden
- Willow Oak
- Green Ash
- American Hornbeam
- Shumard Oak

**Ornamental trees to be used as accents and to delineate property:**

- Crape Myrtle
- Redbud
- Dogwood

**Concept:**

The street trees are to accentuate the street edge. Trees added to property for increased value and to delineate lots. Trunks are to have enough clear trunk height so as to not impede any important views. Trees should be planted 30-50' o.c. depending on variety and site conditions such as lot line, driveways and sidewalks.

**Typical Plaza Landscape:****Evergreen Trees:**

- Broadleaf American Holly
- Sweetbay Magnolia
- Foster Holly

**Deciduous Trees:**

- Red Maple
- Southern Red Oak
- Shumard Oak
- River Birch
- Bald Cypress
- Thornless Honey Locust
- Yellowwood

**Ornamental Trees:**

- Crape Myrtle
- Redbud
- Dogwood
- Carolina Cherry Laurel
- Serviceberry
- Carolina Silverbell

**Ornamental Shrubs/Trees:**

- Azalea
- Holly
- Yew
- Mountain Laurel
- Spirea
- Otto Lyken Laurel
- Hpericum
- Liriope (groundcover)
- Daylily (bulb)

**Concept:**

Create a landscape that will compliment and organize a variety of spaces; that will create rooms and perspectives toward focal points such as fountains, monuments and main entrances of buildings. Trees will add color, shade and be in balance with the surrounding street tree layout.

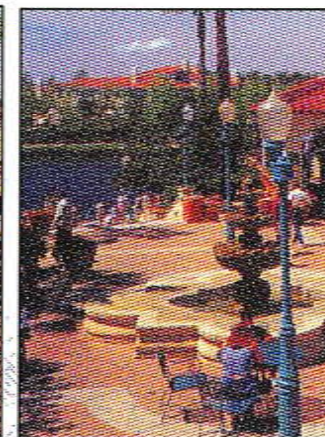
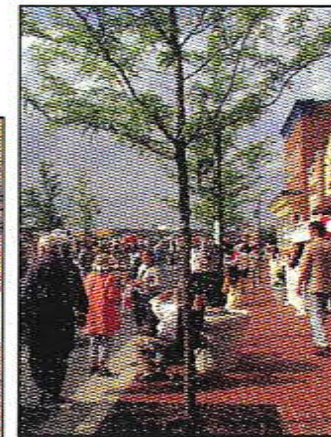
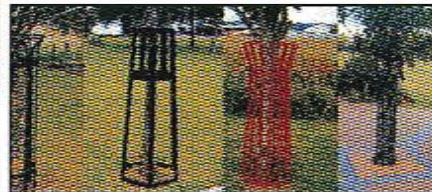
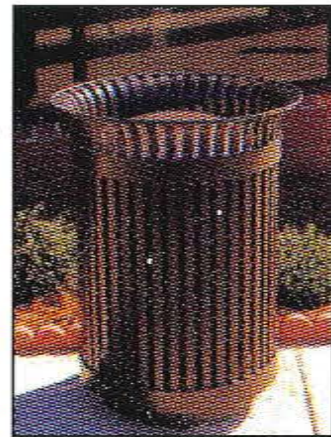
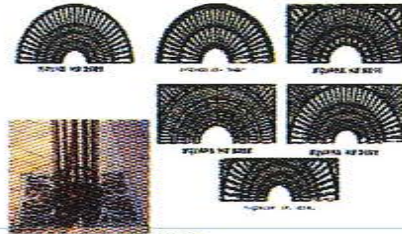
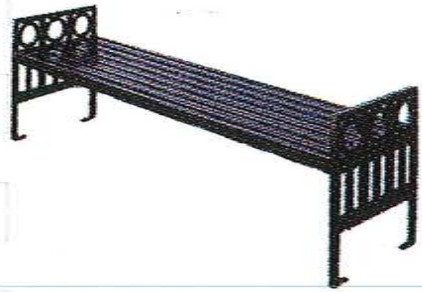




## ELEMENTS

## Street Furniture

Pedestrian amenities such as benches, bike racks, tables and chairs and waste receptacles are essential to an active streetscape. Bollards, tree grates and guards, and planters help keep the area looking its best. These items shall complement the architecture of the building in detail and color. Dark bronze, dark green and black metals lend themselves to this style of architecture and have a time-less look. Street furniture shall be secured to the ground or an adjacent building or structure.



## Street Lighting

Street lighting fixtures range from 15' to 25' tall and lend themselves to a "main street" area. They may also support banners or signage.



## Accent Lighting

Accent lighting fixtures shall be used to illuminate landscaping, fountains or water elements, statues or other special areas. In most cases, these fixtures are modest in design in order not to detract from the illuminated object.

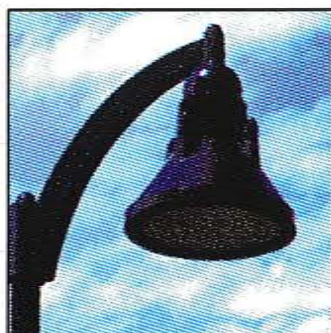


## Lighting

Lighting allows the development to safely function during the evening hours. The design and selection of the light fixtures shall reinforce the architectural quality of the buildings. Lighting shall be cohesive and complimentary across the scale of fixtures.

## Parking Area Lighting

Parking area fixtures are a typically 35' tall and provide proper illumination for large areas.



## Pedestrian Lighting

Pedestrian lighting fixtures are usually 12' tall or less. Bollards may also be used to illuminate a pathway. Pole fixtures may also support banners or signage.

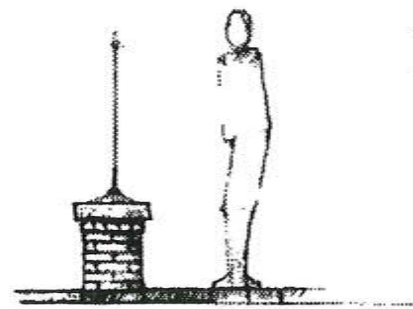
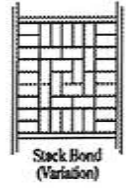
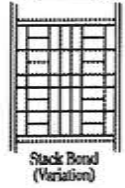
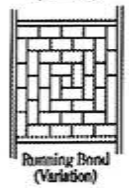
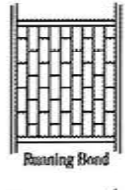
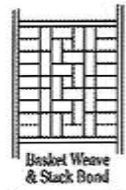
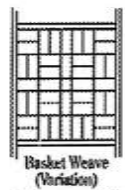
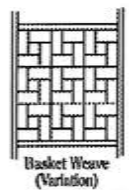
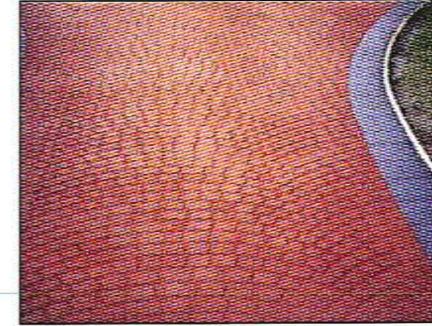
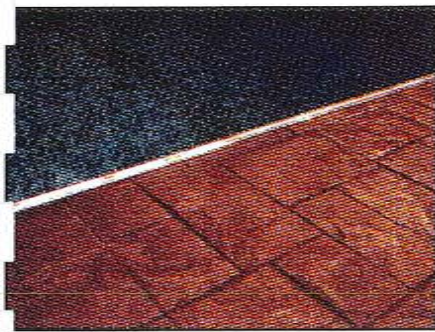




## ELEMENTS

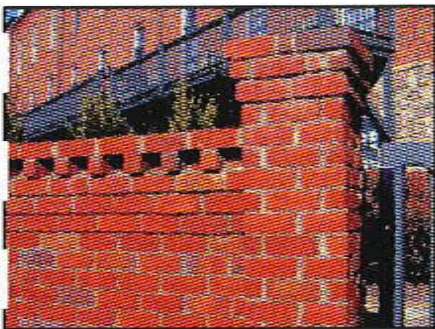
**Paving**

Paving patterns create interest and scale in an outdoor space. They help break up monotonous expanses of concrete and focus attention to the certain areas. Paving can be stamped concrete or asphalt as well as brick and concrete pavers. Colors and patterns should reflect the character of the architecture. Change in paving material shall be used at pedestrian crosswalks and intersections along Main Street for its traffic calming effect.

**Fences & Low Walls**

Fences shall complement the architecture of adjacent buildings in material and design. Traditional fences of wrought iron with finials and similar detailing may be interpreted in a more modern design.

Low walls of brick, stone or a combination of both provide a degree of separation without breaking the view. Walls may be used as seating areas and require proper detailing to avoid water infiltration problems.

**Fountains**

Fountains are encouraged in public plazas and courtyards to provide a visual focal point. The sound of the running water creates a relaxing atmosphere and provides "white noise" to reduce automobile sounds.



## MIXED-USE ARCHITECTURE

The architecture, landscaping and signage of Northshore are intended to capture the atmosphere of an old mill/ industrial site built around the turn of the century that has been undergoing adaptive re-use.

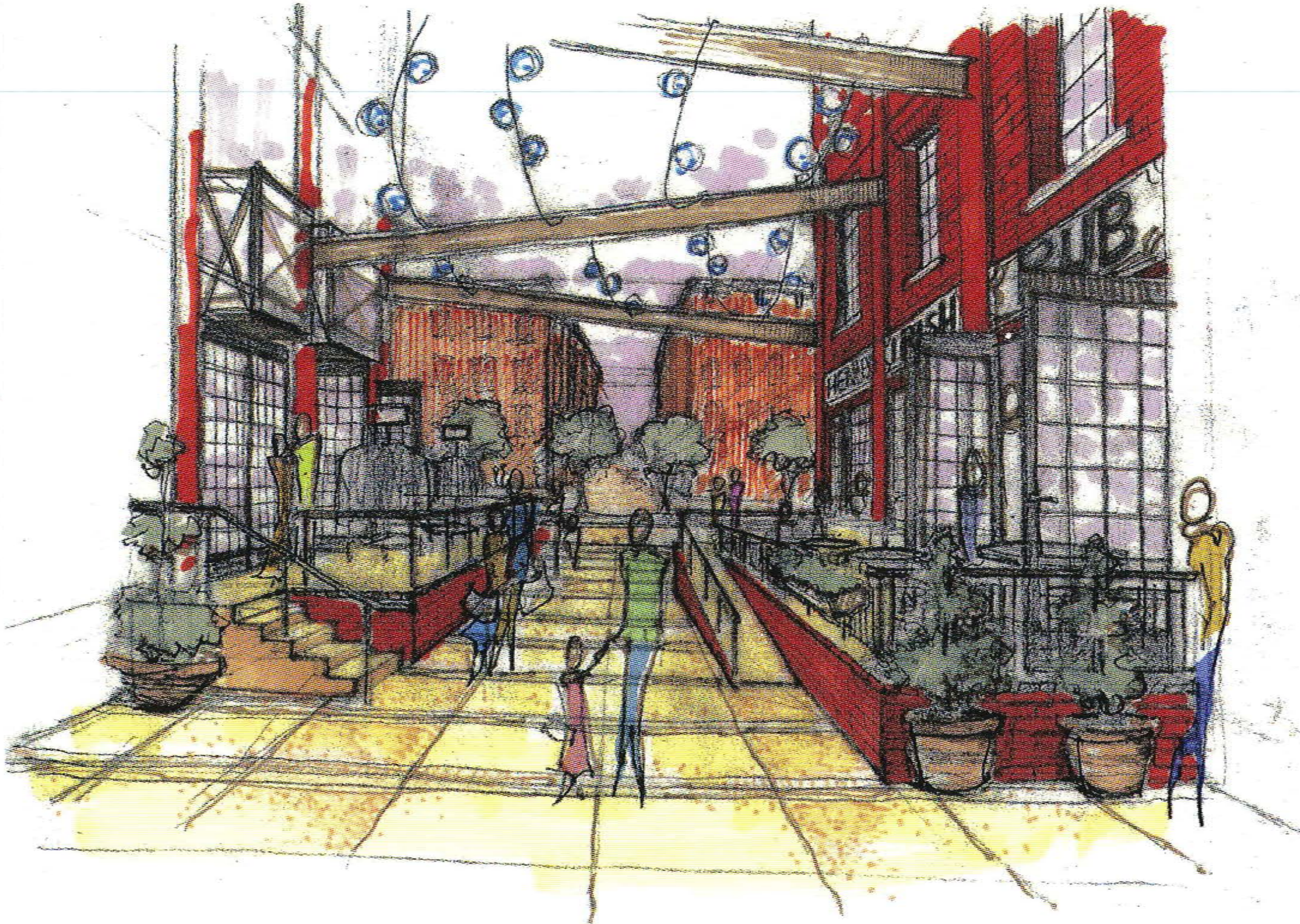
In this type of development we find a heavy propensity for brick detailing and stone bases that recall the riverside nature of these industrial developments. Brick smoke towers and industrial steel water towers define old industrial sites and act as a symbol of civic and public spaces when adapted to new uses. Similar detailing repeats itself in the multi-family residences that grew from these industrial developments.

A wealth of styles and details exist in the mill/industrial buildings at the turn of the century. Intricate brick detailing and variation of form will influence the big box retail and entertainment aspects while the rhythmic structure of traditional industrial buildings will define the retail below and residential above. These residences will be "loft" style residences common in industrial sites that have been rehabilitated.





## MIXED-USE ARCHITECTURE



Industrial/Mill architecture and their adaptive re-use share the following architectural and landscaping characteristics which will be reflected in the buildings and spaces constructed at Northshore:

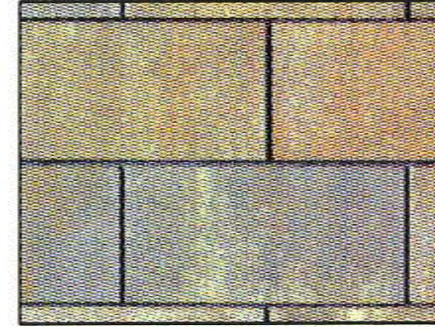
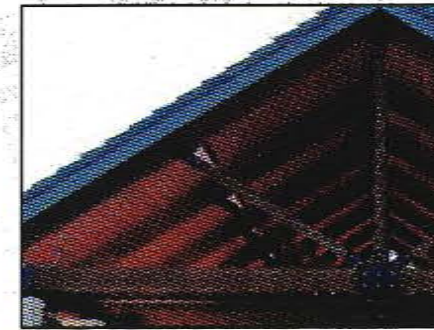
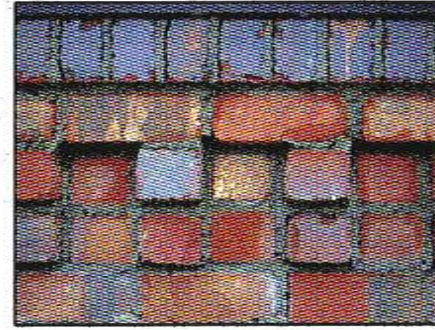
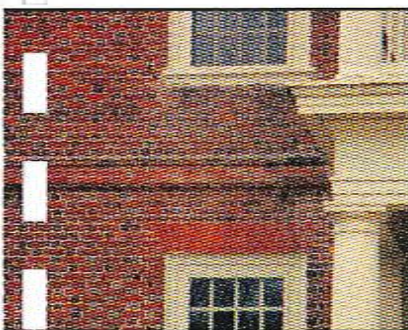
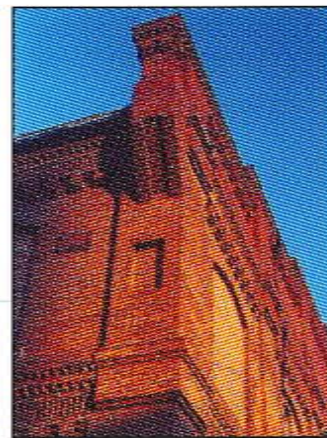
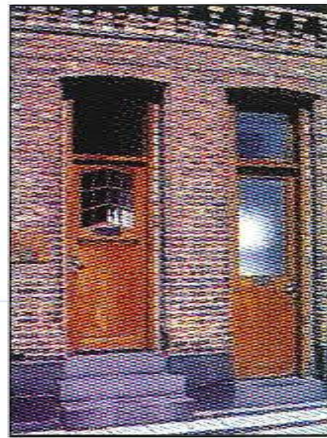
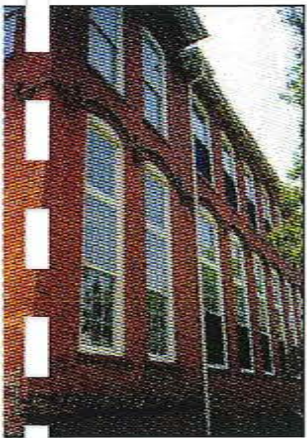
- Vertical tower elements, chimneys and water towers will create interest in the silhouette and express civic and public spaces.
- Canopies, trellises and porches will reflect the industrial nature of late 19th century and early 20th century industrial construction emphasizing cast iron and heavy timber with accentuated connections.
- Roof lines will be brick parapet or low pitch shingle roofs traditionally used in industrial/mill construction.
- Large open public spaces will combine hardscape with trees in metal grates and large containers with smaller topiaries and planting containers. Plantings will soften the hardscapes and create interest at the human scale.



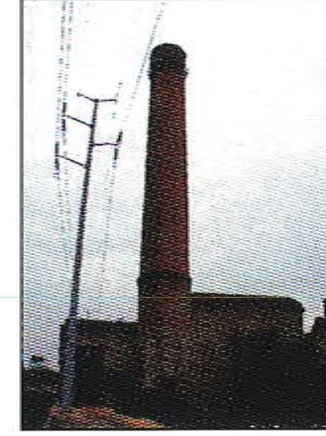
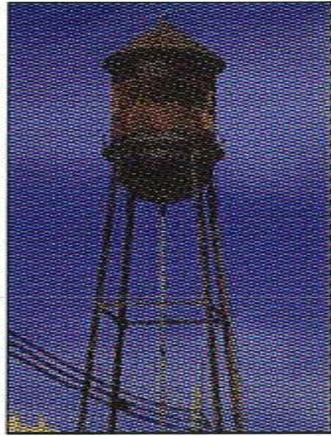


## MATERIALS

Materials should consist mostly of brick walls with or without stone bases. The brick should retain traditional colors of reds and browns found in historic examples of mill construction in Tennessee. Stone should be cut stone that simulates limestone or other traditional stonework in the area. Brick and stone patterns should reflect historic bond and Flemish patterns found in many mill buildings at the turn of the century. Cornices, lintels, and other facade elements should be constructed of masonry or similar materials. Exposed metal work may be used along with wood and heavy timber construction. The detailing and exposed connections of these materials reveal the process of construction. Sloping roofs may be of low-slope metal standing seam or architectural shingles.



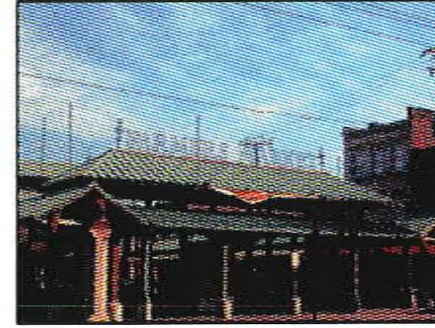
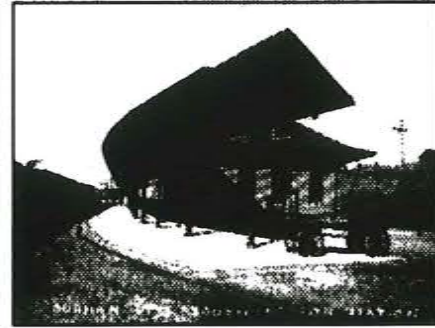
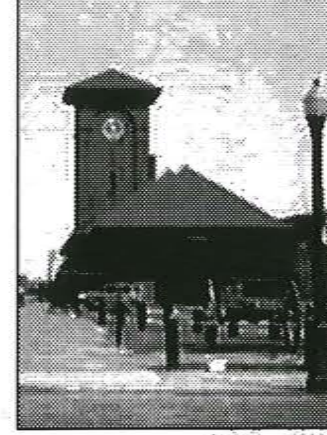
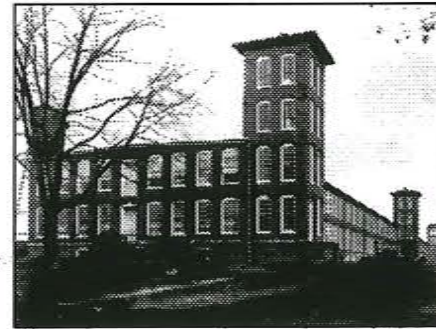
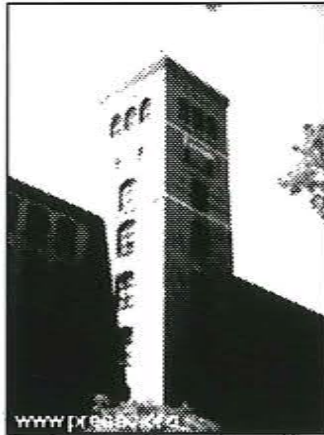
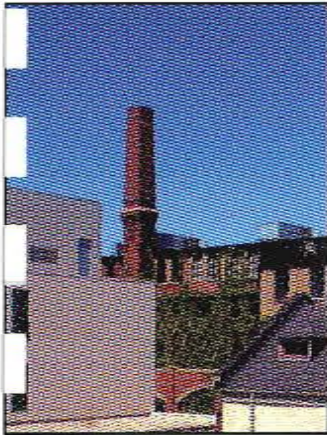




## ARCHITECTURAL ELEMENTS

### Vertical Elements

Vertical towers, smoke stacks, chimneys, and water towers will create interest in the silhouette and express civic and public spaces. These should be made of brick and stone in materials complimenting the main buildings. The detailing should be more intricate since they are feature pieces in the landscape.



### Pavilions

Covered pavilions in public spaces allow for a wide range of activities. They may be used informally for a resting place or may house a weekly market. Pavilions serve as an image of public pride. They must be designed to be flexible and create a lasting image and a sense of place. In Northshore, the pavilions shall draw upon the vernacular of train station platforms common to the region at the turn of the century. These transportation buildings served as an important piece of public architecture. Today, the pavilion will house public events, celebrations and gatherings.

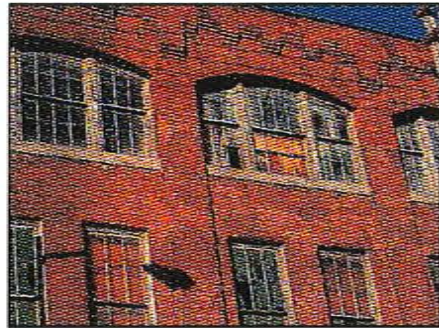




## ARCHITECTURAL ELEMENTS

### Facade

The mill/industrial town is based on brick buildings with a clearly defined base, mid-level, and cornice or roof. These buildings typically have a richness of detailing, simple building forms, and well-articulated openings. The tectonics of the structure is expressed on the building facade: a structural frame is presented with infill panels or openings. Even the details of a wood beam to column connection are articulated. The smaller buildings may relate to the local vernacular building, such as a train station common in this type of mill-town. The buildings shall offer a level of detail, especially from the pedestrian's vantage point, which establishes an interesting streetscape.

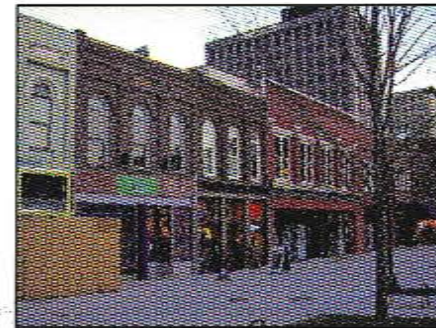
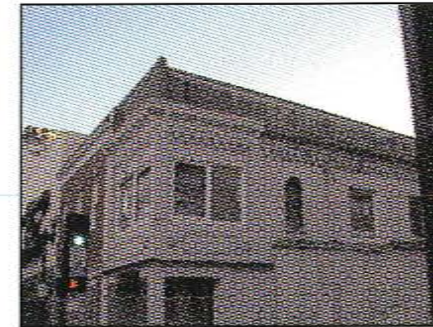
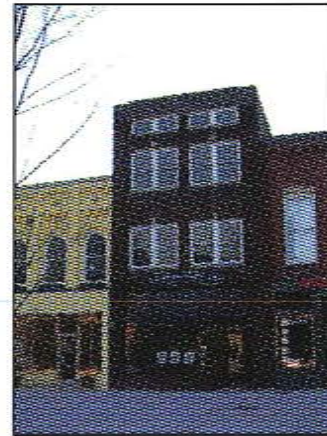




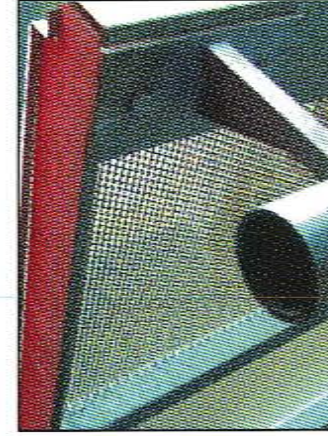
## ARCHITECTURAL ELEMENTS

### Facade

The transformation of this mill style into retail stores, restaurants, offices and residences shall be expressed through the juxtaposition or insertion of building elements and materials. A painted metal window system, balcony and handrail may be inserted into a rough textured brick wall. A detailed wood and steel awning may provide shelter next to a field stone wall. In addition, the integration of properly designed signage, lighting, balconies and awnings will create a vibrant environment which encourages pedestrian activity.







## ARCHITECTURAL ELEMENTS

### Stairways

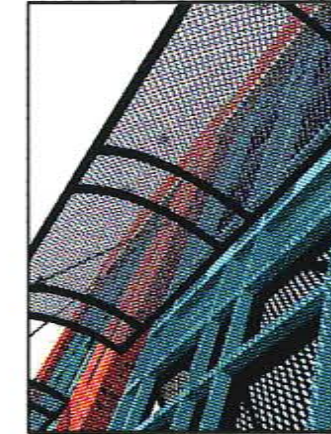
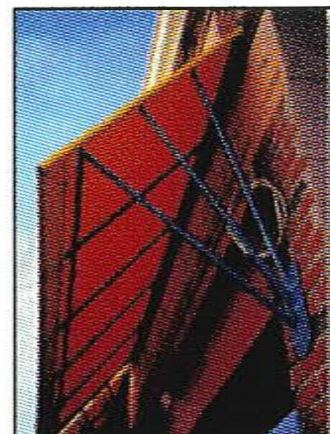
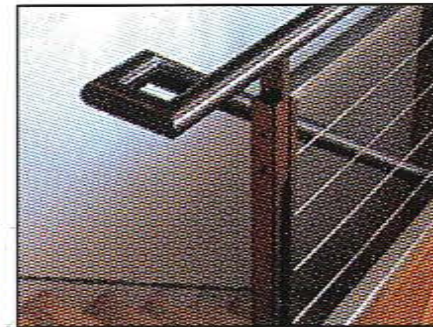
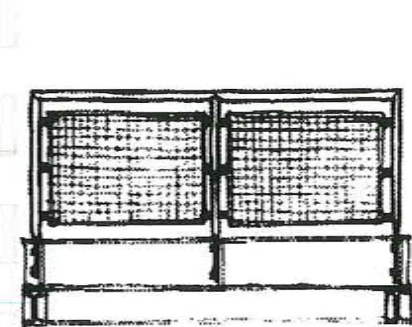
Stairways of metal construction form an open framework that contrasts with the heavy masonry walls typical of the mill style buildings. Careful detailing is required to create a safe and aesthetically pleasing stair.

### Guardrails

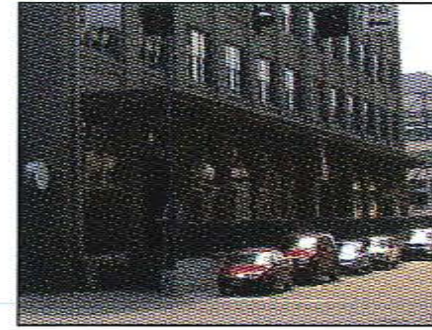
Guardrails and handrails express the industrial nature at the turn of the century and can create an extension of the character of the shop or residence within. Keeping in character with the industrial detailing railing should recall cast iron or steel.

### Canopies

Canopies shall be either wood or metal – expressing the industrial character – or fabric – expressing the adaptive re-use nature found in old mill buildings that have been converted to retail use.







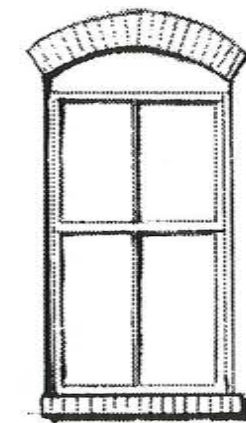
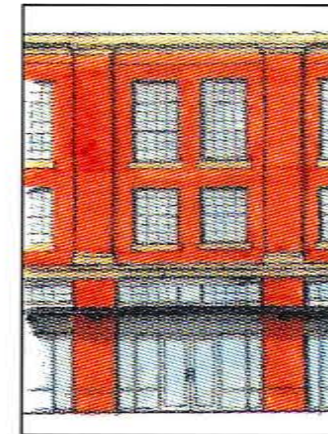
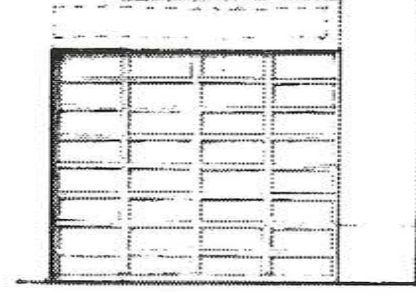
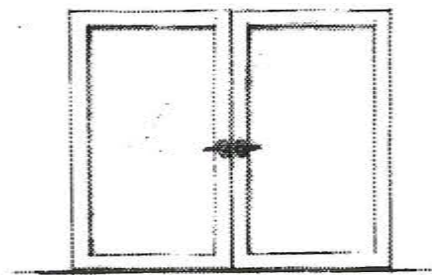
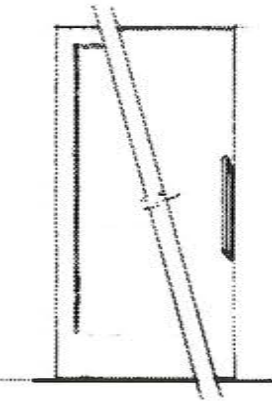
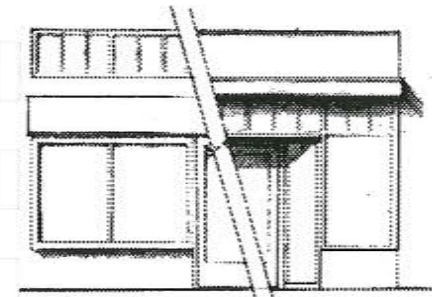
## ARCHITECTURAL ELEMENTS

### Arcade-Covered Walks

Covered walks provide shelter for the pedestrian from rain or intense summer sun. Arcades are typically made of brick or stone where the arch is expressed through details of the materials. Covered walks may be of wood, metal or stone, and may create a balcony above. The openings of these structures must be designed so as not to obscure the view of retail windows inside the walkway.

### Doors & Windows

Mill buildings feature large, operable windows with divided lights, arched openings, and defined sills. Openings are further defined by steel or stone lintels supporting the wall above windows and doors openings. The detailing and proportioning of the doors and windows is critical to the scale of the building.



### Storefront Assembly

With optional transom window or windows above canopy or awning.

### Storefront Door

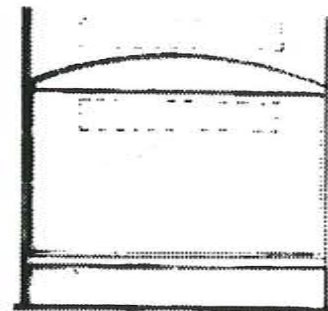
All glass or storefront framing with glazing.

### Barn-Style Door

Intended as access to exterior patio, dining area or similar uses; or as pedestrian access to interior of commercial establishments.

Allow for natural air circulation and daylighting

Swinging or sliding door, glazed, grade level opening.



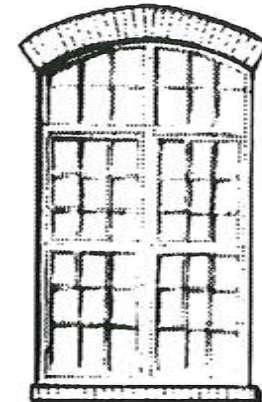
### Sectional Overhead Door

Glass and Metal at Front entry:

- Intended as access to exterior patio or dining area, or as counter or Point-of-Sale for commercial establishments
- Pedestrian access to interior of retail areas
- Allow for natural air circulation and daylighting
- Grade level or counter-height opening

Metal at Rear entry:

- Service access for "back of house" functions
- Grade level to dock level as needed



### Double-hung w/ Arched Opening

More common at upper floors.

Arched brick header.

Standard double-hung window with arched infill panel above.

Sash divided into larger panes with wider muntin spacing.

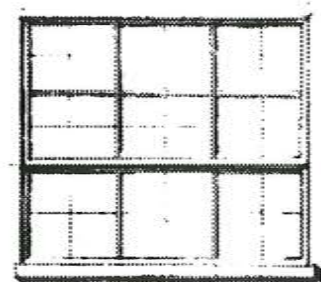
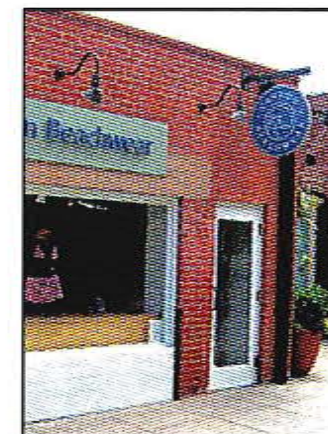
Concrete, stone or brick sill.

### Arched/Double-hung Window

Soldier-brick arched header

Fixed arch window pane above double hung sash

Concrete, stone or brick sill

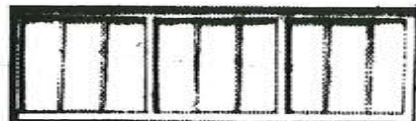


### Double-Hung or Awning Window

Typically only on upper floors.

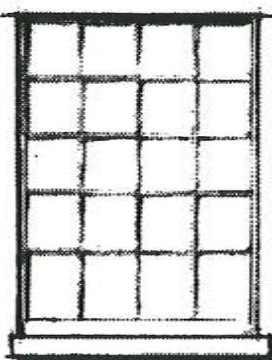
Brick header.

Concrete, stone or brick sill.



### Clearstory or Transom Window

Transom at ground level entry, Clearstory at upper level or above double-height spaces.



### Fixed/Inoperable Window

Sash divided into smaller panes with narrow muntin spacing.

May span one or two floor levels, in single- or double-height spaces.

Concrete, stone or brick sill.

### Single-Panel Storefront Window

Retail storefront with knee-wall.

Arched OR extended header w/ infill (optional transom piece).

Allows for flexibility of canopy and/or signage placement.

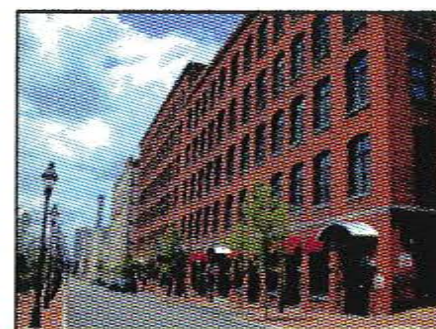
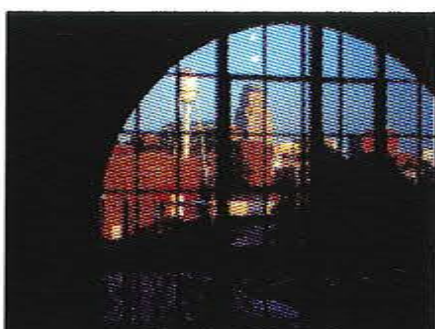
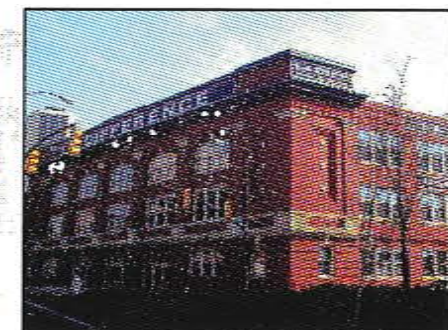
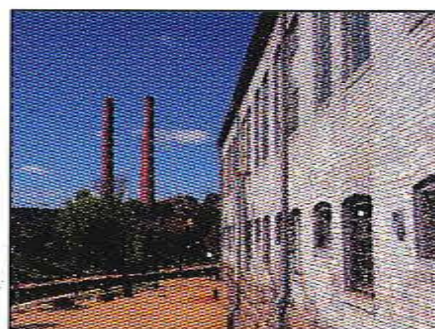
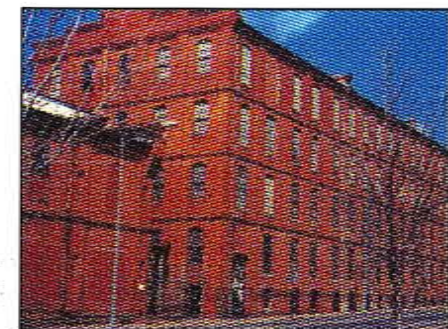
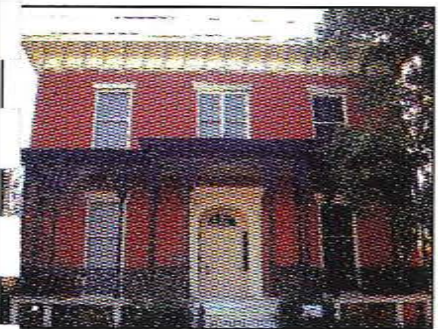
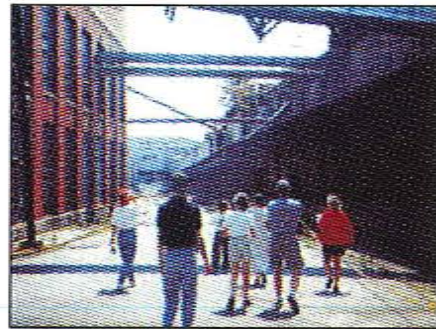
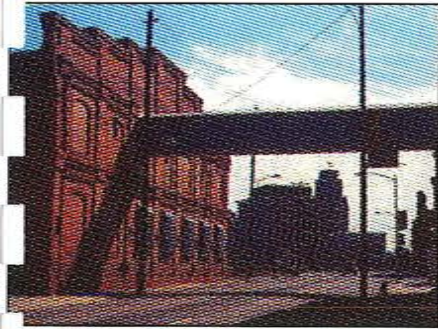
Typically only one or two per structural bay.

Concrete, stone or brick sill/header.





# EXAMPLES



wardrail and heavily detailed cornice overhang. Wrought iron canopy and railings.

Note the expression of structure through brick pilasters and floor lines. There is a regular rhythm to window openings, too.

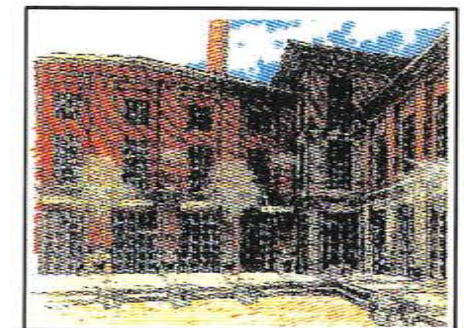
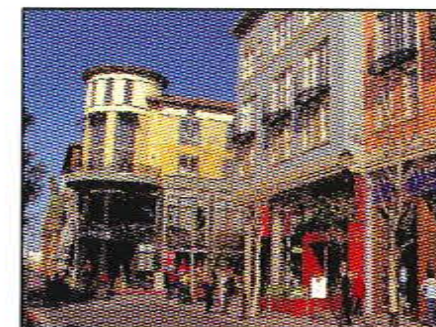
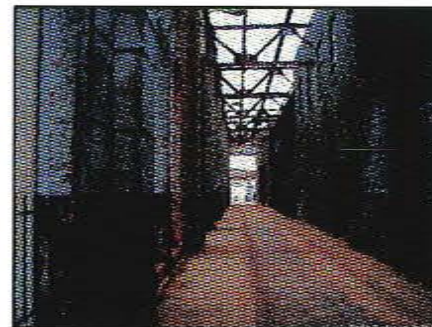
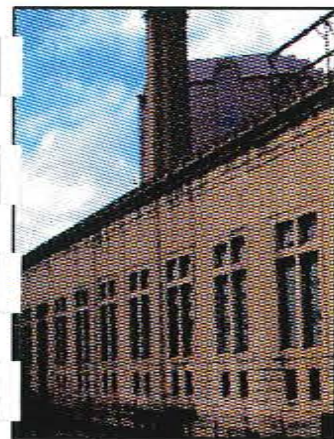
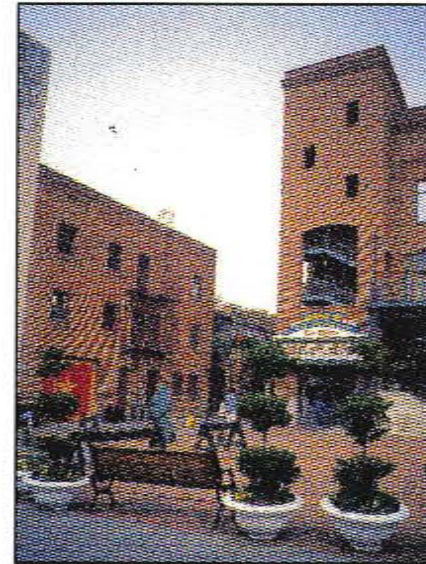
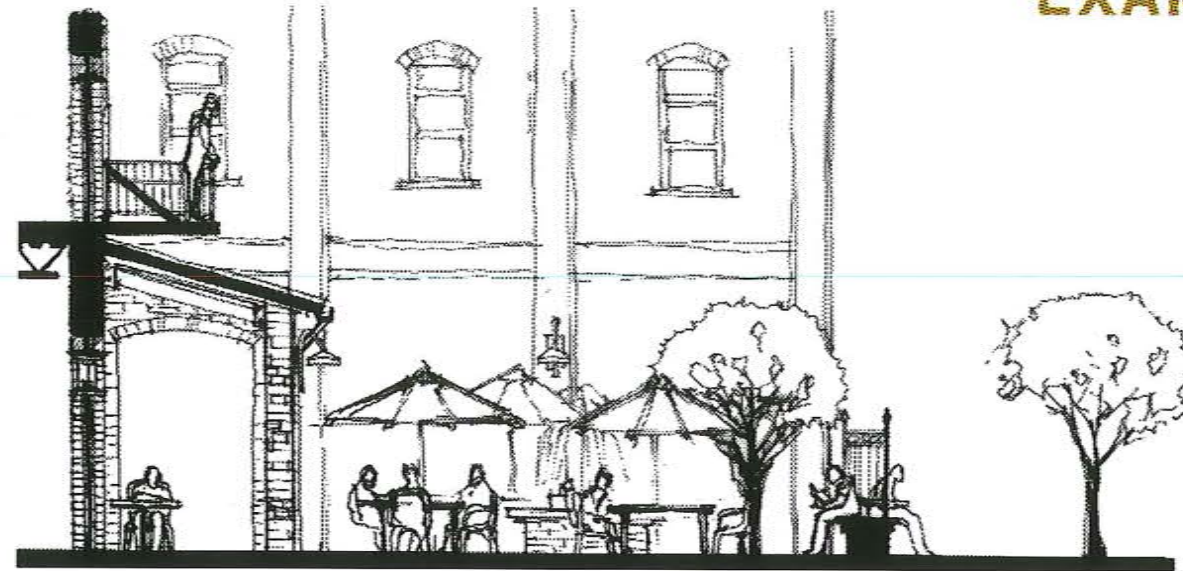
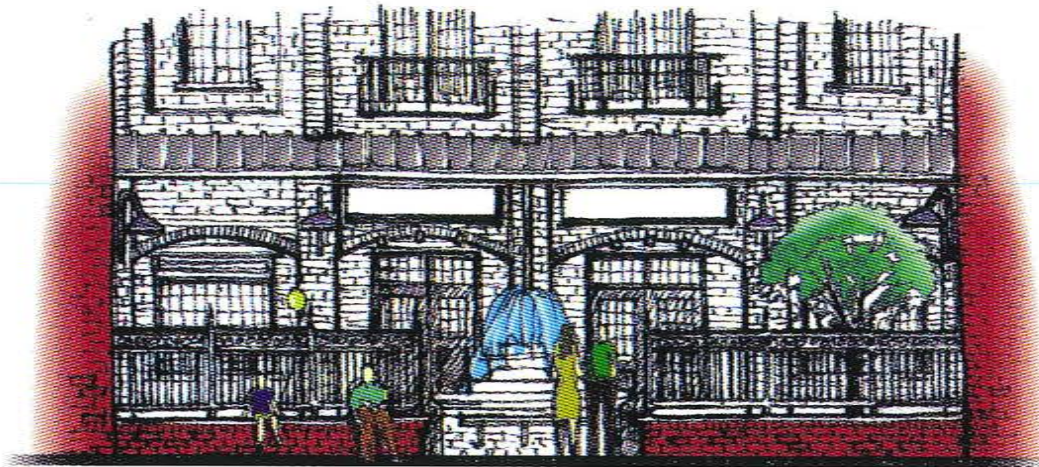
Brick pilasters with stone caps span two floors to create a large order on the facade. The base is articulated from the upper levels.

Note the paired vertical windows with arched top.





# EXAMPLES





## MULTI-FAMILY

The design of the multi-family residential architecture at Northshore will embody these characteristics:

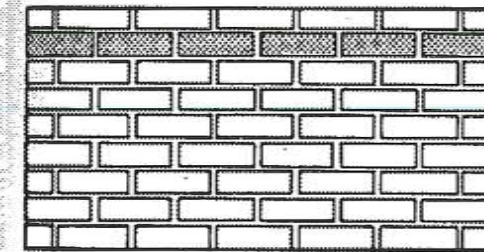
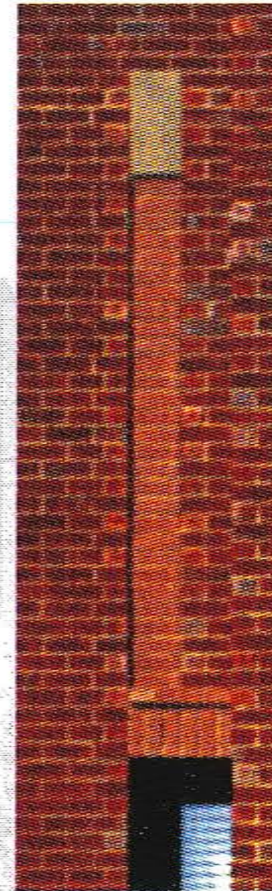
- Reflect the urban character established in the Site Planning and Architecture of the town center. Parking will be located behind the buildings in landscaped motor courts. Residential units will be designed to orient towards the street.
- Scale of the multi-family buildings will complement the town center buildings as well as provide a transition to the single-family homes.
- The architecture of the multi-family buildings will include varying scales of window elements – two story expanses of glass as well as single windows that will relate to the larger buildings in the Village Center as well as the fenestrations in single-family homes.
- Balconies will also be used to give the larger multi-family buildings a residential scale as well as offer opportunities for residents in the buildings to have outdoor private space and “connections” to the street.
- Roof forms will be primarily flat to relate to the architecture of the town center. Sloped roof accents will reinforce the residential use of the buildings as well as transition to the roof forms of the single-family homes.

Landscaping features will create a streetscape that will encourage pedestrians to walk to the town center as well as offer social opportunities for neighbors. Site amenities will include wide sidewalks with street trees and landscaping buffers adjacent to the street





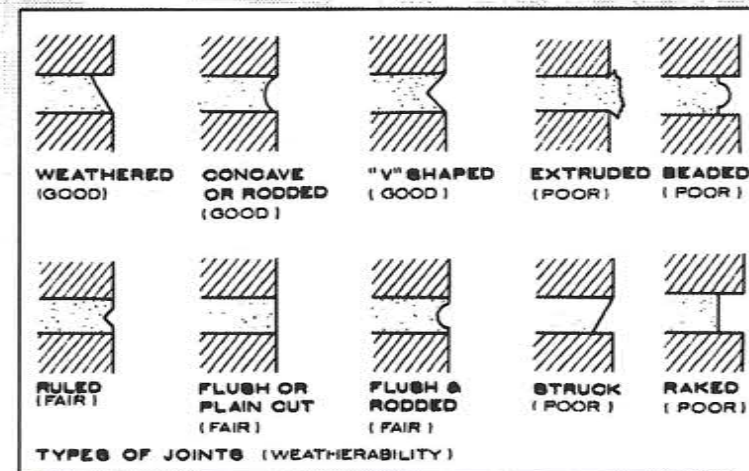
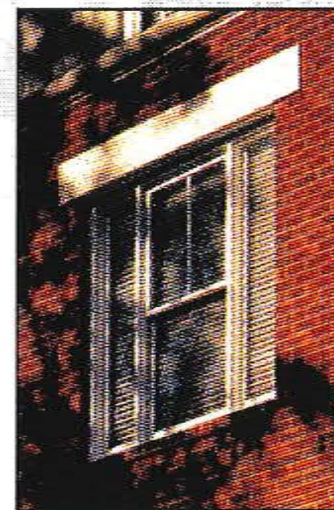
## MATERIALS



**RUNNING**



The building materials will consist of combinations of brick, Hardie panel, EFIS, or siding. A clearly definable base will be present along with a transition of materials in either form or color. The material colors will compliment the traditional mill construction palette as defined by the mixed used architecture. Brick patterns should be common or running bond with a possible accent color in the base. Parapet cornices will be constructed of EFIS or Hardie panel and front either flat roofs or low pitched roofs. Additional details such as metal handrails, pre-cast lintels over windows in brick, aesthetic brackets at roof lines, canopies, panels between windows, and architectural projections will be included to provide variation of treatments to the facades.

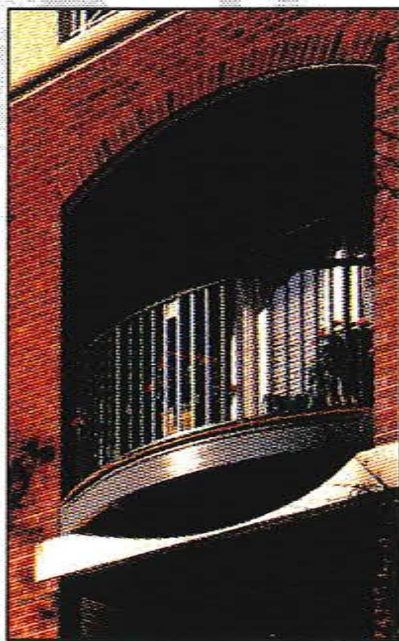
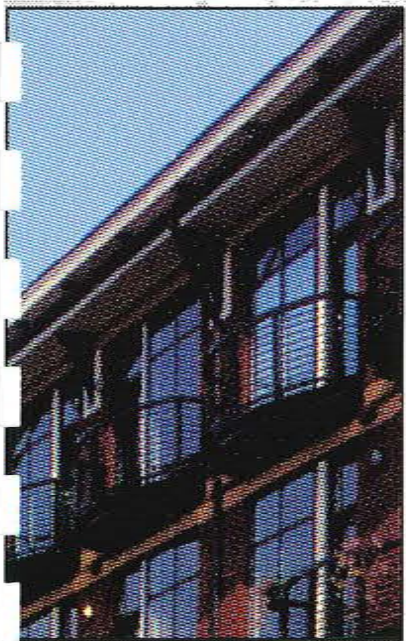
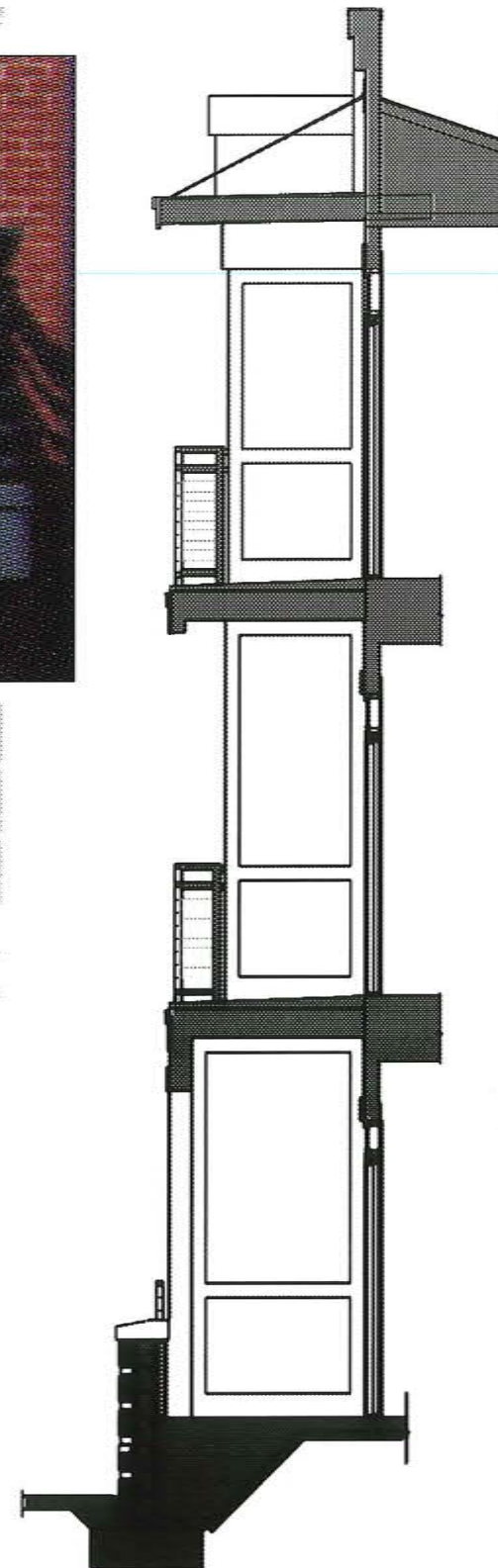




## ARCHITECTURAL ELEMENTS

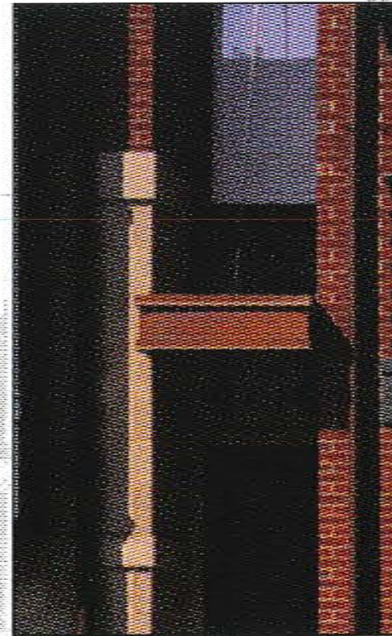
### Balconies

Balconies may be attached projections or deeper recesses into the units. Handrails will consist of metal rails and pickets on the upper levels and a combination of metal handrail and low brick walls on the ground floors. Balconies may be curved or straight with vertical or horizontal railing reflecting the utilitarian design of mill architecture. They may have sloped or flat roofs above them or be open with railings and supported by brackets, columns, or a cantilever design.





## ARCHITECTURAL ELEMENTS



### Canopies

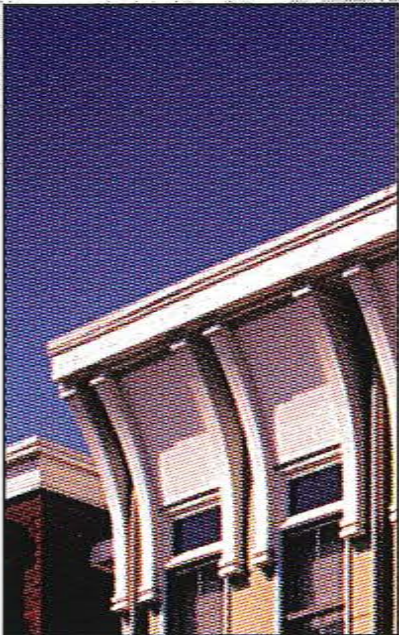
Canopies will be used to shield entries from the weather as well as emphasize important locations on the building facade. The canopies will compliment the residential scale of the buildings. They may be flat or pitched and constructed with various roofing materials: Hardie panel, metal or pre-fabricated components. If tie rods are present, they will be decorative and not structural.

### Brackets

Brackets will be used to emphasize roof features, balcony locations, and special features on buildings to reinforce the residential scale and character of the buildings.

### Architectural Accents

Various accents will be incorporated into the facades of the buildings to create visual interest as well as establish a residential character for the buildings.

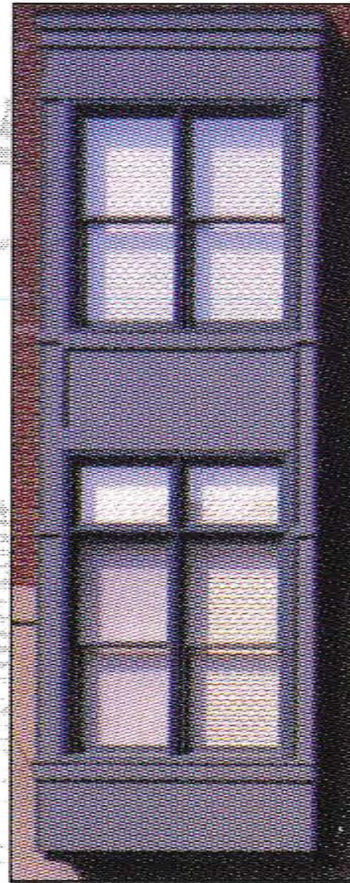




## ARCHITECTURAL ELEMENTS

### Windows

A variety of windows will be used depending on the building material in which they are located. Windows in brick will either have soldier course headers or pre-cast lintels while windows in siding or EFIS will have smooth, consistent trim and a more pronounced header material. Windows may be linked from floor to floor by the use of panels as well as through the use of bay projections.

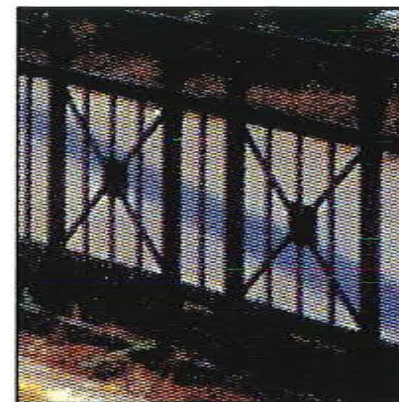


### Fencing

Railing and fencing will be used to define spaces at patios, planted areas, carports, and pedestrian walks. Metal fencing should be painted darker colors.

### Entries

Entry details will be used to define the building at a pedestrian scale. First floor units may have garden walls or individual entrances. Common entrances will be defined with architectural accents to emphasize the importance of the entry.





## EXAMPLES

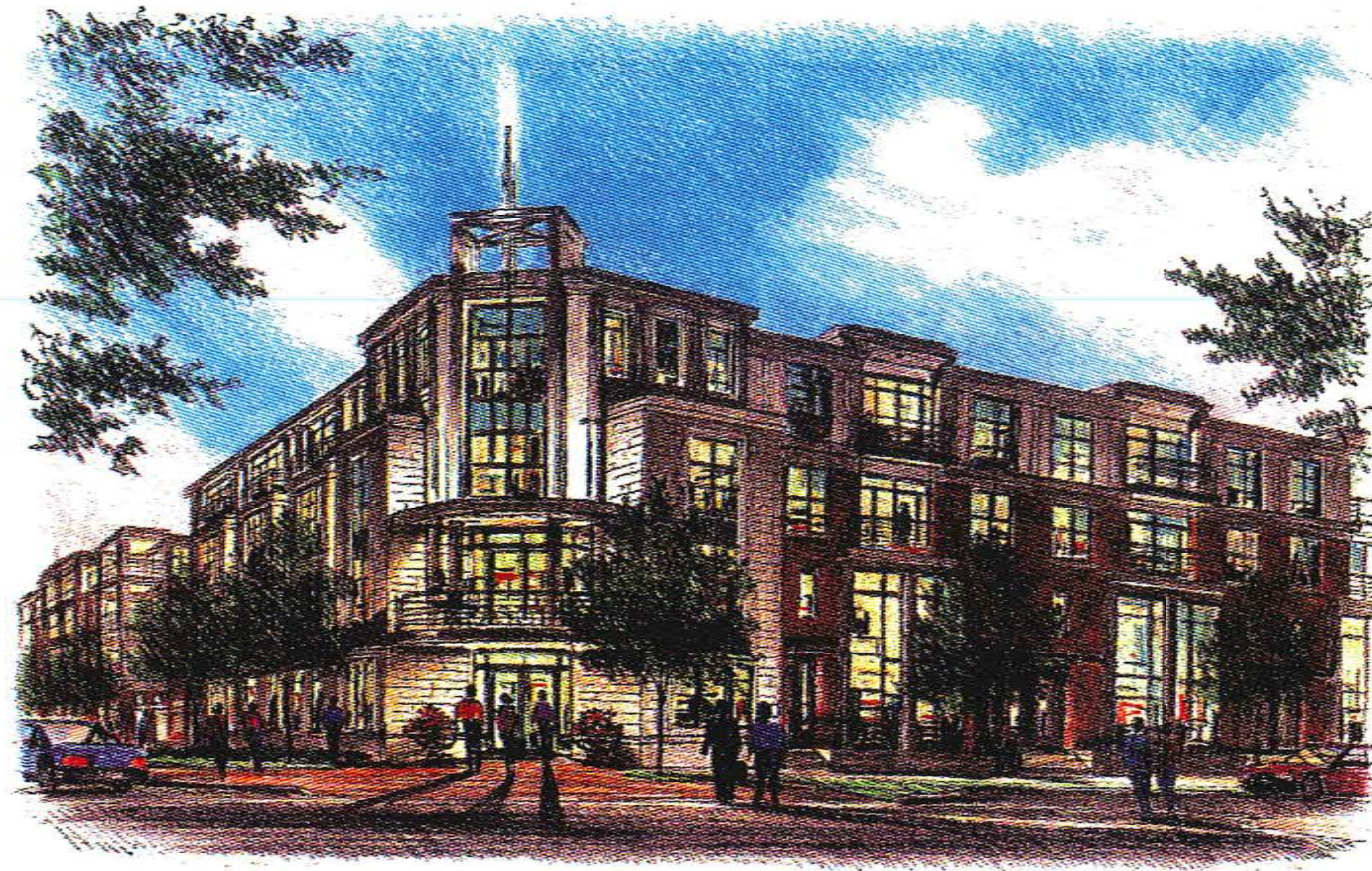
Residential units will be designed to have pedestrian oriented entries on the street. Some units will have direct access to the street through individual stoops while other entries will be provided in larger scale for multiple units on upper levels. The scale of the entries will create a rhythm along the street with an interesting pattern of materials and breaks in the facade. The promotion of street activity for residents will encourage neighbors to socialize and create a "sense of place". The streetscape will include the use of landscaping, wide sidewalks, accent lighting, and street trees to encourage pedestrians to walk to the town center and the adjoining single-family area.

Balconies that overlook the street will connect residents to the activities of the street and neighborhood. The use of bay window elements, entry stoops, and architectural accent treatments to the entry doors and major entryways to the building will create a residential scale to the street. Accent lighting and brick detailing will also reflect the vernacular of the mill aesthetic used within the town center.





## EXAMPLES



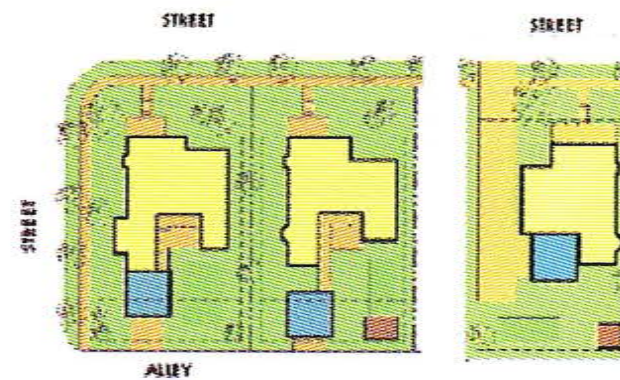


## SINGLE-FAMILY TYPE I

### Single-Family Detached – Large Lot Low-Density Residential

- Minimum Lot Size: 5,000 sq ft., 5,500 sq ft. on corner lot.  
Maximum Lot Size: None  
Minimum Lot Width: 50' interior lot, 55' on corner lot, 60' if a driveway is provided from the front of the property.  
Maximum Height: 2-1/2 Stories / 35'  
Minimum Height: 1 story / 12'  
Maximum Front Yard Setback: 25' to habitable portion of the house.  
Minimum Front Yard Setback: 20' to nearest habitable portion of house.  
Minimum Street Side Yard Setback: 10'  
Minimum Interior Side Yard Setback: 5'  
Minimum Rear Yard Setbacks: Main Building: 25'  
Minimum Rear Yard Setbacks: Accessory Buildings: 5'  
Maximum Building Coverage: 55% of lot area  
Maximum Impervious Cover: 65% of lot area  
Minimum Raised Foundation: 18" sidewalk to porch floor elevation.

Description: This type includes custom village and manor houses and is intended for the larger lots in the neighborhood. These lots may have significant topographical or other site constraints, which require more land area to provide proper vehicle and pedestrian access. Type I buildings on interior lots may have vehicular access from either a rear alley or a street provided the garage does not face the street. Type I buildings on corner lots shall have vehicular access from a rear alley only. Type I buildings may have accessory structures including secondary dwellings.





## SINGLE-FAMILY TYPE II

### Single-Family Detached – Small Lot Low-Density Residential

Minimum Lot Size: 5,000 sq ft., 5,500 sq ft. on corner lot

Maximum Lot Size: None

Minimum Lot Width: 40' interior lot, 45' on corner lot.

Maximum Height: 2-1/2 Stories / 35'

Minimum Height: 1 story / 12'

Maximum Front Yard Setback: 25' to habitable portion of the house

Minimum Front Yard Setback: 20' to nearest habitable portion of house

Minimum Street Side Yard Setback: 10'

Minimum Interior Side Yard Setback: 5'

Minimum Rear Yard Setbacks: Main Building: 25'

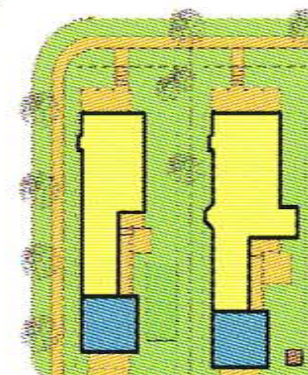
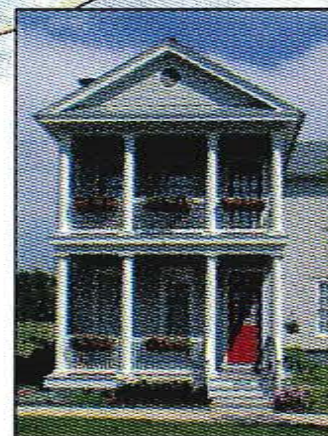
Minimum Rear Yard Setbacks: Accessory Buildings: 5'

Maximum Building Coverage: 55% of lot area

Maximum Impervious Cover: 65% of lot area

Minimum Raised Foundation: 18"

Description: This type includes smaller cottage and village houses and is intended for the smaller width lots (<50') in the neighborhood. Type II buildings shall have vehicular access from a rear alley only. Type II buildings may have accessory buildings including secondary dwellings.





## TOWNHOUSE

### Single Family Attached Medium Density Residential

Minimum Lot Size: 2,000 sq ft., 2,500 sq ft. on corner lot

Maximum Lot Size: 4,000 sq. ft.

Minimum Lot Width: 20' interior lot, 25' on corner lot.

Maximum Height: 2-1/2 Stories / 35'

Minimum Height: 2 stories

Maximum Front Yard Setback: 10' to habitable portion of the house

Minimum Front Yard Setback: 5' to nearest habitable portion of house

Minimum Street Side Yard Setback: 5'

Minimum Interior Side Yard Setback: 0'

Minimum Rear Yard Setbacks: Main Building: 25'

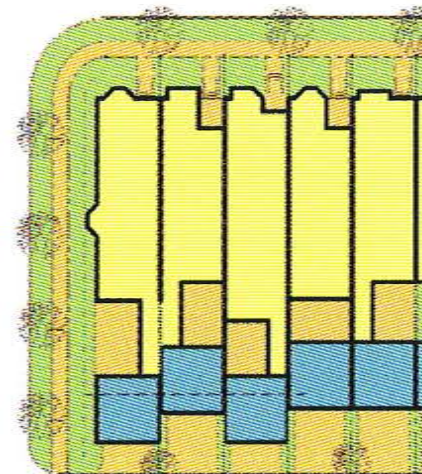
Minimum Rear Yard Setbacks: Accessory Buildings: 5'

Maximum Building Coverage: 70% of lot area

Maximum Impervious Cover: 90% of lot area

Minimum Raised Foundation: 18"

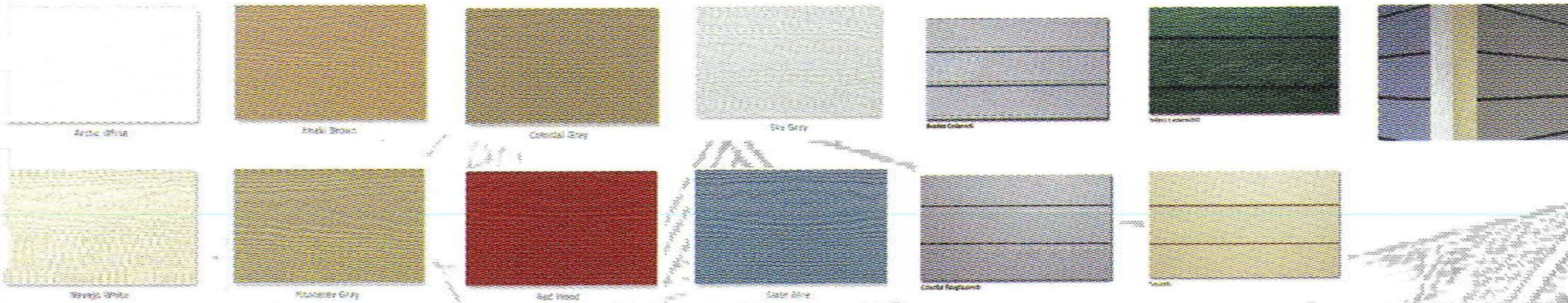
Description: This type includes may have vehicular access from a rear alley only. Townhouses may not have secondary dwellings.



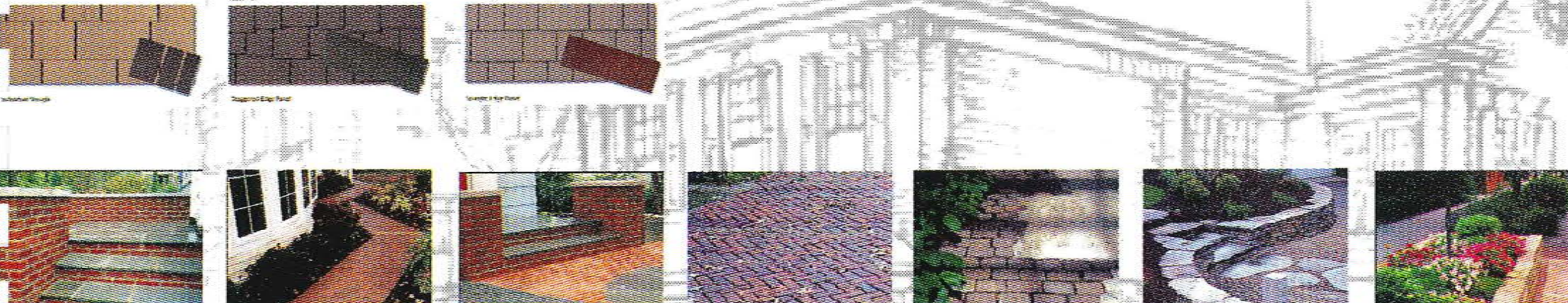


# MATERIALS

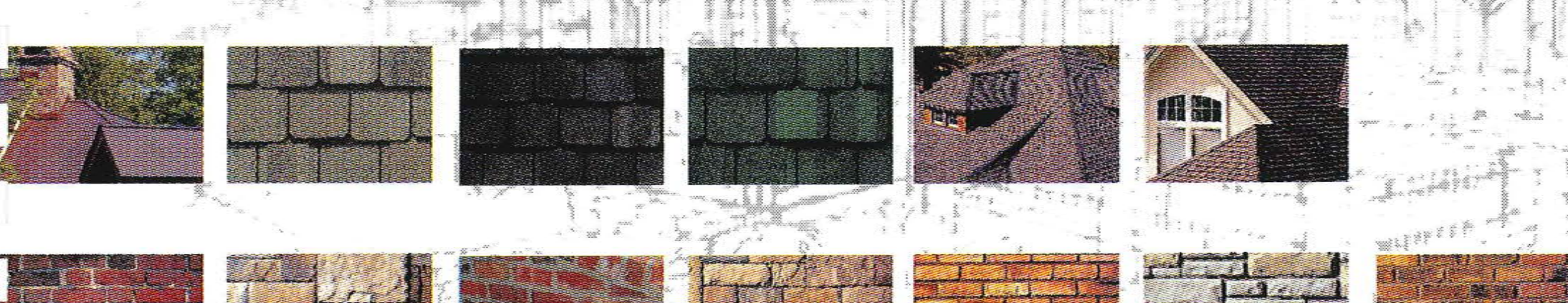
Siding



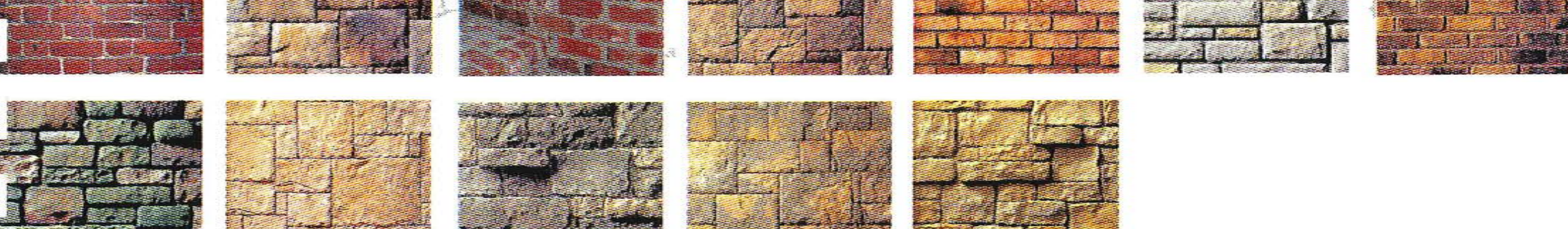
Pavers & Steps



Roofs



Stone & Brick





## ARCHITECTURAL ELEMENTS

### Doors

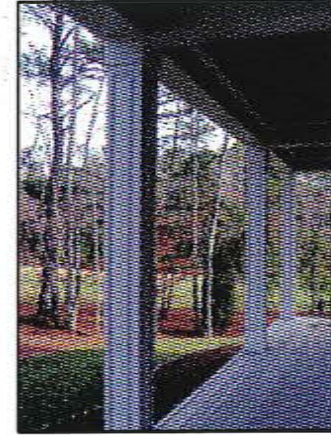
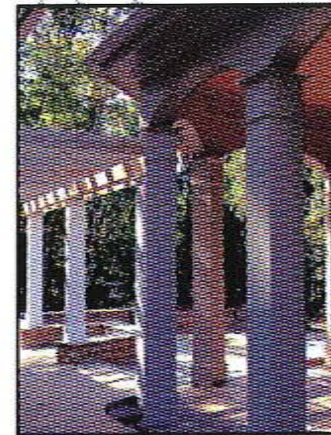
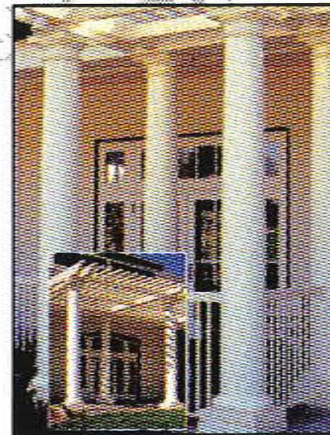
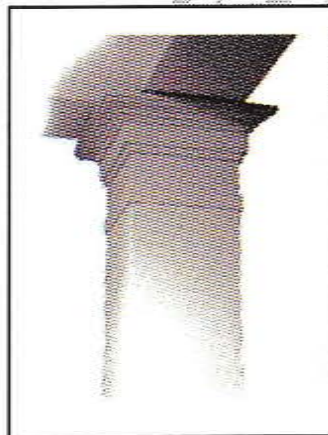
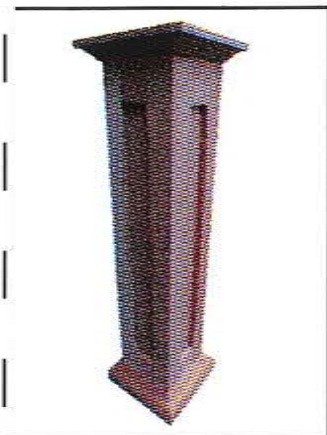
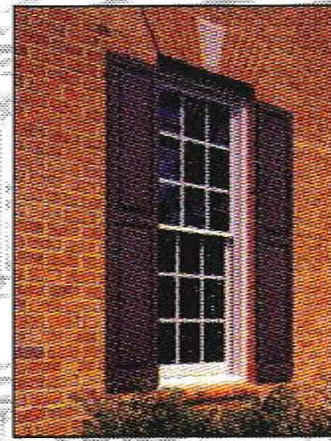
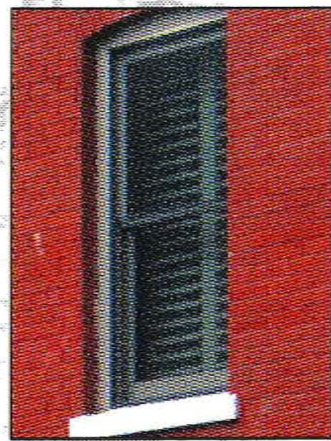
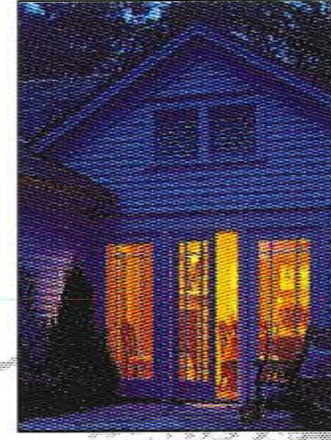
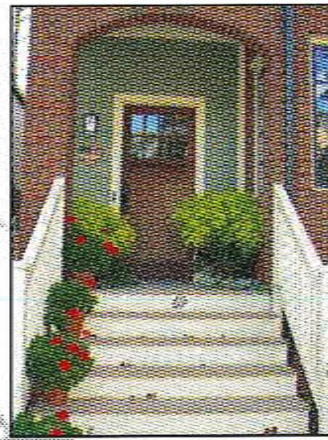
All exterior doors on the floor level nearest to grade shall be a minimum 8'-0" tall units. The use of tall vertically proportioned units is encouraged to reinforce the overall vertical emphasis of neo-traditional styles. Doors should be of a traditional style appropriate to the architectural style chosen for the home.

### Windows

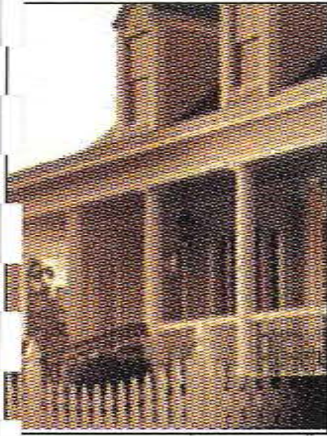
Windows should have predominantly vertical proportions. This includes the window units itself as well as the muntin and mullion patterns. Every individual window unit should have a minimum ratio of 2 vertical height units to 1 horizontal width unit. A height-to-width ratio greater than 2:1 is preferred. Double and triple combinations of window units are acceptable provided each individual window unit meets the minimum 2:1 height-to-width ratio. All windows should have wide exterior head, jamb and sill trim appropriate for the style of architecture. The highest quality windows should be used whenever possible. Bow and bay windows are acceptable and encourages to add visual interest if appropriate to the style. Skylights and light monitors are acceptable if they are not visible from the street.

### Shutters

The use of traditional window shutters as an architectural enhancement is encouraged if appropriate for the intended use and style. Shutters may be operable or fixed. Shutters should be sized in proportion to the windows they serve. Shutters, whether operable or not, should be sized so that each shutter panel would cover one-half of the window it serves. Shutters should be painted a complementary traditional color to adjacent materials. Shutters may be either louvered or solid 1, 2, or 3 panel designs as appropriate to the style of home chosen.







## ARCHITECTURAL ELEMENTS

### Columns

Exterior columns, posts and pilasters should be made of durable painted wood, wood composite, cellular PVC, moulded gypsum-fiberglass composite. Other materials may be approved. Columns, posts, and pilasters are a primary rhythm setting feature of the exterior and should be appropriately proportioned and detailed for the architectural style.

### Dormers

The use of roof dormers with louvers or windows are acceptable so long as they compliment the style of the home and are well proportioned. Dormers may be located either entirely on the roof plane above the eave line or they may break the eave line as extensions of the walls below. Dormer materials should be compatible with the primary siding and roofing materials.

### Porches and Balconies

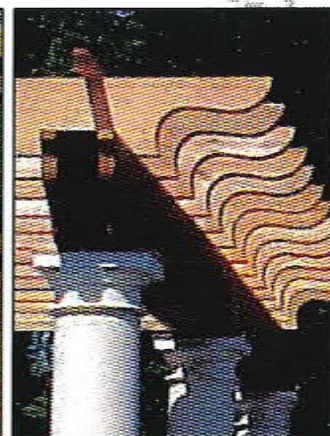
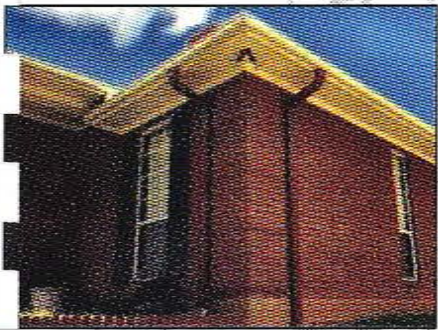
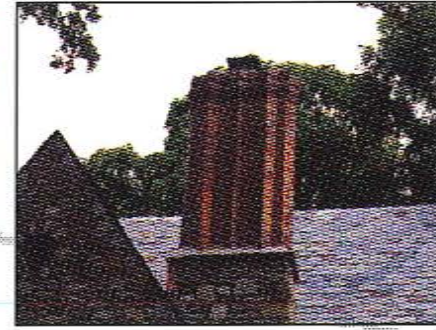
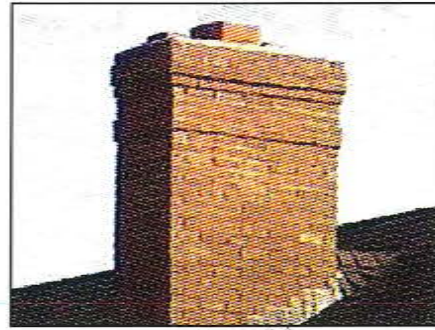
All houses should have a covered front porch. They shall be minimum 6' deep (8' or deeper is preferred) where the covered porch is no wider than the front steps, and is intended to only cover the entrance. Porches may extend 10' into the front yard space. Porch steps may extend an additional 8' into the yard space. Covered porches shall have a minimum soffit height of 8'. For all single family detached homes, a minimum of 25% of the total street side width of the structure should be a raised covered porch. The use of upper level balconies is encouraged to add interest. On corner lots, porches and balconies should wrap around the street facing corner and extend down the side facade.

### Louvers

The use of traditional ventilation louvers is encouraged. Louvers may be located in gable ends or in roof top dormers. Louvers may be ventilating or decorative. Ventilating louvers should include bird screens inside the louver blades.







## ARCHITECTURAL ELEMENTS

### Chimneys

Chimneys prominently extending through the roof are encouraged as a historic architectural feature. Chimneys add interest to the roofline silhouette and reinforce the vertical emphasis of traditional architecture. Chimneys shall have a brick or stone finish to compliment the character of the home. Decorative masonry details on chimneys are encouraged. Particular emphasis should be placed on historic masonry details at chimney terminations. The use of clay chimney pots as terminations add roof line interest and are acceptable if appropriate to the architectural style chosen.

### Gutters and Downspouts

Gutters and downspouts are acceptable provided they are of traditional profiles, details and sizes. Gutters and downspouts should be painted metal, painted aluminum or weathered copper. Painted metal gutters and downspouts shall be of a color compatible with the approved color scheme of the house. No brightly colored gutters and downspouts will be allowed.

### Cupolas and Vanes

Cupolas and belvederes are encouraged to add interest to the homes roof line. Cupolas and belvederes should be well proportioned and made of durable materials as appropriate to the style of architecture chosen.

### Railings, Fences and Trellises

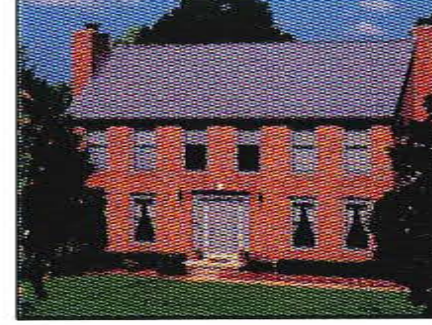
Exterior porch, balcony, and stair railings should be of coated metal, coated aluminum or painted wood. Other materials may be approved if structurally stable and appear to be traditional railing materials. Railing patterns should match the style of home chosen and meet local codes. Exterior fences and gates should be of coated metal, coated aluminum or painted wood. Other materials may be approved if structurally stable and appear to be traditional fencing materials. Fencing patterns should match the style of home chosen and meet local codes. Fences shall be no taller than 4' from finished grade.





## EXAMPLES

These houses show good use of the architectural elements described in this section. The homes in Northshore shall have individual designs that are carefully detailed to create a varied and attractive community.



### Characteristics to avoid

The following examples show architecture that relates more to a suburban cul-de-sac neighborhood than to a planned traditional neighborhood development.





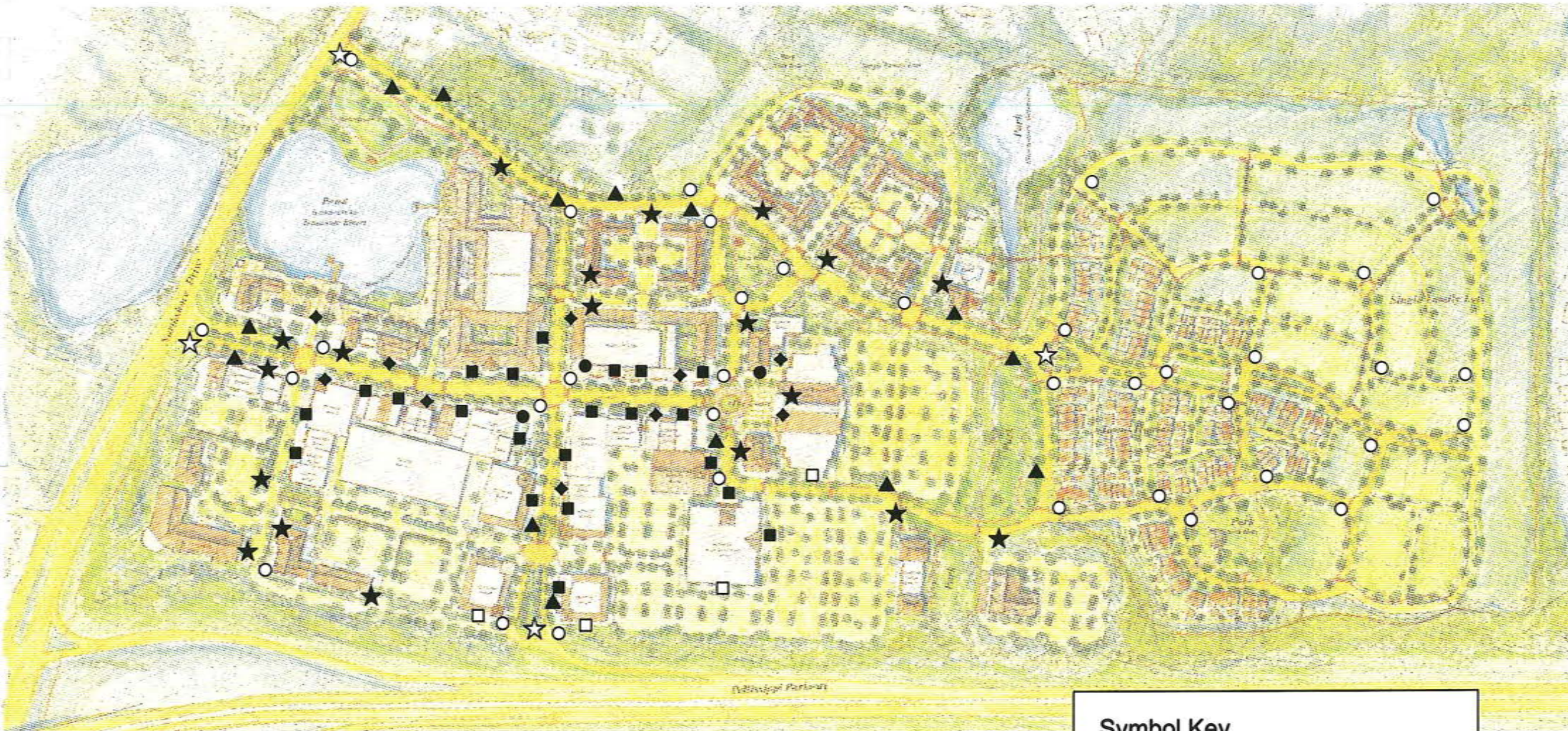
## SIGNAGE

Signs across the Northshore development are important to the success of the complex for a variety of reasons, including:

- identification of destinations (complex, retail, corporate and residential)
- the orderly presentation of vehicular and pedestrian wayfinding information
- campus-wide vehicular regulation
- place-making support in telling the Northshore visual story.

As a unique place within the greater Knoxville region, the Northshore complex will present a wide variety of destinations, functions and services. Each will require distinct signs to help in finding and/or identifying the destination. This will only happen successfully when the Master Sign Plan is aggressively and earnestly followed as the development reaches build-out.

The signs identified hereafter will tell the story as well as support the visual flavor of the architecture and environment. While conforming to the Knoxville TC-1 Town Center District regulations in function, the signs will support the architecture and environmental character in material, color and visual tone.



### Symbol Key

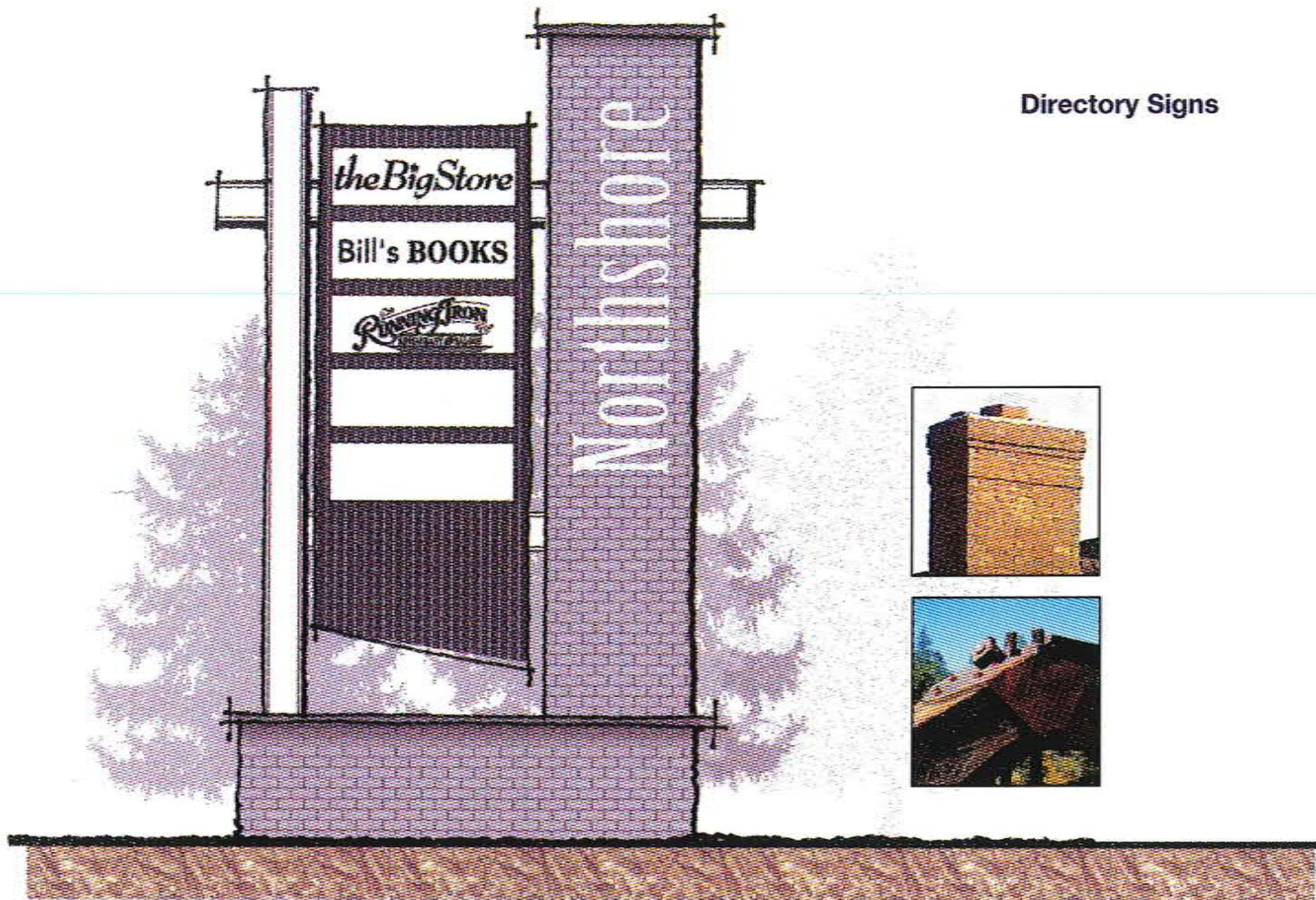
- ☆ Monument Sign - Entrance
- ★ Monument Sign - Place
- ▲ Project Directional Sign - 1 & 2
- ◆ Pedestrian Directional/Directory
- Commercial Identification - Large
- Commercial Identification - Fascia
- Shingle Sign
- Street Name Sign





## SIGNAGE

### Directory Signs



### Directory Signs

Monument sign elements will identify Northshore from the Highway as well as at each entry point into the complex. The primary function of these elements will be to locate the facility and then verify the entry points on the perimeter. These signs will be provided by the developer.

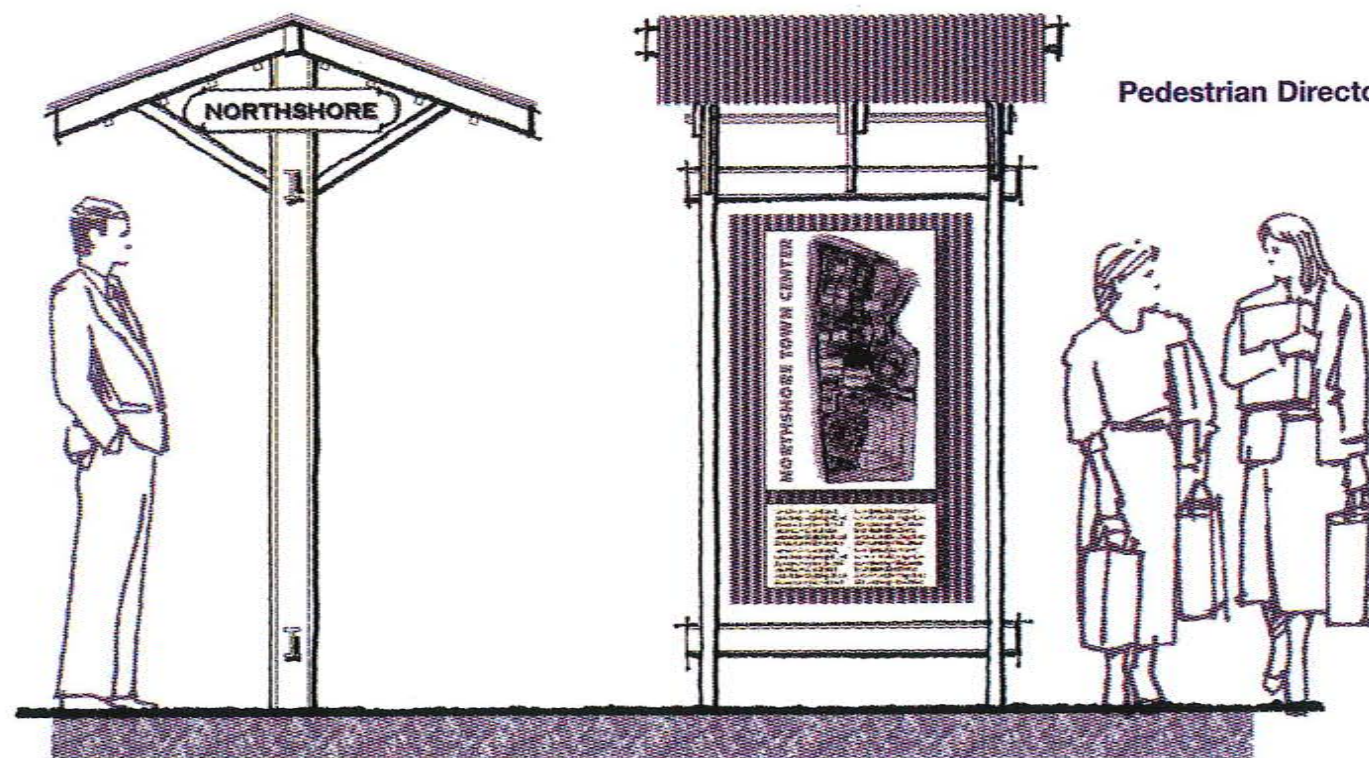
- Painted "I-beam" structure, with visible mechanical connections.
- "Rusty" corrugated panel.
- Painted non-illuminated panel with reflective pressure sensitive vinyl legends and graphics.
- See Zoning Regulations for Size, Quantities and Locations.

### Pedestrian

In the commercial areas, along with the parks and plazas, pedestrian signs will be provided to assist in decision making. Expressed as a free-standing kiosk structure, this element will accomplish a number of goals. It will include general mapping of the area (including stores/restaurants), directional information, pockets for brochures/menues, and other potential Northshore promotional material.

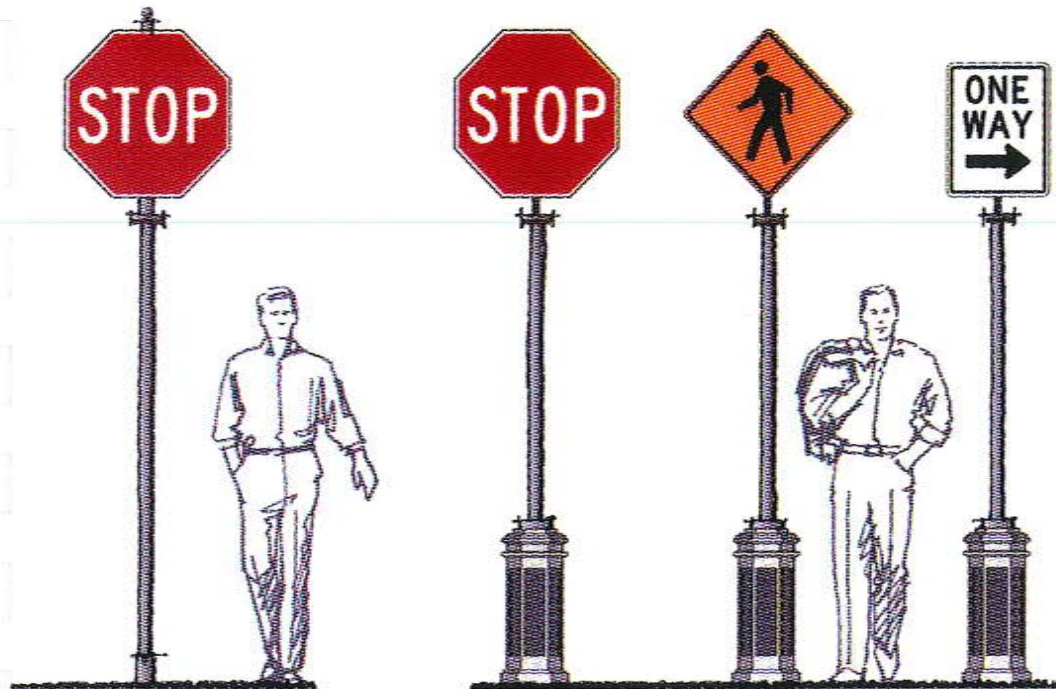
- Painted "I-beam" structure, with visible mechanical connections.
- "Rusty" corrugated roof and display panel support.
- Painted metal display panel with surface installed Scotch-print graphics from e-files.
- Down "wash" illumination from underside of roof structure.

### Pedestrian Directory Signs

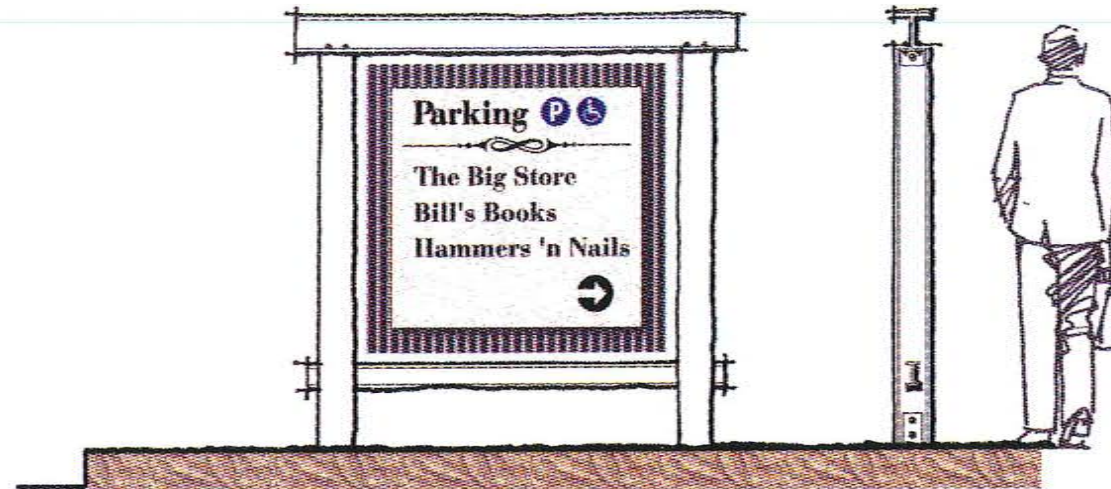




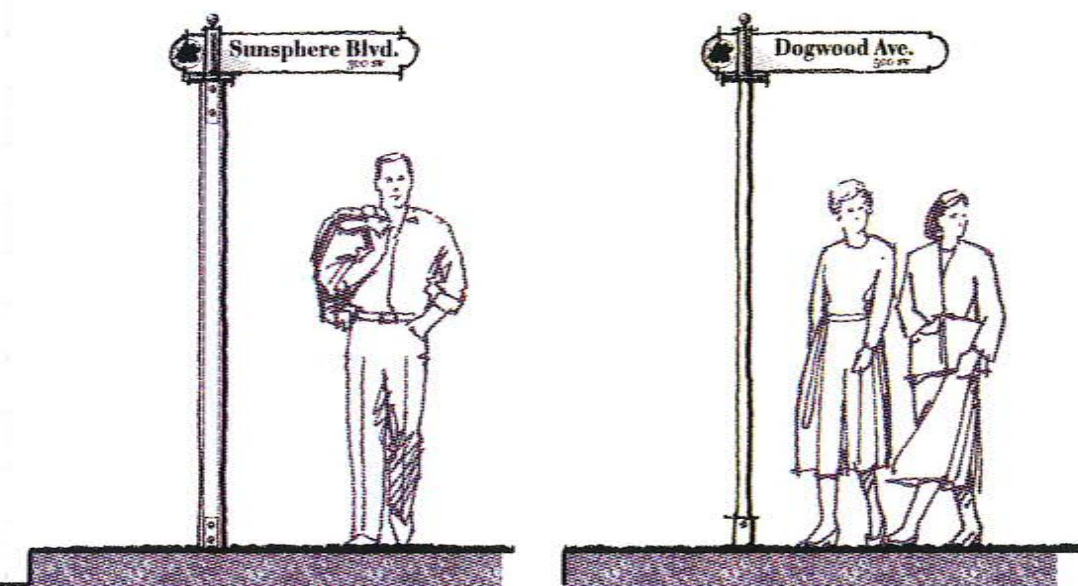
## SIGNAGE



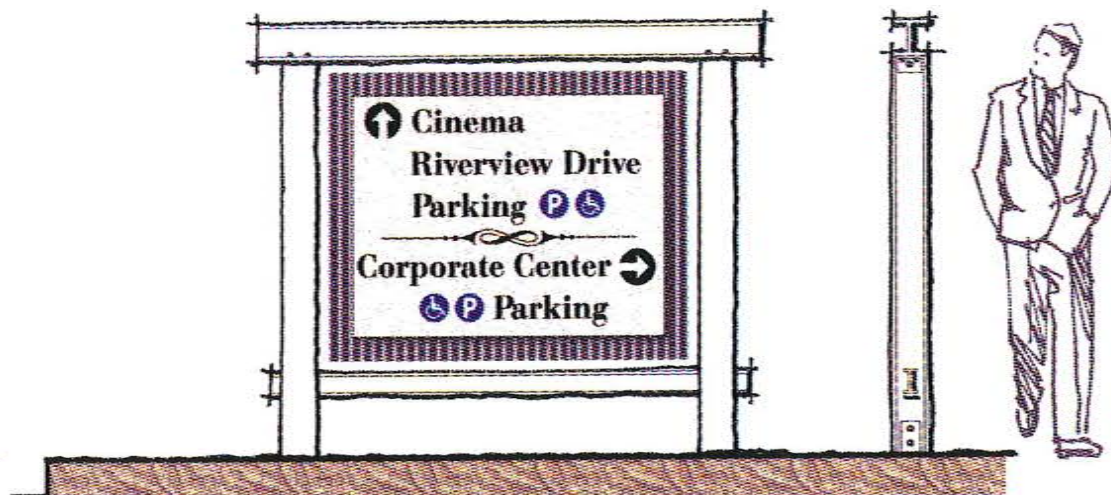
Regulatory Signs



Vehicular Directory Signs



Street Name Signs



### Regulatory Signs

Vehicular regulatory signs shall conform graphically to the federal Manual on Uniform Traffic Control Devices, Millennium Edition (2000). In the commercial areas, a special architectural base will be employed (covering the break-away detail), and in the residential areas, a more modest/standard post and breakaway/connection.

- Painted round-section post and capital.
- Sign panels per federal Manual on Uniform Traffic Control Devices.
- Commercial area to have architectural base-piece attached.

### Vehicular Directory Signs

Vehicular directional signs will be located across the site roadway system and provide general wayfinding information for the motorist. Scaled to be read from a vehicle, and designed to reflect the architectural "tone", These signs will be located "upstream" of any decision points, and will address subjects including general destination areas, streets ahead, and parking for retail. These signs will be located and "programmed" to provide information "into" as well as "out from" the complex.

### Street Name Signs

- Painted vertical "I-beam" structure, with visible mechanical connections in commercial area.
- Square-section Uni-strut male/female breakaway post in residential area; per City of Knoxville Engineering Standard Detail.
- Sign blades to be painted metal sheet with surface installed reflective legends.





# the Big Store

# Bill's BOOKS

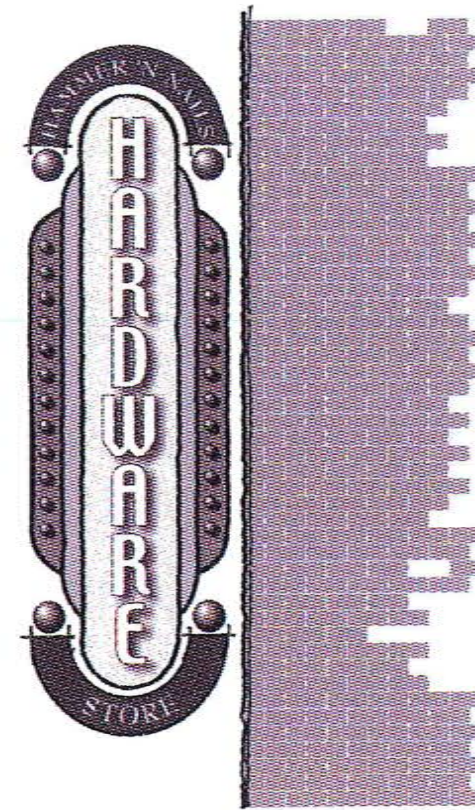
## SIGNAGE

### Wall Signs – Face and Projection Mounted

- Painted fabricated metal sign cabinet with exterior "goose-neck" "wash" illumination. Dimensional logo/logotype letterforms are to be mounted to face of cabinet.
- Painted fabricated metal sign cabinet, with interior luminous tubing illumination; to provide "halo" outline illumination of cabinet (only). Provide 3" (minimum) stand-off of cabinet.
- Dimensional logo/logotype letterforms are to be mounted to face of cabinet.
- Painted fabricated non-illuminated metal reverse-channel sign cabinet, with ambient light illumination. Dimensional logo/logotype letterforms are to be mounted to face of cabinet.
- See Zoning Regulations for Size, Quantities and Locations

### Window Signs

- Window Identification Signs
- Secondary Information Signs –  
Credit Card/Hours of Operation
- Sale/Promotion Signs



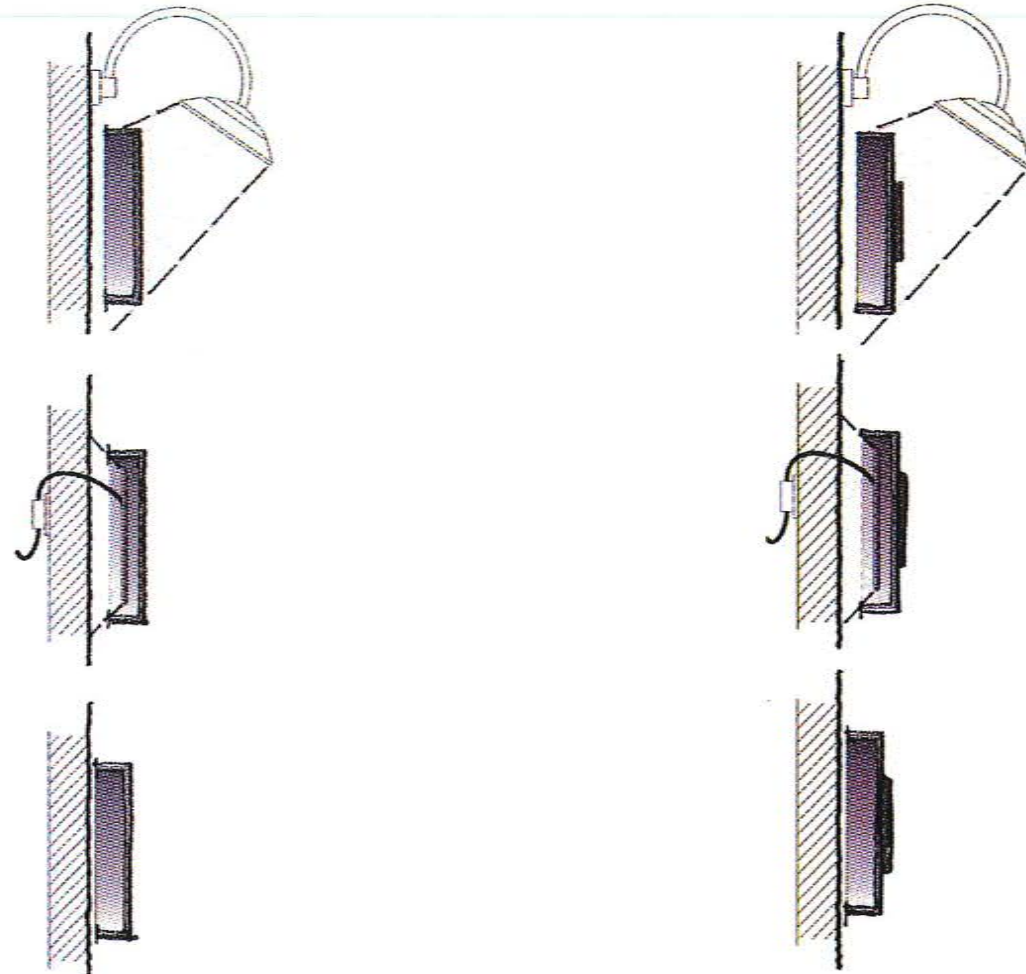
### Hardware Sign

Painted fabricated metal sign cabinet with interior luminous tubing illumination around cabinet "layers" and letterforms. Small low-intensity incandescent lamps are permissible in this application to affect the "style" desired.

Note: external "goose-neck" "wash" illumination is appropriate to this application as well.

No lower than 10' - 0" above finished surface.

See Zoning Regulations for Size, Quantities and Locations



### the Big Store

Painted fabricated metal reverse-channel logo/logotype sign, with interior luminous tubing illumination; to provide "halo" outline illumination of sign. Provide 3" (minimum) stand-off. No inter-letter conduit. Letter transformers are to be installed on rear of installation wall surface.

Painted fabricated non-illuminated metal reverse-channel logo/logotype sign, with ambient light illumination

Painted fabricated metal logo/logotype sign, with exterior "goose-neck" "wash" illumination.

See Zoning Regulations for Size, Quantities and Locations

### Bill's Books

Painted fabricated metal sign cabinet with exterior "goose-neck" "wash" illumination. Dimensional logo/logotype letterforms are to be mounted to face of cabinet.

Painted fabricated metal sign cabinet, with interior luminous tubing illumination; to provide "halo" outline illumination of cabinet (only). Provide 3" (minimum) stand-off of cabinet.

Dimensional logo/logotype letterforms are to be mounted to face of cabinet. Painted fabricated non-illuminated metal reverse-channel sign cabinet, with ambient light illumination. Dimensional logo/logotype letterforms are to be mounted to face of cabinet.

See Zoning Regulations for Size, Quantities and Locations

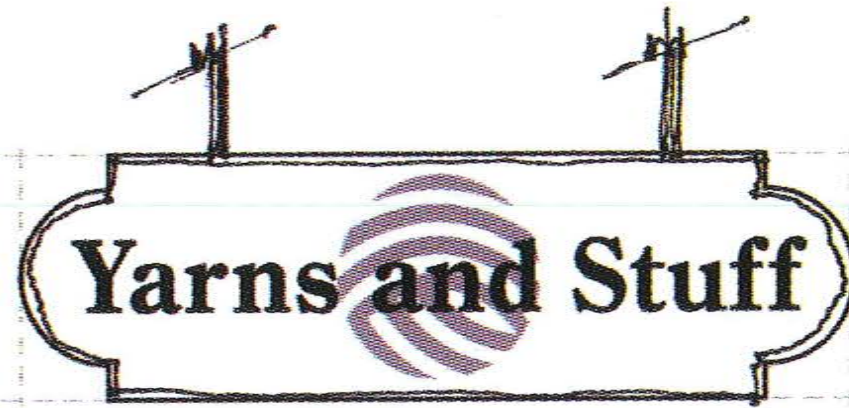




## SIGNAGE

### Arcade Panels

- Painted fabricated non-illuminated double-face sign panel with a maximum horizontal dimension of 4' – 0" and vertical dimension of 1' – 2". Lighting may be provided as external "wash" illumination from above; to be located in the arcade under-structure.
- Signs shall be hung from arcade under-structure with two (2) mechanical connections; sign adjusted to minimum height indicated.
- Legend and graphic can be dimensional with referenced craft/artifact imagery encouraged as shown.
- Hand painted commercial wall signs – strongly supported to reinforce the architectural context of the overall design – are to be considered on a case by case basis.





## SIGNAGE



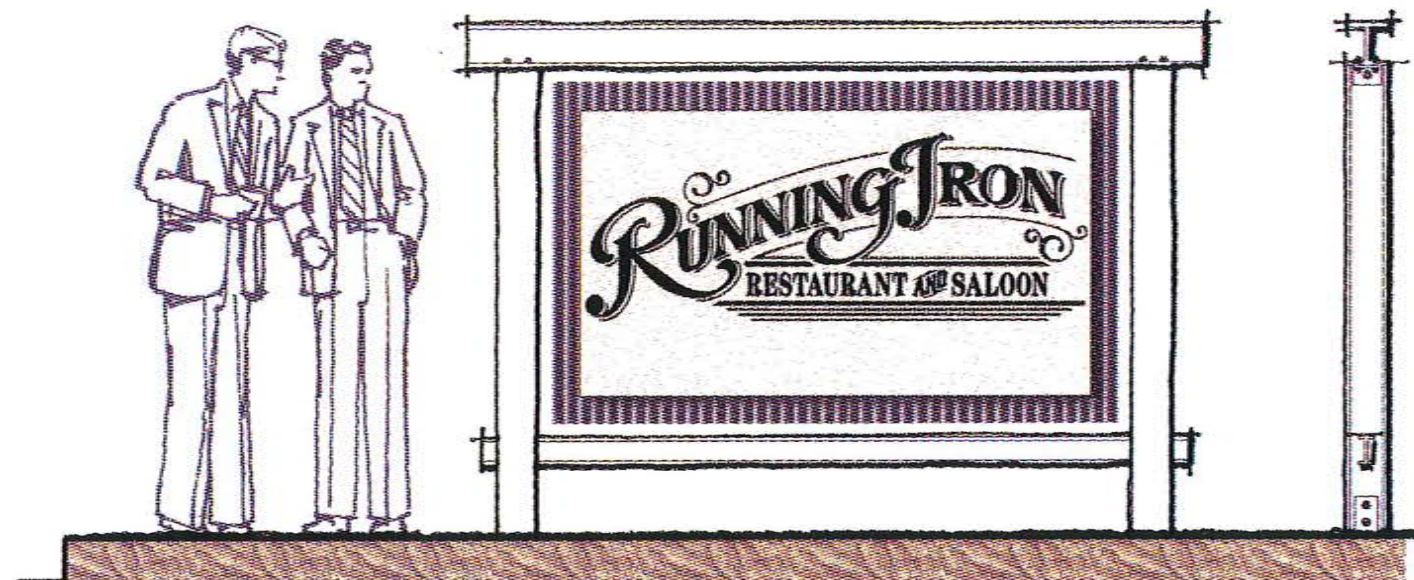
Monument Sign - 1

### Monument Sign - 1

- Painted reverse-channel letterforms with internal luminous tubing illumination providing "halo" illumination.
- See Zoning Regulations for Size, Quantities and Locations.

### Monument Sign - 2

- Painted "I-beam" structure, with visible mechanical connections.
- "Rusty" corrugated panel.
- Logotype/naming image on non-illuminated panel.
- Illumination to be either "goose-neck" down lighting, or "wash" illumination from below.
- See Zoning Regulations for Size, Quantities and Locations.



Monument Sign - 2







## EXAMPLES

### Prohibited Signs

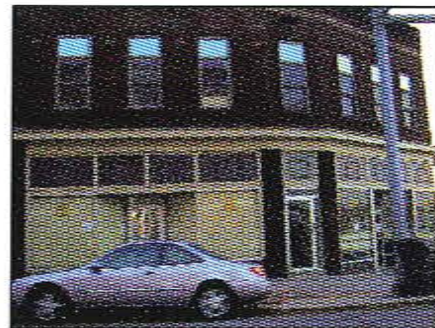
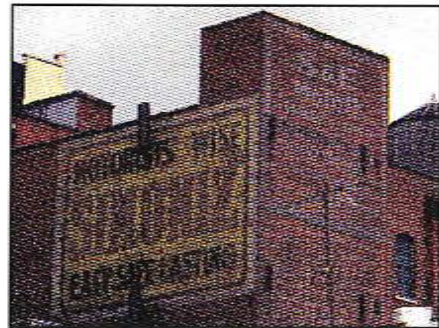
No sign shall have face illumination originating in the interior of the sign.

No sign shall have animation and/or flashing lights as part of its display.

No sign shall generate noise as part of its display.

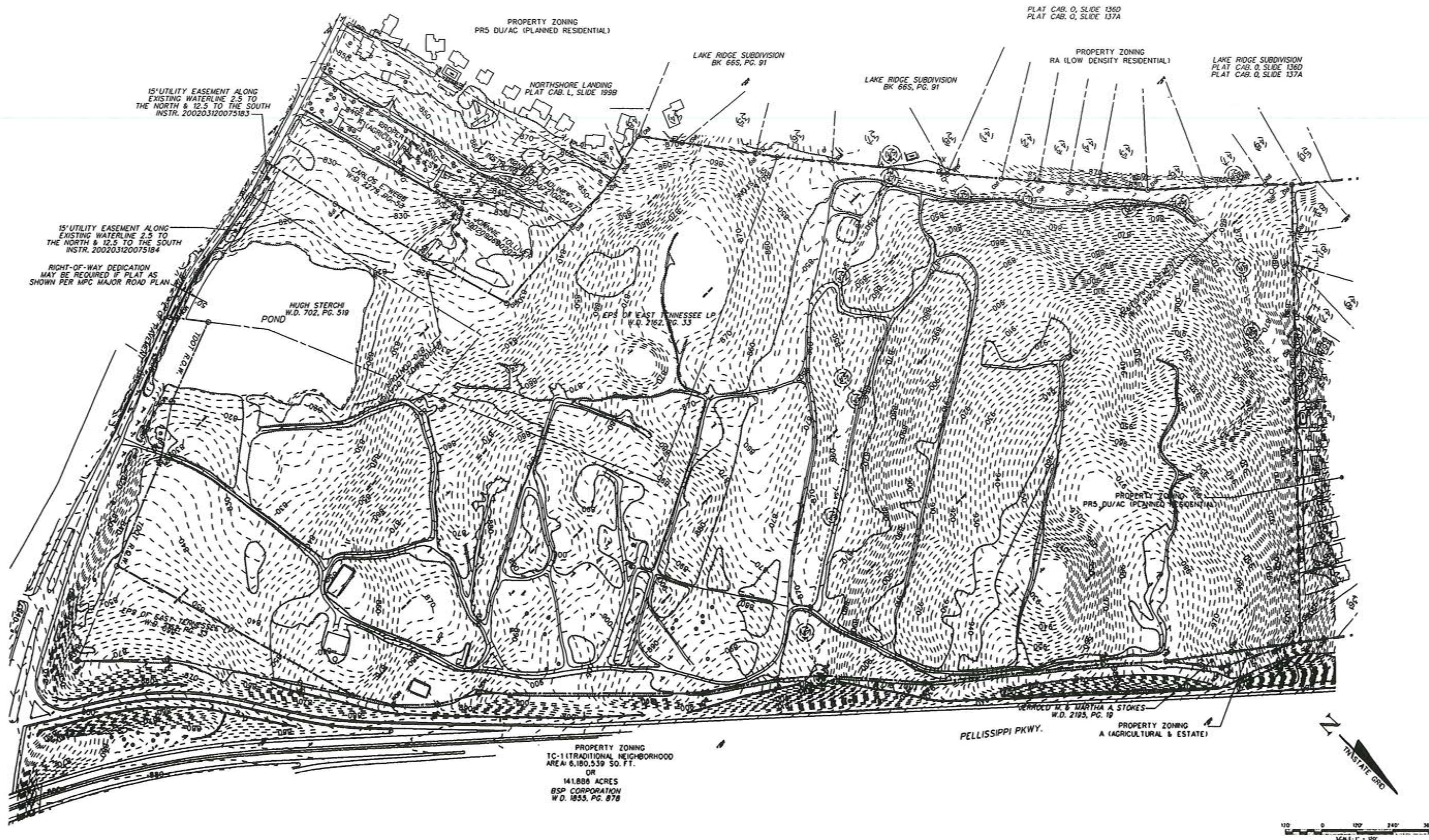
No internally illuminated canopy and/or canopy signs are permitted.

A variety of sign types is encouraged throughout the mixed-use area.



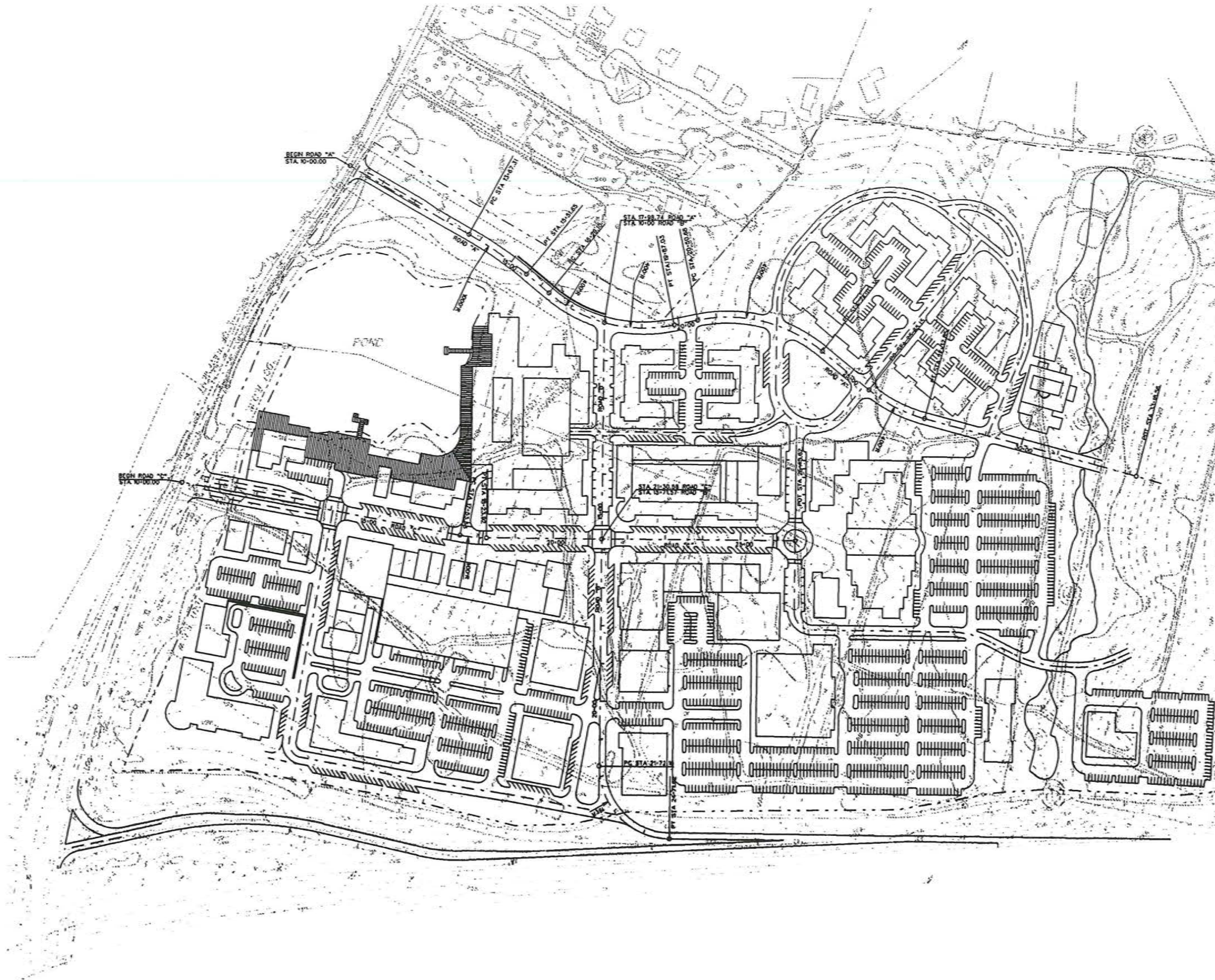


## EXISTING SURVEY



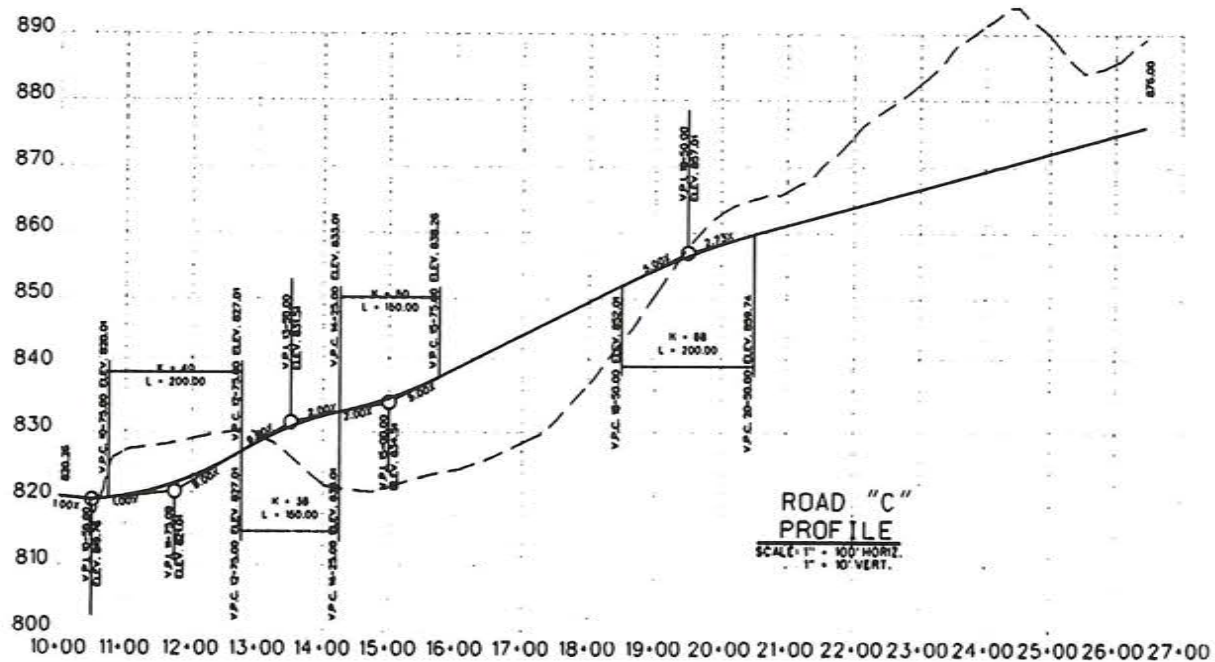
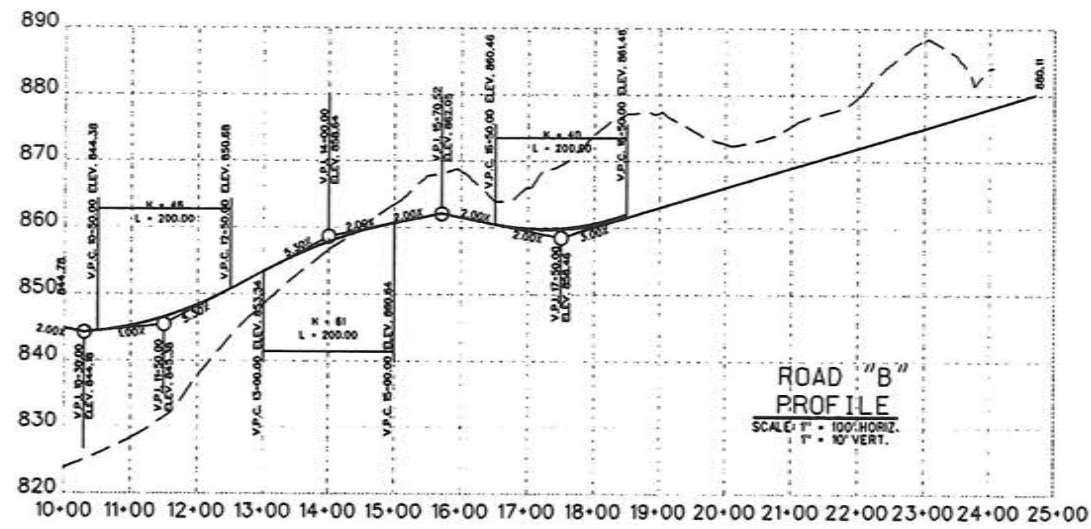
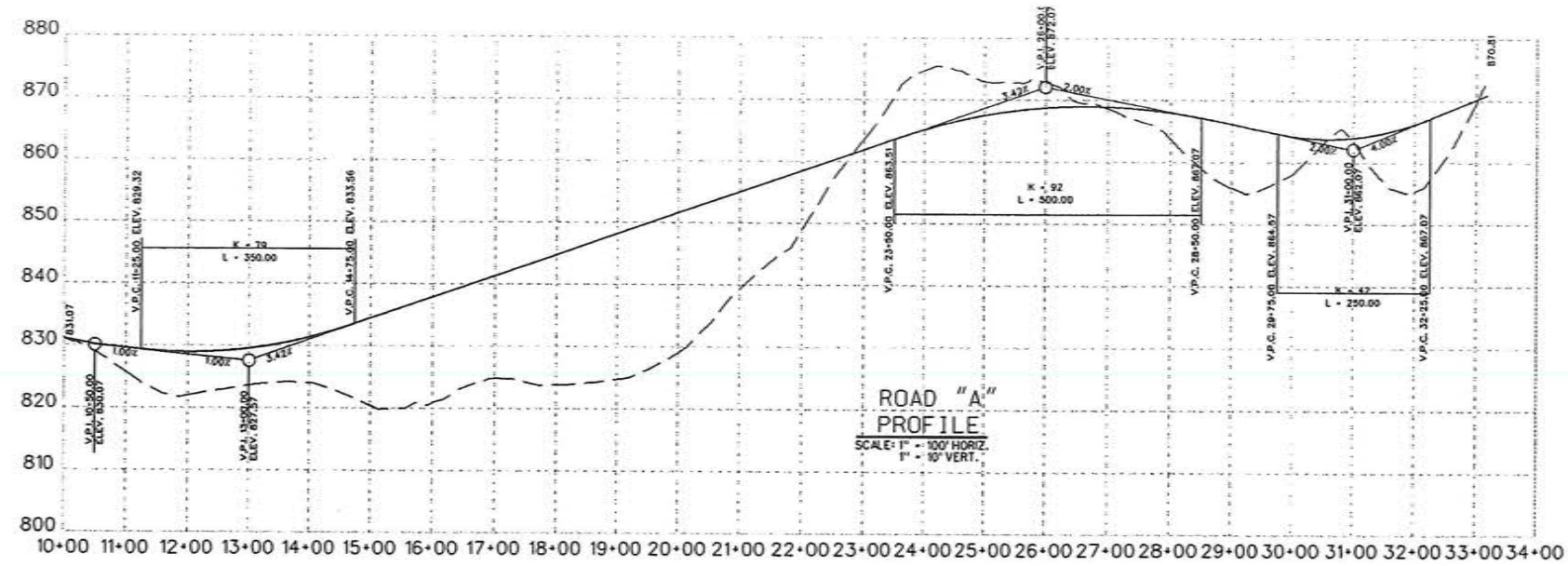


# CONCEPTUAL ROAD LAYOUT



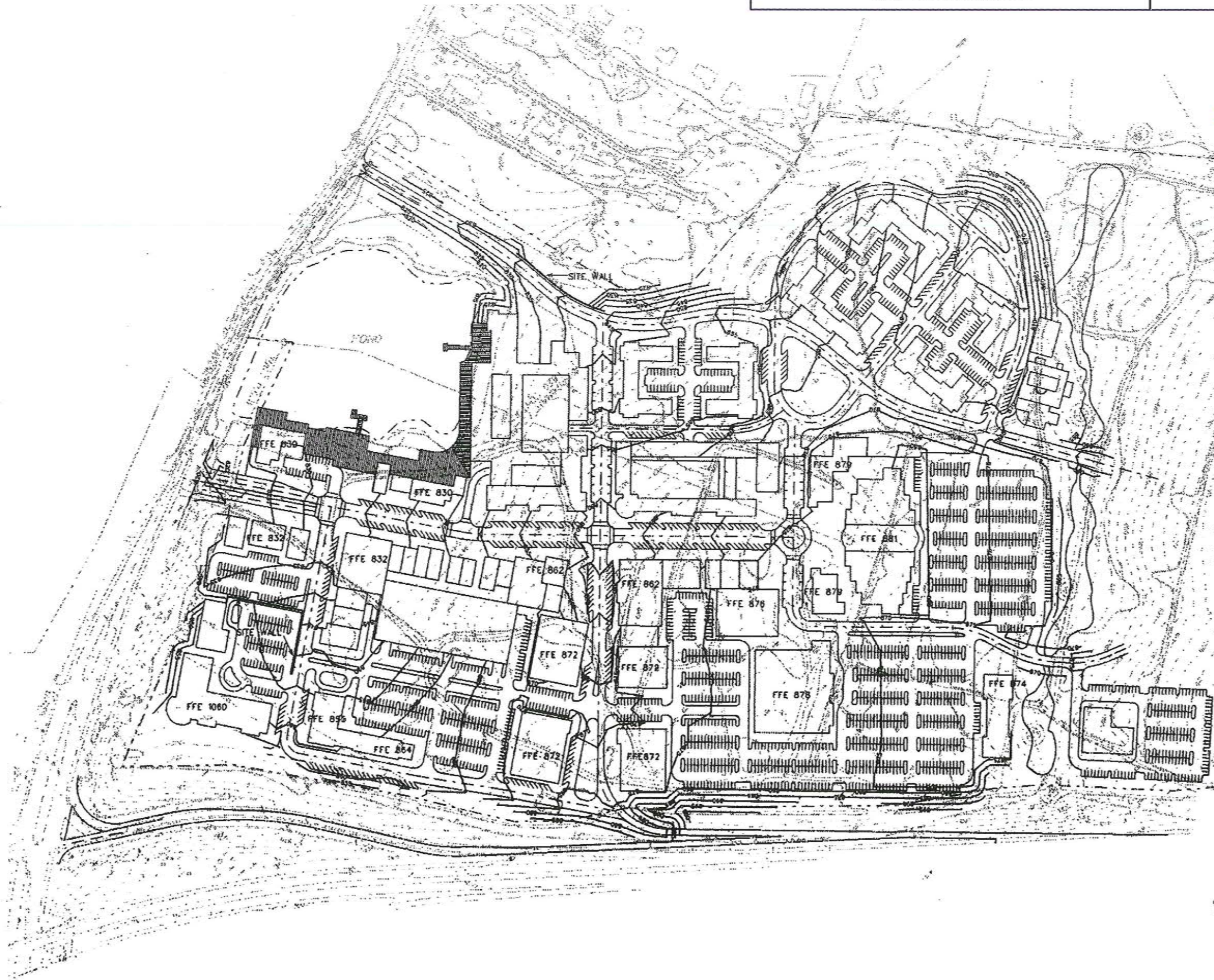


## CONCEPTUAL ROAD PROFILE





# CONCEPTUAL SITE GRADING



0 100 200 300  
SCALE: 1" = 100'





## DRAINAGE PLAN

