

SOUTH JEFFERSON REDEVELOPMENT AREA DESIGN GUIDELINES

Revised January 23, 2012

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SOUTH JEFFERSON REDEVELOPMENT AREA DESIGN GUIDELINES

The South Jefferson Redevelopment Area Design Guidelines are meant to guide new developments (redevelopments), making them fit with local character while raising the quality of the built environment in the project area. The 110 acres of the South Jefferson Redevelopment Area hold remarkable potential to increase the downtown service area and vibrancy by substantially increasing the size and adding 40% to the square footage of the current downtown.

The addition of this substantial redevelopment area can fulfill the design paradigm of Jefferson Street as the main street of Roanoke, originally envisioned in the 1928 John Nolen plan for Roanoke. Some underutilized infrastructure is already in place, and existing neighborhoods surround the redevelopment area. Proposed buildings of the redevelopment area hold the potential to link the neighborhoods into and through proposed development by the placement of greenways, roads, sidewalks, and other key urban design elements.

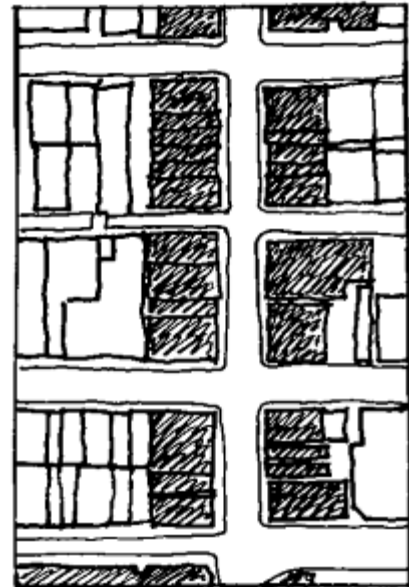
URBAN DESIGN THEMES

The size and shape of the redevelopment area, the history of the area, and the general patterns of contributing land uses set a condition fostering three variations of the guidelines for three distinct areas:

Jefferson Street Corridor

Jefferson Street is the Main Street of Roanoke. Aligned due north-south, dividing east and west quarters of the city, address of Roanoke’s tallest buildings and anchored on the ends by the St. Andrew’s compound at the North and Roanoke Memorial Hospital to the south, the central artery of the city is the geographic compass and an appropriately-named cultural icon of Roanoke.

Further redevelopment along South Jefferson should reflect the successful patterns already begun in the downtown:



Jefferson Street Relation of Buildings to Open Space: Main Street Character

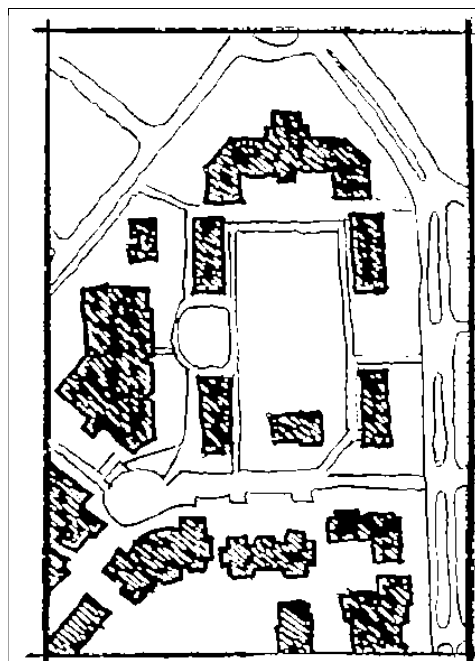
- The street should be pedestrian-friendly, with crosswalks.
- There should be no visual obstructions to this open street, such as pedestrian bridges, spanning Jefferson Street.
- Pedestrian- scale lighting and trees should be placed on the sidewalk, buffering pedestrians from the street.
- Buildings should be placed in zero-lot-line arrangements. It is crucial that facades with entrances are located at the back of the sidewalk.
- On-street parking should be used. Restriction of parking during peak times may be considered, similar to downtown.
- Redevelopments' emphasis should be on spreading the downtown main street visual patterns into the project area.
- Building frontages are, or appear to be, series of connected and relatively narrow buildings. Existing building widths on Jefferson Street range from 15 feet up to 100 feet. Most are within 25-50 feet. Wider buildings should achieve this intent through modulation of facades and articulation with building materials and multiple active entrances.
- Block lengths are relatively short, ranging from 200 feet to 500 feet. To achieve a downtown pattern, block lengths should not exceed 500 feet.
- Buildings fronting on Jefferson Street must be at least 3 stories.
- The frontage of Jefferson Street should present a continuous fabric of buildings and civic spaces which should not be interrupted by surface parking, except on the frontage adjacent to the bridge.
- Any parking structure frontage on Jefferson Street should have an active use other than parking at the street level, except on the frontage adjacent to the bridge.

Campus and Institutional Area

Great campuses often contain large buildings owned by one institution. The modulated size of the buildings, and their consistent materials and shapes makes them identifiable in a landscape setting. Roanoke Valley is host to several institutional developments, which have their own patterns for siting. The campus of Roanoke College, Hollins University, Radford University, and the Veteran's Administration Hospital are local examples of scenic and historic campuses. The most urban of these examples, Roanoke College is sited only a block from Salem's Main Street. This condition creates an intensely urban condition, as the patterns of the Main Street are contrasted with the scenic qualities of the adjacent inner-focused campus.

The existing patterns of the south side of Reserve Avenue are consistent with urban campus design. A large boulevard hosts green areas with occasional institutional buildings, and athletic facilities, set back and landscaped. The function of the post-war reserves has changed, but the pattern remains. To complete and build on the pattern, the north side of Reserve Avenue should be treated in urban campus format. Buildings should be set back from the boulevard, in a landscaped setting. The focus of the institution should be toward inner quadrangles and courtyards. While the mission of the institutions may deserve an inner-focused cloister, it should present a hospitable edge to the boulevard.

Building materials of the campus area should be consistent with a traditional Virginia campus, suggesting order and permanence. Visual cues from existing campus-style buildings along Reserve Avenue should inform new buildings. Development in the campus area on the east side of Jefferson Street may blend institutional materials and architecture with the architectural design of "The Crossing" area as a part of a unified design so long as the building materials and architecture are approved during the Development Plan Review and authorized by the City of Roanoke. However, any new building which fronts directly on Jefferson Street shall be not less than three stories in height.



Radford Campus Relation of Buildings to Open Space: Buildings set back and contributing



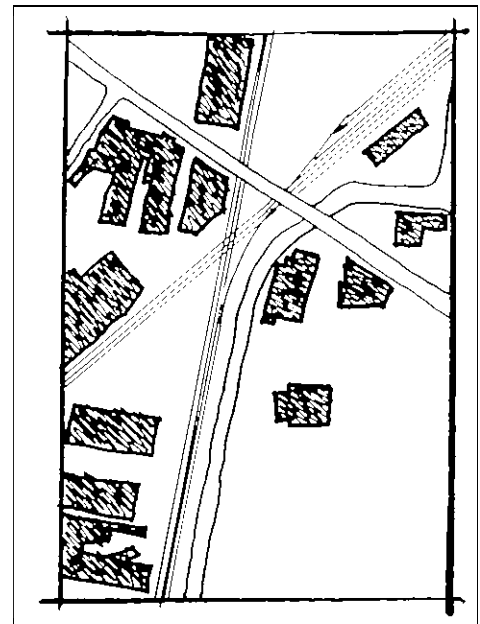
Reserve Avenue Scenes: Large buildings, including reserves, stadium, and hospital, contribute to institutional scale. Each building is set back from the Boulevard.

The Crossing

Originally developed with transportation and warehousing in-mind, a village developed at the crossing of two railroads; the Virginian, and the Norfolk & Western. Over a dozen transportation-oriented structures were developed, including warehouses, a streetcar barn, a railroad terminal, switch buildings and two elegant bridges over the railroads. In discussions with software developers, the soft-type and rustic space of the old warehouses could be a resource for young people who want loft space for flexible development. Some warehouses could qualify for special financial incentives, increasing their rehabilitation potential with significant investment tax incentives.

The architecture of “The Crossing” should reflect the warehouse qualities and the under-the-bridge ambiance of this area. Simple square expressive brick forms should predominate, punctuated by simple appurtenances. Jack-arch windows, vehicular entrances, arches and other simple brick structures should supplement the existing resources.

The site work of “The Crossing” area should reflect its simple counter-point to the more refined campus and downtown beyond. Overhead utilities, railroad-themed lights, and other utilitarian appurtenances of warehouses should predominate.

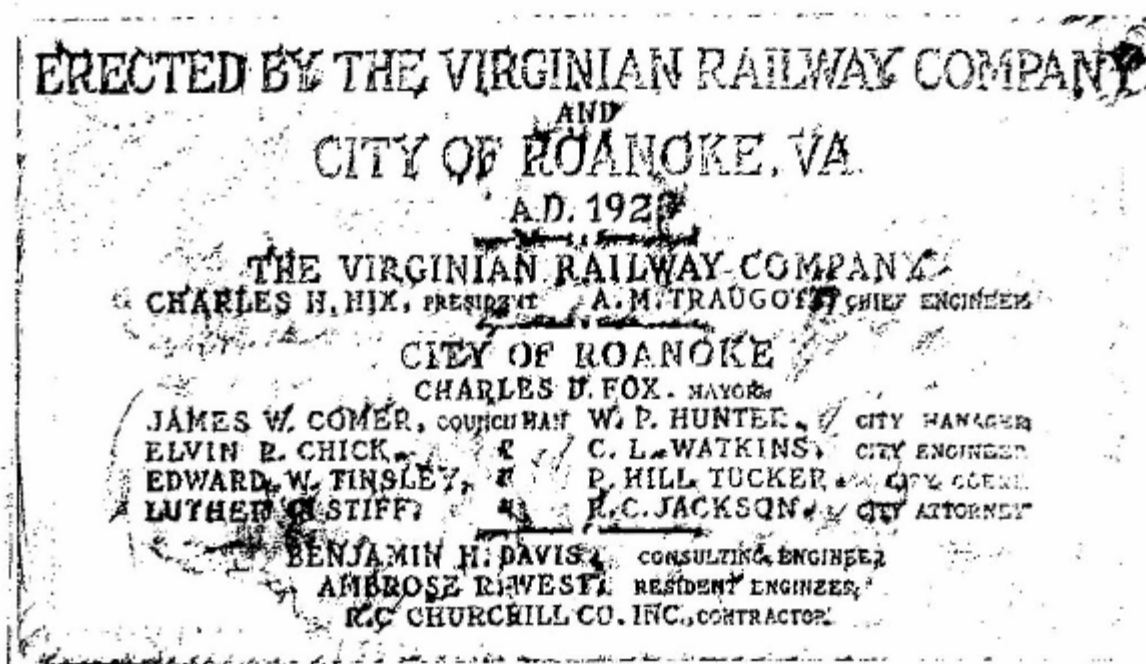


The Crossing
Relation of Buildings to Open Space:
Buildings oriented to
Railroad Transportation





Under the Bridge, or “Retro” character of the Crossing Area



Plaques from the Walnut Avenue and Jefferson Street Bridges:
1920s Details inspire Crossing Details

Transportation Arteries

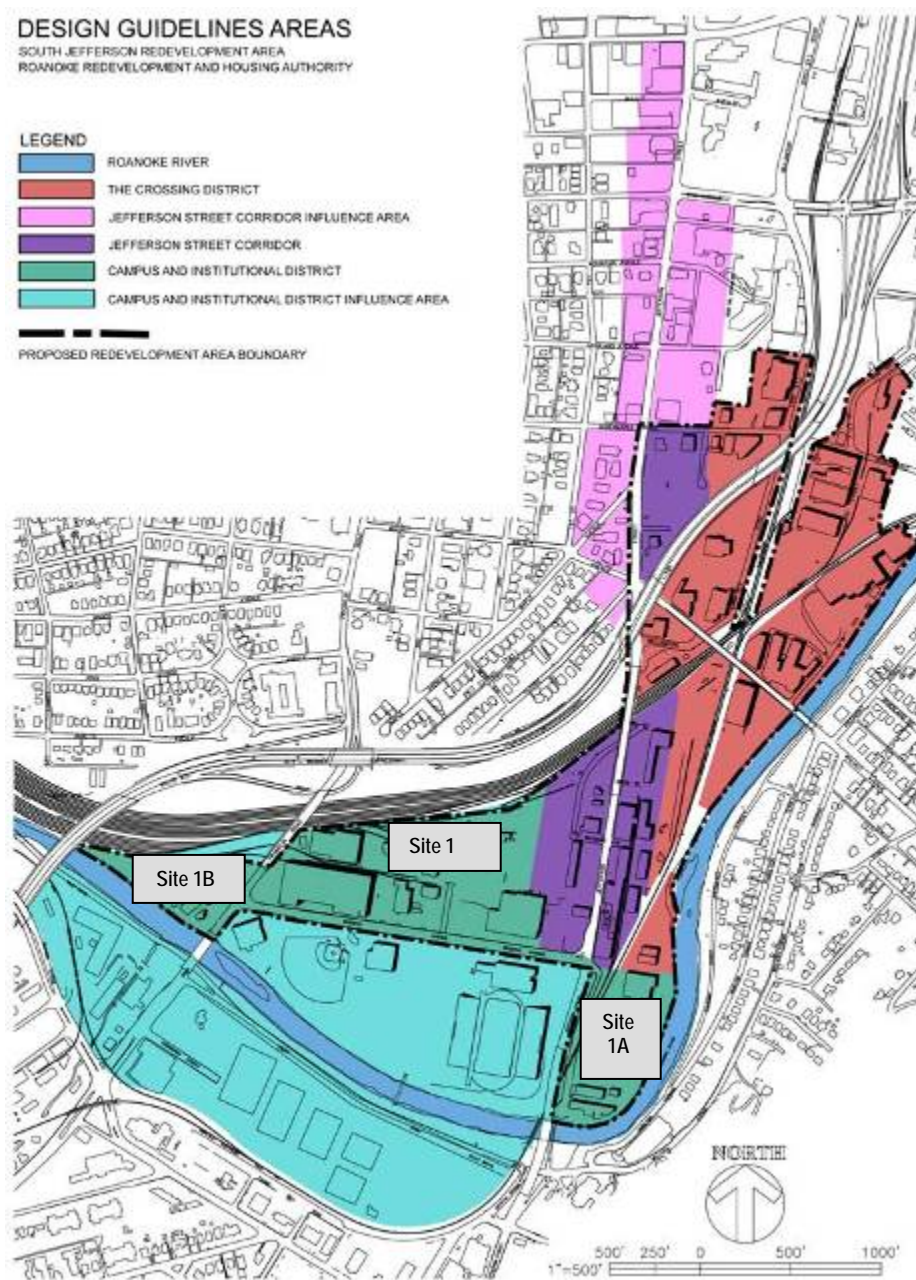
Intersecting Jefferson Street just north of the Campus area, Williamson Road parallels Jefferson just one block away through the northern half of the redevelopment area. This unique condition poses the opportunity to use Williamson Road as a traffic moving street, leaving Jefferson as a more pedestrian-oriented main street. Although beyond the boundary of the redevelopment, the possibility of separating the grade of Williamson at Elm Avenue further enhances this opportunity. The downtown patterns of a Williamson Road Boulevard, seen downtown with lights, crosswalks, medians, and sidewalks, should continue to its southern terminus with Jefferson Street. South Williamson Road can continue the tradition of the city's boulevards, to include Downtown Williamson, Reserve, Wells, and Gainsboro/Second Street.

Jefferson Street serves as the main image artery of the Jefferson Corridor. Reserve Avenue serves as the Campus edge boulevard, and Williamson Road serves as a parkway through The Crossing.

AREAS OF APPLICATION

The map below illustrates the areas where specific guidelines apply for redevelopment. The bolder colors indicate the areas where guidelines apply within the redevelopment boundary. The lighter color areas beyond the boundaries indicate areas which show similar patterns of development for inspiration of the guidelines.

Color map of Design Guidelines Application
Central Campus is Site 1 – Perimeter Campus Areas are Sites 1A & 1B



DESIGN GUIDELINES ADMINISTRATION

Development Plan Review and Procedures:

Potential site redevelopers should contact the Roanoke Redevelopment and Housing Authority (RRHA), and have their designers meet with the RRHA and City Planning Staff, prior to preparing site plans. This meeting will introduce redevelopment teams to the guidelines, applicability of the guidelines to specific sites, and provide a background for thorough understanding of requirements and desired conditions for site development plans. In addition, City staff can communicate development codes and review requirements to the redevelopment team.

A second meeting with RRHA and City Planning Staff is required at the conclusion of schematic design, to ensure a general compliance with the guidelines prior to investing in the level of detail required in site development plans.

For review and comment, site development plans will be submitted as shown below. Review and comment on proposed site development plans will be provided within sixty (60) days of submittal to the RRHA. Revised documents may be resubmitted at any time, and will be returned with comments within thirty (30) days.

Required site development plan content:

All drawings shall be drawn at or larger than a scale of one inch equals one hundred (100) feet (1" = 100'). Site development plans shall include the following:

1. A plat of the property is to be developed, showing the dimensions and shape of the property, required setback lines, the exact sizes, location and height of all existing structures (including signs, fences and walls) and buildings, and of all proposed structures (including signs, fences and walls) and buildings, or additions or alterations to existing structures (including signs, fences and walls) and buildings, including any additions, alterations, or expansions for which plans have been made, but are not expected to be implemented immediately.
2. The topography of the area is to be developed, with contour intervals of two (2) feet or less, showing existing physical features, including all existing trees of six (6) inches or greater in caliper, and all watercourses. The floodway and floodplain boundaries must be shown.
3. An architectural plan, indicating proposed elevations, building materials, building covers and signage.
4. The location and size of all existing and proposed streets, alleys, sidewalks, pedestrian ways, curbs and curb cuts, gutters, parking and loading areas

(indicating the number of parking spaces), open space, and outdoor storage areas that are within the site to be developed.

5. The location of proposed utilities, and easements for these utilities, with particular emphasis on sharing locations for easement areas with other development initiatives.
6. The location, height, type and material of all plantings, landscaping, screening, walls, fences, signs, outdoor lighting systems, required or otherwise.
7. The nature and manner of any and all excavations and grading proposed for the site, including fill, compaction, and slope planting and treatment.
8. The location of all dumpsters or other outdoor trash receptacles. The location of all towers, satellite reception dishes, and other airwave communication equipment. The location of all exterior air handling and conditioning equipment, such as chillers and air handlers. The location of utility boxes, and service boxes for underground electricity.
9. The location and screening methods of all outdoor animal handling and storage areas, and proposed methods of animal waste conveyance.
10. A tabulation of the total square footage of the property to be developed, showing what percentage and number of square feet is proposed to be devoted to uses, including off street parking or loading areas, open or landscaped areas and other major uses.
11. For all developments:
 - The specific use to which each building or structure will be put, the square footage of floor area to be put to each such use, and the estimated number of employees who will work therein, and the shifts they will work.
 - The type of wastes or by-products, if any, to be generated and the proposed method of disposal of such.
 - Any other information required by the RRHA in order to determine the impact of a particular use and its conformity with the Development and these guidelines.

Maintenance

The redeveloper, lessee or occupant of any lot or site will be responsible for the maintenance and clean and safe condition of the land, buildings, landscaping, exterior lighting, parking areas and all other improvements in accordance with these guidelines. He shall also be responsible for the prompt removal of all trash, lawn mowing, tree and plant trimmings.

During construction it shall be the responsibility of each land redeveloper to ensure that public streets and construction sites are kept free of unsightly accumulations of rubbish and scrap materials, and that construction materials, trailers, and the like are kept in a neat and orderly manner.

In the event any redeveloper, lessee, or occupant fails to comply with any of its responsibilities for property maintenance, then the RRHA shall have the right, privilege and license to enter upon the premises and take any and all measures necessary to maintain the property to meet the standards set out herein; The redeveloper shall pay for the expenses incurred in so doing.

Timing of Guidelines Improvements

Each redeveloper, contemporaneously with the development of improvements on the site, shall install landscaping on all unimproved areas on its site in accordance with plans approved by the Authority, which shall include all guideline improvements on or adjacent to the redevelopers particular site in accordance with the Redevelopment Plan that was in effect as of the date the Redeveloper acquired such site. No changes shall be made to the approved plans for the site or an adjacent unpaved right-of-way without the prior written approval of the Authority or, to the extent of any landscaping within the unpaved right-of-way, the City of Roanoke may require.

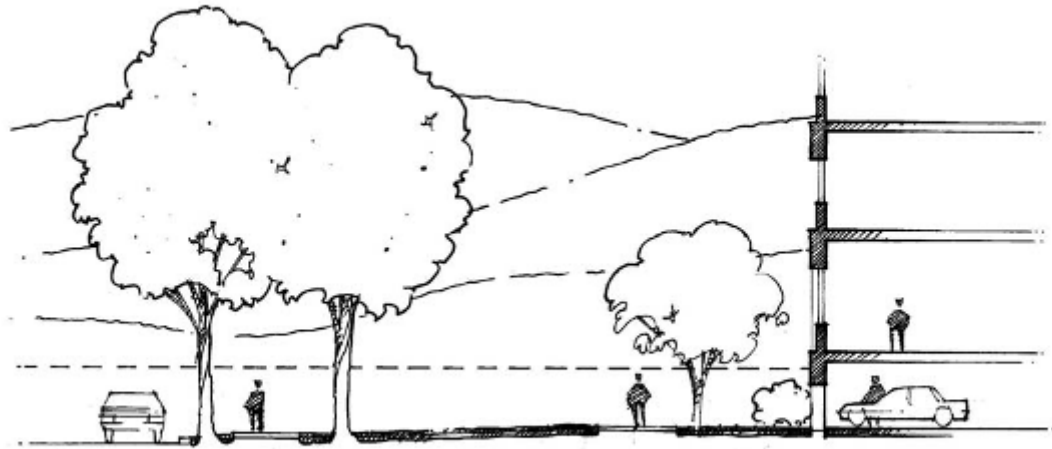
Upkeep

Each redeveloper shall keep all of such guidelines improvements in good condition and repair and in neat and orderly appearance. He shall be responsible for all expenses relating to the maintenance, repair or replacement of landscaping on the Owners site and on unpaved right-of-way adjacent to such site which is not maintained by the applicable government entity.

BUILDINGS AND STRUCTURES

Floodplain Use

Because of the floodplain condition of much of the redevelopment area, the first floor of some buildings will need to have an other-than-habitable use. The map used for area-wide floodplain conditions is found in the Redevelopment Plan for the South Jefferson Redevelopment Area (RRHA, 2001). Some redevelopment projects may capitalize on this condition to park cars on a pad below the first occupied floor, or to raise the building pad in accordance with the City of Roanoke floodplain regulations. Within Site 1 of the Campus and Institutional District, all buildings shall have at grade parking below the elevated, first occupied floor; at grade parking is not required for Site 1A or 1B. Creative application of techniques to mitigate and manage potential flooding vis-à-vis the need for activity at the street frontage will be key to successful development in the redevelopment area.



To reduce the potential for flood damage, all Buildings in Site 1 will have at grade parking below the first occupied floor.

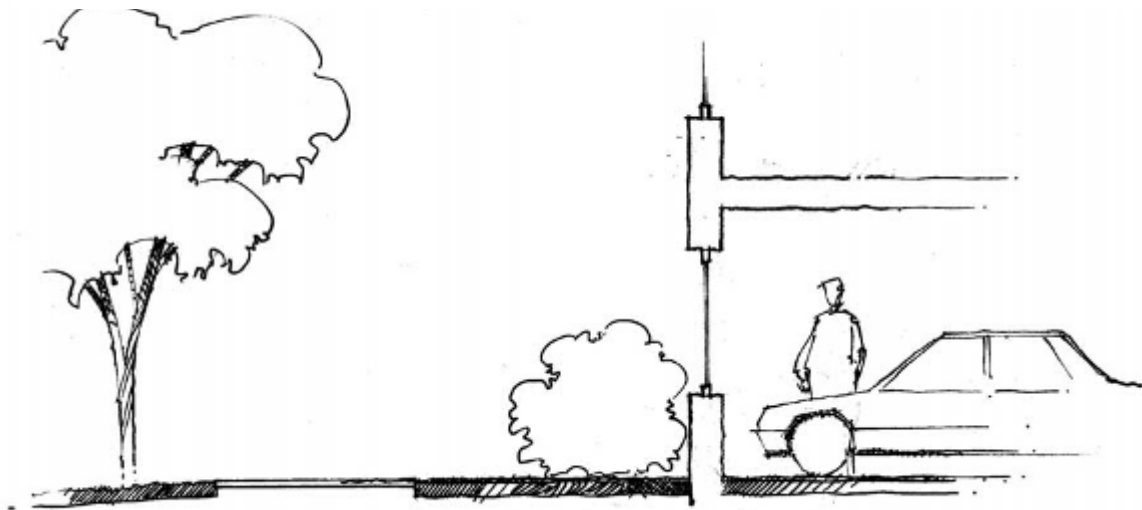
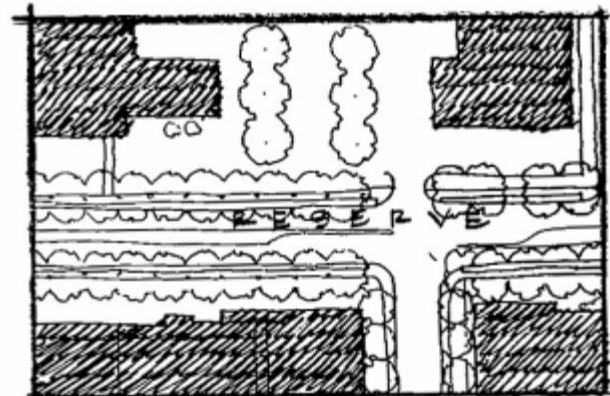
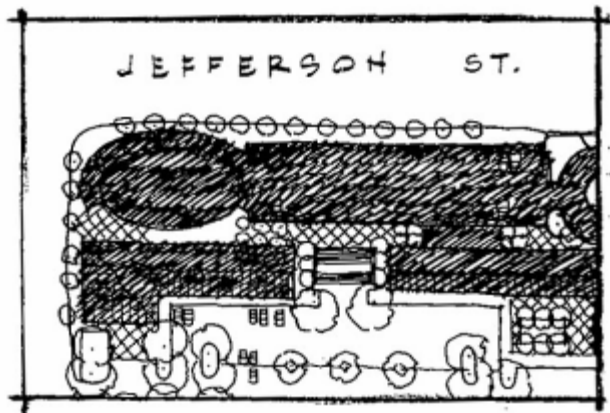


Illustration of at grade parking at face of building

Placement of Buildings

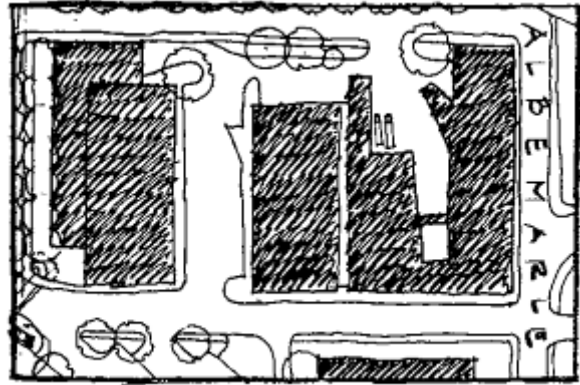
One of the most important aspects of creating a desirable physical environment is placement of buildings in the landscape. Principal buildings will be placed strictly in accordance with applicable zoning standards for minimum and maximum front yards. Zero setbacks from front lot lines are desired in most cases.



Context for setbacks: Jefferson Street features buildings at the rear of the sidewalk, and placement of campus buildings at Roanoke College and on Reserve Avenue set back with landscaped buffer.



Context for setbacks: The Crossing features buildings near streets.



Height Limit

Jefferson Street Corridor

The maximum height of buildings along the Jefferson Street Corridor is 120 feet.

Campus and Institutional Area

The maximum height of buildings located within Site 1 of the Campus and Institutional Area is 140 feet.

The maximum height of buildings along Reserve Avenue is 90'.

The Crossing

The maximum height for buildings located in The Crossing is 120 feet.

Building Materials

Jefferson Corridor

Each building on Jefferson Street should express individuality. St. Andrews Church, the old Norfolk and Western General Office Buildings, Dominion Tower, the Patrick Henry, and Roanoke Memorial Hospital are examples of superior individual architectural statements along Jefferson Street. None of these buildings match, which contributes to the character of the street as a whole. This pattern of development is encouraged. Materials will be solid and permanent, including stone, brick, pre-cast concrete, glass, metals, and other materials expressive of permanence. Buildings should express high-quality and efficient modern uses of materials. A high level of transparency is essential, particularly at ground level frontages. Reflective glass may be considered as a secondary material. It is not allowed as the primary material. Hardy plank siding and panels, concrete masonry units, stucco and other materials, as approved by RRHA, may be used for minor design elements.



Jefferson Street: Individual
Architectural Statements

Campus and Institutional Area

In contrast with the individuality of Jefferson Street buildings, each campus building should appear as identifiable with the whole. Acceptable materials include brick, stone, cut limestone, decorative masonry, pre-cast and cast-in-place concrete, with wood and pre-cast

trim. Structures should be made with reserved earth tones: buildings should take subtle cues from existing campus style buildings on the south side of Reserve Avenue, including the Parks and Recreation Building, National Guard Armory, City Schools Building (former Naval Reserve) and Victory Stadium. The buildings also should be expressive of their progress and high-tech nature. Transparency is encouraged. Reflective glass may be considered as a secondary material. It is not allowed as the primary material. Roofs should be of dark material, and should match adjacent buildings in the campus. Incorporation of slate-like shingles or metal roofing is encouraged. Roofs should be expressive of tradition and not predominately flat. The module of new buildings should be expressive with welcoming stairs with porticoes.



Campus-style Architecture at Roanoke College:
Individual buildings identifiable with the whole through sizes and materials

The Crossing

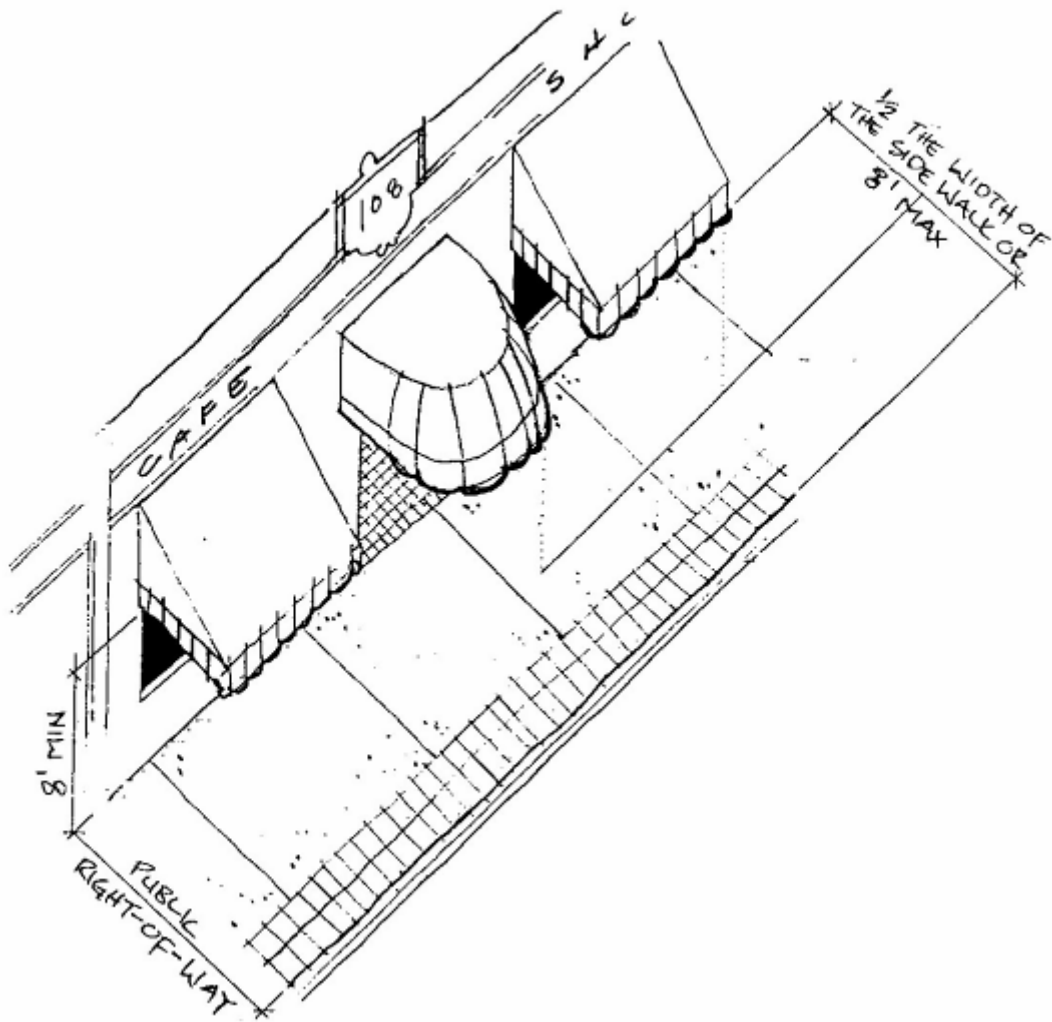
Structures should exhibit brick and steel, large warehouse-style modulation based on service functions. Large door openings are preferred, as well as large simple windows, with jack-arches and arches, and dark colored roofs. Natural exposed metal may be used as approved by RRHA.

Street-level Facades

In addition to being permitted in urban open space areas, awnings and similar appurtenances are permitted at the entrances to buildings. Such a structure may be constructed of rigid or flexible material designed to complement the streetscape. Any such extension may extend from the building up to one half of the width of the sidewalk area in front of the building or eight feet, whichever is less. If the extension extends into the public right-of-way, an encroachment agreement from the City of Roanoke is required.



Simple building tradition in The Crossing:
Large structures' openings desirable for retrofitting.



In no case may any facility extend beyond the curb line of a public street. A minimum overhead clearance of eight feet from the sidewalk must be maintained.

Roofs and Roof Top Equipment

All towers, tower antennae, satellite receiving and transmitting equipment, roof-mounted equipment, other equipment, and outside roof top storage areas on the property, and such other items designated by the Authority, shall be screened from ground level view by means of a screening wall of materials similar to and compatible with the materials used in the principle building on the site. The Authority shall have full power to determine the facilities or areas that must be screened and the screening materials and requirements for each.

PARKING

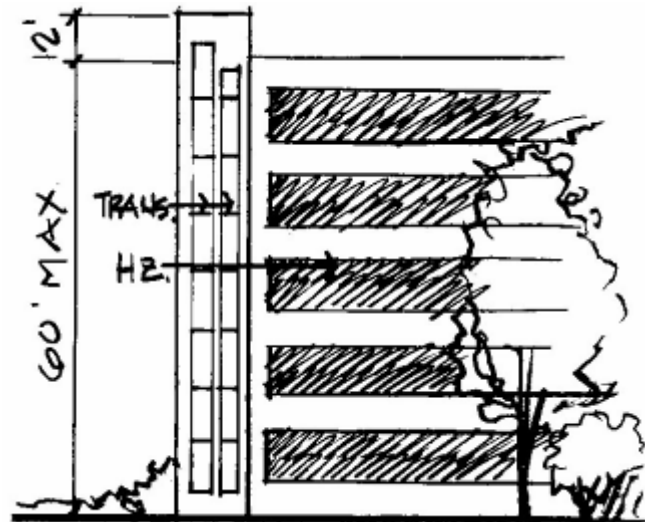
Structured Parking

Along major streets structured parking shall be limited to five (5) parking levels above grade, such that the finish elevation of the highest level does not exceed sixty (60) feet above grade. When placed against the railroad as a buffer, structures can be higher, rising 10' vertically for every 100' horizontally placed behind back of curb of Reserve Ave, Jefferson Street, Albemarle Avenue, or Williamson Road. An additional twelve (12) feet shall be allowed for parapets, as well as stair and elevator enclosures to serve the highest level. Structured parking can occupy the ground floor of other buildings, to remove occupied floors from the floodplain.

The longest dimension shall be limited to 400 feet in length. The longest dimension shall be limited to 200 feet without building modulation, either expressed in detail, or preferably an active component, such as stair and elevator enclosures.

Circulation shall be designed such that ramps are located at least one bay away from the exterior wall. The area of openings in the exterior wall shall be a maximum of 25 percent of the total perimeter wall area of each tier. The exterior facades of a garage shall be horizontal at a ninety (90) degree angle from the support columns.

Key pedestrian circulation elements (stair towers, elevators) shall be located toward public streets and shall have interior stairs and elevators visible from the street or public plaza area.



Garage pattern adjacent to major street

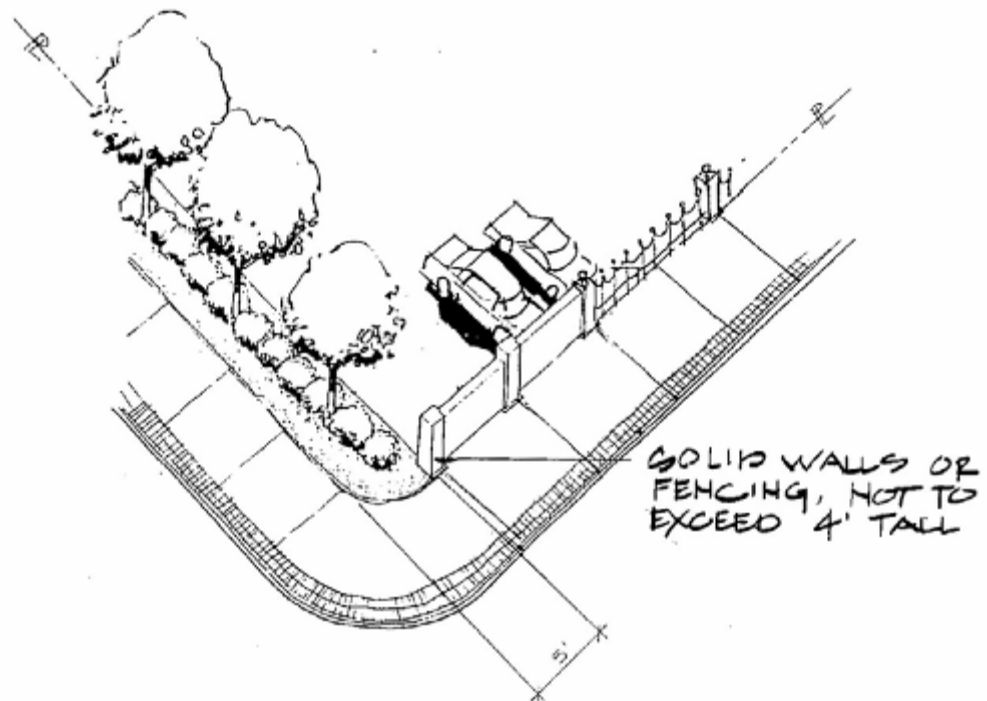
Location and scale of surface parking

Similar to building placement, the ratio of parking contributes to the sense of place within each area. The character of the redevelopment area is defined by the pattern of parking, and should observe these guidelines:

- Surface parking should not dominate any site. Lots should be sized to accommodate typical demands rather than peaks.
- Streets should be designed to encourage on-street parking and accommodate some of the parking demand.
- No surface parking lot shall front on Jefferson Street.
- Corner lots should be avoided as sites for permanent surface parking lots.
- Locate parking at the rear or within the interior of sites.
- Where fronting on a main street, limit to 60 feet of frontage, except where a parking area is intended to be a nonpermanent use to be later occupied by buildings.

Surface Lots Buffer

Grade level surface parking lots must be screened from the street and pedestrian areas by solid walls or permanent rail or balustrade fences not exceeding 4 feet in height.



Shaded Surface Lots

In choosing trees to provide parking lot shade, consider both the urban conditions the trees will need to endure, and the floodplain heavy soils of the sites in the redevelopment area. Canopy trees are required to provide shade in surface lots.

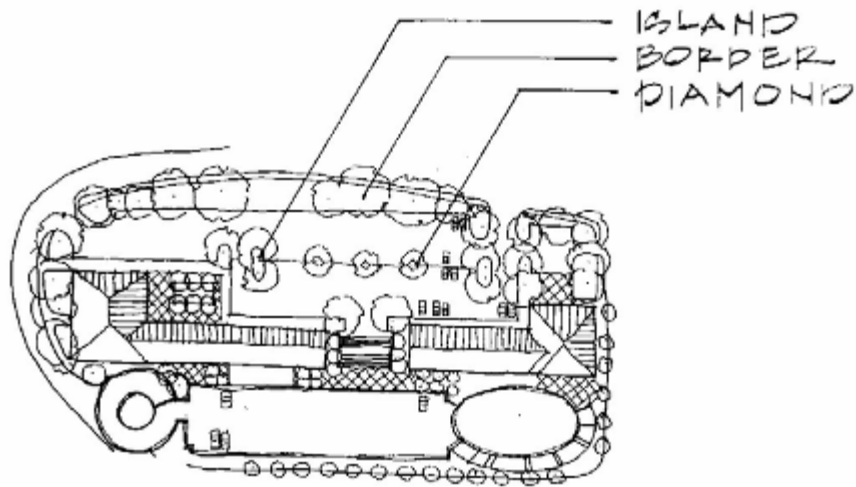
New canopy trees of 2” and higher caliper will contribute to a 25% shade ratio. Refer to the City’s Zoning Ordinance Table 642.1 for acceptable species and canopy calculations. Trees may be distributed among

Trees around border near curbs

Trees in Islands

Trees in Diamond Planters

The sketch below illustrates the three types of planting arrangements. Trees in Diamond Planters may contribute to the 25% shade ratio but may not contribute to the City of Roanoke’s 20% zoning requirement.



SITework AND DETAILS

Streets

All streets shall be equipped with paving, curbing, sidewalks, lighting fixtures, street name signs, and street trees, as designated by the Authority. Such facilities shall be installed in accordance with *Street Design Guidelines* adopted by the City of Roanoke.

Pedestrian Areas

Sidewalks will be provided by the City of Roanoke along Jefferson Street and Reserve Avenue, in compliance with downtown and neighborhood development standards. Handicap ramps provided at each corner will be constructed in accordance with current City interpretation of ADA standards.

At key pedestrian crossings shown in the Illustrative Master Plan, the installation of paver crosswalks are recommended. Intersections to receive paver crosswalks include Reserve - Franklin, Jefferson - Reserve, Jefferson - Walnut, Jefferson - Maple, and Jefferson - Williamson.



Typical Intersection demonstrating crosswalk patterns, ramps, downtown streetlights, and median potential for Williamson Road

Greenways should be compliant with the Roanoke Valley Conceptual Greenways Plan and recommended greenway design guidelines.

Specific guidelines are recommended for project areas:

Jefferson Street Corridor:

The typical sidewalk will measure at least 10 feet in width, with additional matching sidewalk added by the redeveloper depending on building setbacks. Wider plazas of 24 feet in width shall be provided at recessed building entries. The sidewalk paving will match the downtown palette. Major sidewalks will be light-gray concrete, with the traditional two-brick stripe adjacent to the curb, or an approved alternative design and material.

Campus and Institutional Area

A colored concrete walkway system, or paver walkway system, is recommended throughout the inner campus. Reserve Avenue sidewalks may include the special and matching treatment, as long as both sides of Reserve are redeveloped simultaneously.

Dark colored concrete, bluestone, or red-brown pavers demarcate accents at entries or plazas in special areas of the campus.

Crossing

Sidewalks are recommended to be light gray concrete, with an emphasis on minimizing the amount of decoration.

In some contrasting private areas, more elaborately-paved courtyards are recommended. These may use brick, bluestone, cobblestone, asphalt or other paving or industrial materials as approved by RRHA.

Grading and Drainage

Grading on each site will take place in conformance with the approved site plan. In general, slopes will not be permitted over 2:1 without proper structural control, or steeper than 4:1 without proper vegetative control.

Plans for all floodplain modifications, dams, lakes, ponds, retention basins and other water features of any kind and general site drainage must conform to federal, state and local requirements and must be submitted to appropriate agencies in advance for approval. Each redeveloper shall control water runoff drainage from the site to prevent damage to adjacent tracts, streets, or any other area in the property.

Open Space

In general, public open space is provided for in the public areas of the Redevelopment Master Plan. Public plazas and greenways are encouraged to fulfill the plan. Areas recommended for private courts, greenways, plazas, walks and gardens are shown in the Illustrative Master Plan.

Redevelopment of these areas on parcels is expected to be included in site plan submittals. The following types of private open space serve as general guidelines:

Jefferson Street Corridor

- Landscaped open spaces will be included in motor courts, located away from Jefferson Street
- Open courtyards facing Jefferson Street may include walled outdoor dining, outdoor sculpture installations or fountains and tree-canopied entry plazas.

Campus and Institutional Area

- Greenway connectors will be provided by redevelopers.
- Redevelopers will provide axial open space. Amenities will be provided on east and west termini of Reserve Avenue. Structures such as clock towers, transparent stair towers, or fountains may be used as accents, as shown in the Illustrative Master Plan.
- Open space areas include interior courtyards, motor courts, and shared parking lots.
- Open Space will be provided in the setback zones between Reserve Avenue and Building Facades. This utility and berm zone will be planted with canopy and flowering trees.

The Crossing

- Greenway connectors will be provided by redevelopers.
- Redevelopers will provide sculptural open space amenities along the greenspace axis connecting Williamson Road and the Roanoke River, and with each surface parking lot, as shown in the Illustrative Master Plan.

Easements and Utilities

Easements should be specifically reserved over and through all front, side, rear, and interior lot lines and at all corners. In as much as it is practicable, utilities and easements should be bundled and remain in areas which are easy to serve, and away from significant landscape development areas.

Place utilities and utility easements in back-of-house areas, such as adjacent to the numerous railroad rights-of-way. Consider utility easements in front areas only when their future maintenance and construction will not interfere with trees which will mature as the utilities deteriorate.

All connections of drains and sewers with the public sewers of the City shall be made in accordance with the provisions of Chapter 26, Sewers and Sewerage Disposal, of the Code of the City of Roanoke (1979), as amended.

Utility lines will be located in accordance with the applicable zoning regulations.

Loading Areas

Each site shall provide sufficient on-site loading facilities or alternative curbside facilities to accommodate site activities, and all loading movements, but not limited to

turnarounds, shall be made off of streets. No materials, supplies, or equipment shall be permitted to remain outside of any structure unless screened in a manner satisfactory to the RRHA. Loading docks, service areas and maneuvering areas shall be located on a site out of view from primary streets and front entrances to buildings.

All loading and material handling areas shall be to the rear of the site. The RRHA may permit a redeveloper to install or construct loading, service, and outside storage and material handling areas where same would otherwise be prohibited if the redeveloper proposes and installs or constructs sufficient berming, natural vegetation or compatible screening of such area from sites and streets and right-of-way adjacent to the site upon which same are located.

Exterior areas which must be secured for safety or security reasons shall be located between the rear exterior of the principle building and the rear boundary of the site. The location of all fences or walls constructed on the site shall be included within the plans submitted to the RRHA for review.

Service areas shall not be permitted to protrude above the top of the screening wall or plantings. Access openings shall be located in such a manner so as to minimize public view into the service area.

Utilities and Refuse

Dumpsters shall be screened from public view at ground level by use of a solid wall or solid board fence and shall not be permitted to protrude above the top of wall or fence. In addition, evergreen plantings may be required to supplement and soften the wall or fence. Gates on the dumpster enclosure shall be constructed in such a manner so as to withstand the daily abuse, wear and tear to which they are commonly subjected. All gates shall have a steel framework attached to steel posts. The posts and framework shall be covered in such manner so as not to be visible from public view. Chain-link fabric with slats shall not be considered an acceptable solution. Painting of wooden parts may be required depending on circumstances.

All transformers, ground mounted mechanical units, back flow prevention, and any such device as deemed unsightly in appearance by the Authority shall be screened at ground level by evergreen landscaping. These devices shall not be permitted to protrude above the screening material.

Storage of Materials

Materials shall be kept out of view from primary streets, research from public plazas, and from designated lobby spaces. Materials can be screened using walls of similar or compatible materials as the principle buildings or hedges.

Signage

Individual signs should have unified design to express a common theme, while allowing flexibility for expression of company or area identity. Directional and informational signs should also have a unified design and size.

Building Identification Signs



Jefferson Street Corridor

Except for areas where properties in the Jefferson Street Corridor abut properties in The Crossing area, all signs pertaining to buildings on the Jefferson Street Corridor shall be located on the buildings only and have a designated size set at a maximum of five percent (5%) of the front elevation if affixed to the facade. They may be illuminated.

Where properties in the Jefferson Street Corridor abut properties in The Crossing area, the signage standards for The Crossing area may be utilized, as part of a unified design, if approved by RRHA.



Examples of Jefferson Corridor signage: Buildings serve as Beacons

Examples of Crossing signage: Painted Bands set the character

Campus and Institutional Area

All signs pertaining to developments located in the Campus and Institutional Area shall be characteristic of the occupant of the campus. These characteristics shall be uniform throughout the area. The signs will be monument signs, matched, with a maximum height of ten feet and maximum width of seven feet.



Examples of matched Campus- style signage seen at Carilion Facilities

The Crossing

All signs pertaining to buildings located in The Crossing shall maintain the historical ambiance of the area. These signs may be expressed as a painted band on the sides of the buildings, or a shingle hanging near the door. The painted band shall be a maximum of 5' in height. Maximum shingle size is 15 square feet. Monument signs are considered less desirable in this area.

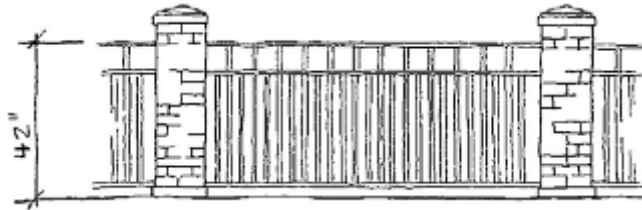
Large signs over buildings also have a tradition in the Crossing. Developed in the pre-World War II era, these signs were built to be seen from nascent bridges in the area. Some are successful in their use of neon, and in their expression on roof ridge, contributing to the architecture. Sensitive and creative continuation of this tradition is encouraged in The Crossing.

Directional Signs

Directional signs, limited in area to twenty-four (24) square feet each, may be used when necessary to direct traffic to a building on the same premises. The height of the sign shall not exceed eight (8) feet above grade. Grade at the base of the sign shall not exceed an average adjacent grade (30 foot perimeter) by more than one foot. The total volume used by the sign shall not exceed 16 cubic feet. Such signs shall not contain advertising copy or identify a tenant in the Redevelopment Area. The aggregate area of all such signs shall not exceed 360 square feet.

Fencing

Where public uses will be within thirty feet (30') of an active rail line, a 42" high safety wall or fence is recommended between the use and the railway hazard.



Example of Safety Fencing

Where public uses will be near an active animal use area, a safety wall or fence is recommended between the public and the animals. Types of fencing are determined by the requirements of the animals.

In general, fencing is discouraged in the Redevelopment Area. Except as noted herein for public safety and for screening, use of fences on the property is permitted only where specifically approved in writing in advance by the RRHA. Bare chain link fencing, barbed wire fencing, and other utilitarian fences will be prohibited in the Redevelopment Area.

Outdoor Lighting

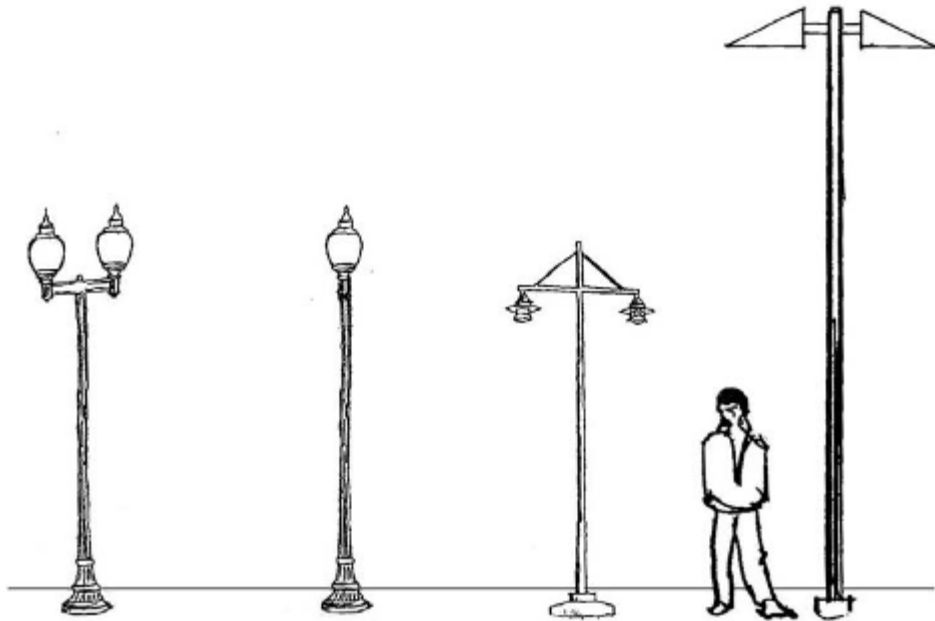
The color of the lighting shall be consistent throughout the Redevelopment Area and shall be determined by the RRHA. On public rights-of-way, the street lighting will be consistent with the downtown patterns of lighting, using similar-source lamps.

On development parcels, each redeveloper will be responsible for installing attractive and efficient lighting fixtures. The illumination source should be a "white" light source as provided by metal halide lamps.

Campus and Institutional Area

Surface parking lot standards shall not exceed 18 feet in height. All parking light fixtures shall be black in color.

Pedestrian and walkway lighting shall be produced from a visible source; fixtures shall not exceed 12 feet in height. Fixtures and poles shall be black in color similar to parking lot lighting. Illumination of pedestrian and walkway areas should be consistent with lighting levels on downtown streets.



Palette of Lighting: (left to right) Jefferson Street fixture, Walkways fixture, Crossing “Warehouse-style” fixture and fixture acceptable in surface parking areas

Jefferson Street Corridor

Illumination of pedestrian and walkway areas should be consistent with lighting levels on downtown streets.

The Crossing

Pedestrian and walkway lighting shall be produced from a visible source; fixtures shall not exceed 15 feet in height. Fixtures and poles shall be industrial colors as approved by RRHA. A warehouse-style or railroad-influence palette is desired. Illumination of pedestrian and walkway areas should be consistent with lighting levels on downtown streets.

Environmental Concerns

No redeveloper, owner, lessee, tenant, operator or other occupant of the Property or any portion thereof shall handle, store, deposit, use, process, manufacture, dispose of or release or allow any of its agents, employees, contractors or invitees to handle, store, deposit, use, process, manufacture, dispose of or release any hazardous substances of any kind from, on, in, under or in the air above any part of the property, including, but not limited to, any surface waters or groundwater located on the property, or into public sanitary sewer systems serving the Property without complying with all environmental laws, including but not limited to, performing pre-treatment, obtaining permits and giving notices as required by environmental laws, and applicable laws regarding the liabilities of such handling.

“Hazardous substances” means those substances now or hereafter included within any of the definitions of “hazardous substances”, “hazardous waste”, “hazardous materials”, “pollutant”, “contaminant”, or “toxic substance” under, or otherwise regulated by, any environmental law; including, but not limited to mixtures containing listed hazardous substances and waste generated from the treatment, storage, or disposal of hazardous substances, asbestos, polychlorinated biphenyl’s, radioactive materials, petroleum and natural gas, liquefied natural gas and synthetic gas, and regulated heavy metals.

“Environmental laws” shall mean and include all present and future federal, state or local laws, rules, orders, ordinances and regulations pertaining to environmental regulation, or the use, processing, storage, disposal, generation or transportation of hazardous substances, or any related contamination, cleanup or disclosure.

Enduring Condition of Property

The redeveloper of any parcel of land in the Redevelopment Area shall at all times keep the premises, buildings, improvements, and appurtenances in a safe, clean, and wholesome condition and comply in all respects with City, State, and Federal health, fire, and police laws, rules, ordinances, codes, statutes, requirements, and regulations as well as those set forth in the Plan Review and Procedures Section. The redeveloper or owner will remove, at his or its own expense, any rubbish which may accumulate on such parcel of land.

The City of Roanoke will be responsible for the upkeep of public streets, sidewalks and greenways within the property. The redeveloper shall clean and maintain all private streets and walkways, alleys, entry roads, courts, sewers, and drains free from construction debris and dirt prior to acceptance by the City and at such other times during construction as the City Director of Public Works deems necessary to prevent creating a public nuisance. In event redeveloper fails to clean and maintain said improvements within forty-eight (48) hours after notification by the Director of Public Works, the City may proceed to have the improvements cleaned and maintained and the redeveloper shall pay all cost incurred by the City prior to acceptance of improvements.