5.0 ARCHITECTURE

5.1 Architecture Introduction

Overview

The purpose of the Architecture Criteria is to ensure and maintain a consistent, high-quality built environment in the Warfield Neighborhood as a new mixed-use neighborhood that respects the surrounding context, supports the vision for the redevelopment of Downtown Columbia, and exemplifies the character and experience of the best downtowns in the United States.

As noted in Section 1.0 Introductions on page 4, the Warfield Neighborhood Design Guidelines are not a prescription for a specific design mandate. Variations from these guidelines that conform to the goals of the Downtown Columbia Plan are permitted on the basis of unusual programmatic requirements, peculiar site or economic constraints, or architectural / site design merit as determined by the County and where shown on appropriately submitted documents.

Purpose

The purpose of the Architecture Criteria are to guide the design and character of built structures in Warfield, including all building types. The criteria include both text and diagrams that specify: 1) acceptable building materials, 2) methods of application or configuration of the materials, and 3) acceptable techniques for construction.

Sustainability Goals

Per the *Downtown Columbia Sustainability Program*, buildings within Warfield shall be designed to holistically address sustainability. A balanced approach is desired; each project shall be environmentally sound, functional and effective, and financially viable. Buildings shall be healthy and good stewards, using natural resources, such as water and energy, efficiently. Sustainable buildings create spaces that are comfortable, engaging, beautiful, and inspiring.

Displays explaining the green building systems and facilities should be visible in all buildings and shall be educational and engaging, facilitating the participation of tenants, employees, residents, and visitors in sustainable practices.

Per the Howard County Green Building Law (CB14-2010), all new construction 10,000 square feet or larger shall achieve LEED certification from the US Green Building Council of a certified-level rating or higher. The Leadership in Energy and Environmental Design (LEED®) Green Building Rating System™ is a nationally accepted benchmark for the design, construction, and operation of high performance, green buildings. It encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

Additional green building standards or programs may be referenced as well, such as the Living Building Challenge and the Sustainable Sites Initiative.

Primary measures of architecture sustainability include:

- Create buildings which limit impact to natural resources and are healthy for the environment and the people.
- Promote walkable neighborhoods; on primary streets, where feasible, 75% or more of a building's street level facade should be wall openings such as windows and doors.
- Improve stormwater runoff quality and groundwater recharge; consider green roofs for a substantial reduction in stormwater runoff through storage, vegetative uptake, evaporation and plant transpiration.
- Reduce potable water use in landscape areas; consider harvesting rainwater or filtered grey water from the building for landscape irrigation.
- Facilitate and encourage bicycling; provide secure storage in commercial, retail, and residential areas. Further, provide weather-protected bike storage in multifamily residential buildings and in office buildings over 10,000 square feet.
- Reduce building heating and cooling energy use; when possible, orient buildings to maximize southern exposure for passive solar gain and use roof and window shades to screen summer sun on the south, east, and west sides of buildings.
- Reduce impacts from the use of fossil fuels; consider alternative energy production at the building, including solar photovoltaic, solar thermal, and micro wind turbine. Consider using photovoltaic panels as shade structures on building awnings and on the top level of parking structures.
- Integrate building design into the green infrastructure network through integrated stormwater management and patches of native habitat within the urban fabric (including green roofs).
- Avoid material and resource waste; at the design stage, consider to use or plan for the reuse of 90% or more of the purchased or acquired construction materials. Further, design buildings based on material availability and standard dimensions.
- Reduce the embodied energy in materials; consider acquiring 50% or more of construction materials (including site materials) from reused, recycled content, regional, and rapidly-renewable sources.
- Reduce heat island effect; use light-colored and/or high albedo shade structures, pergolas, landscape plantings, and/or photovoltaic arrays over dark-colored and/or low albedo surfaces such as the top level of parking structures.
- Reduce the amount of construction waste sent to landfills; consider diverting 80% or more of non-hazardous construction waste from landfills or incineration.

For reference, the *Downtown Columbia Sustainability Program,* as developed for the *Downtown-wide Design Guidelines*, can be found in Appendix A1.

Components

The Architectural Design Criteria comprise the following sections, covering the redevelopment goals for Downtown and standards for the elements of building:

- Building Typologies
- Building Form
- Storefront Standards
- Material and Element Standards

General Provisions

The general provisions below apply to all buildings with the exception of civic buildings:

1. Buildings should front onto the more primary street. Buildings facing a primary street should have active building frontage (e.g. retail space or building amenity space) at the ground level for fifty percent (50%) or more of the facade length, where feasible. Buildings facing a secondary street are not required to have storefronts at the ground level. Where a building abuts Little Patuxent Parkway or Governor Warfield Boulevard, building frontage and building entry may face internally or to a secondary street.

2. Buildings exceeding 120 feet in any horizontal dimensions should set up an implicit or explicit system of bays. Implicit systems use window groupings in the base, intervening floors, and the cornice area to denote bays. Explicit systems use columns, pilasters, or other similar features on the principal facade to accentuate smaller increments and individual storefronts. Implicit systems use material chances horizontally and within the base of the building or storefront to accentuate smaller increments. (2)

3. The frontage elevations of all buildings should be divided into architecturally distinct sections typically in which the height is equal to or greater than the width, unless otherwise appropriate to the architectural character, using material changes, window groups, columns or pilasters to create hierarchy.

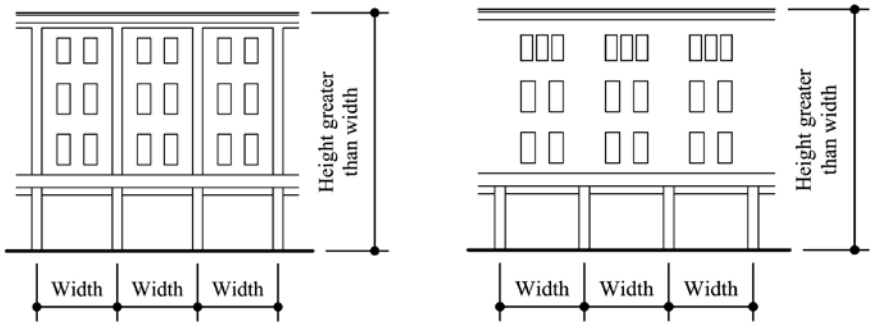
4. Entrances should be visually identifiable within the facade and articulated within the base or bays in which they occur.

5. Corners of buildings at important intersections are encouraged to have special articulation, such as a change in fenestration, a change in the height of the base or top, a change in material, or similar. (see also Urban Design, p.17)

6. Ground floors shall have a minimum interior ceiling height of 12 feet; 14 feet preferred, excepting residential ground floor areas, or parking garages and back of house spaces not visible from the primary facade.

7. No less than 15% nor more than 80% of the upper level facade shall be glazed openings in residential. No less than 40% nor more than 90% of the upper level facade shall be glazed openings in office. Storefront openings shall be a maximum of 90% glazed openings. (7)

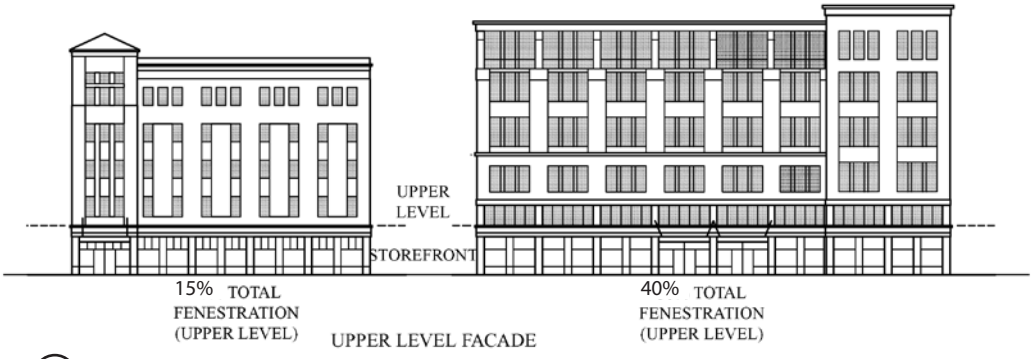
8. All buildings shall have a base, middle, top/cap, as follows: (8)
   a. All Downtown buildings should have a clearly defined base that should have a visual appearance of greater height than other floors;
   b. Buildings 2 to 3 stories in height should have a clearly defined base and a heavily articulated cornice or parapet; these buildings should not have a distinguished middle and top.
   c. Buildings 4 to 6 stories in height should have a 1-story base, a distinguished middle, and a 1/2 or 1-story top.
   d. Buildings 7 to 15 stories in height should have a 1 or 2-story base, a distinguished middle, and a 1-story top.
   e. An expression line (such as a horizontal band, projecting material, or regulating line) should delineate the division between base, middle, and top. (see Horizontal Elements, p. 136)
   f. The top should be distinguished from the middle by changing the window rhythm, material, setback, floor height, or similar.
   g. Setbacks in the building elevation should occur at a horizontal expression line. (see Horizontal Elements, p. 136)
   h. In addition to the base, middle, and top, all buildings should have a cap, such as a cornice or parapet, trellis or shade device, sloped roof, penthouse, or similar architectural feature.



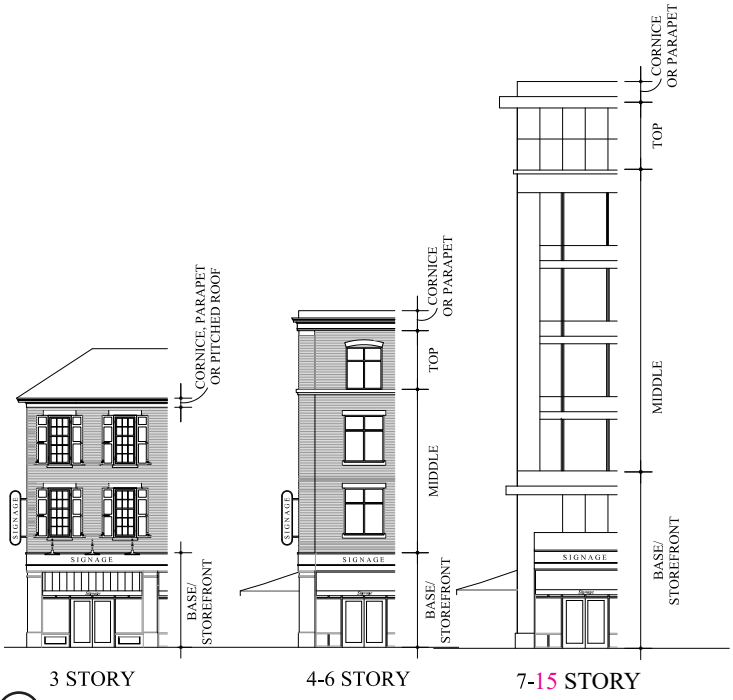
EXPLICIT SYSTEMS USE COLUMNS OR PILASTERS ON THE PRINCIPAL FACADE TO ACCENTUATE SMALLER INCREMENT BUILDINGS AND STOREFRONTS WITH VERTICAL PROPORTIONS.

IMPLICIT SYSTEMS USE WINDOW GROUPINGS IN THE BASE, INTERVENING FLOORS, AND THE CORNICE AREA TO DENOTE BAYS USING VERTICAL PROPORTIONS.

2 Examples of implicit and explicit bay systems



7 Examples of building fenestration percentages



8 Base, middle, and top diagram

** The diagrams on this page are intended to depict the General Provisions criteria on the facing page, not to suggest an architectural style. See the precedents on the following pages for additional images of the envisioned architectural character in the Warfield neighborhood.*

5.2 Building Types

The primary building types in the Warfield Neighborhood will include:

Civic: Civic buildings are operated by not-for-profit organizations dedicated to arts, culture, education, recreation, government, transit, and municipal parking, or for use approved by the Planning Board.

Signature Building: Signature buildings are not use-specific, however, are significant and unique due to location on prominent sites and shall include premier attention to architectural design.

Residential / Senior Living and Care Facility/ Residential over Retail: Structures within this building type typically have ground-level retail or building amenity space for the majority of the building frontage along the primary street(s) and residential units above. As a mixed-use type, residents and retail patrons and employees, together, occupy the building around the clock, providing vitality to this Downtown neighborhood. Shared uses within a building also provide the opportunity to share parking, reducing the need for extra, under-utilized parking spaces. Parking is typically accommodated in garages above or below grade (See Urban Design, p. 24). For structures within this building type, where residential units occupy the ground level (where no retail occurs), individual entries with stoops or recessed entry ways are encouraged. The primary entry should have a prominent architectural read. A drop-off area, either curbside or with a pull-off lane separated from the street may be permitted especially to support a senior living and care facility. Individual residential unit entries with stoops or recessed entry ways are encouraged. Visitability is encouraged for all residential units in Warfield to promote aging in place, socializing, and prevent the isolation of people with mobility limitations. The term "visitability," as described by www.visitability.org, refers to a residential unit designed in such a way that it can be lived in or visited by people who have trouble with steps or who use wheelchairs or walkers.

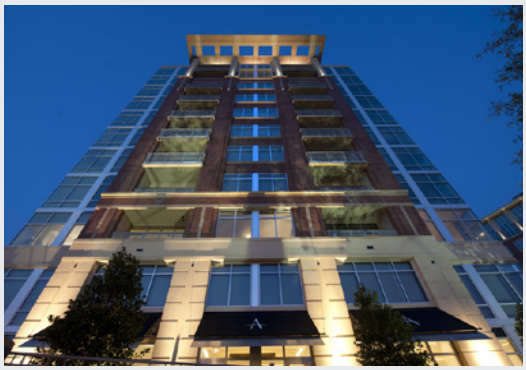
Office over Retail: Similar to the Residential over Retail building, this type combines uses with ground level retail or building amenity space for the majority of the building frontage along the primary street(s) and office space above. The shared uses of office and retail within a building provide the opportunity to share some parking. Parking is typically accommodated in garages above or below grade. Above-grade garages are ideally located mid-block, wrapped on all sides (see Urban Design, p. 22)

Hotel: As a building welcoming visitors to Downtown, a hotel should have a distinctive character from other types. The primary entry shall have a prominent architectural read and a guest drop-off area, either curb-side or with a pull-off lane(s) separated from the street. The ground level may accommodate retail and restaurant spaces, as well as building amenity and meeting spaces. Guest rooms on the upper levels shall have a residential fenestration pattern.

Retail: Stand-alone retail buildings, whether with a single tenant or multiple tenants, are not anticipated as a primary type in the Warfield neighborhood. However, adjacent to the Mall, 1 and 2 story retail additions may be used to define the new Warfield Plaza. Small pavilion-scaled retail buildings may be located in or near amenity spaces to provide activity and serve people using the plaza, square, or green.

Structured Parking: New, stand-alone structured parking garages are not encouraged as a building type in Downtown. Structured parking shall be accommodated mid-block, ideally wrapped on all sides, or underground. Independent structured parking may be allowed by variance due to unusual programmatic requirements or particular site constraints only. (see Urban Design, p. 15)

See the following pages for criteria specific to each building type.



Civic Overview

Civic buildings serve the public and may include libraries, museums, fire stations, civic and association headquarters, visitor or exhibit centers, and similar. Civic buildings should be located on prominent sites terminating key intersections or primary vistas.

In order to encourage a distinctive read, civic structures are exempt from build-to-line or frontage coverage requirements, as well as other *Warfield Design Guidelines* criteria, as approved by the Planning Board. Lobby entrances should be highlighted as a strong, legible element of the façade as it relates to site location.

Signature Building Overview

Signature buildings are not use-specific, however, due to location on prominent sites terminating key intersections or views, the architecture in these locations should have distinctive articulation or massing, such as a unique facade, lobby entrance, vertical element, or other special treatment.

Standards:

- Architectural bays should read in elevation.
- Typically, a strong base should be defined and delineated from upper stories by a cornice or other horizontal banding element.
- Walls, piers, and/or columns at the building base should visually transfer the wall load above, through the storefront, to the ground plane and shall relate in alignment to the wall areas above.
- The lobby entrance shall be highlighted as a strong, legible element of the façade.
- Window types and patterns shall be varied in a logical, restrained manner.
- Wall and roof elements shall be employed to screen roof mechanical equipment from street-level view.

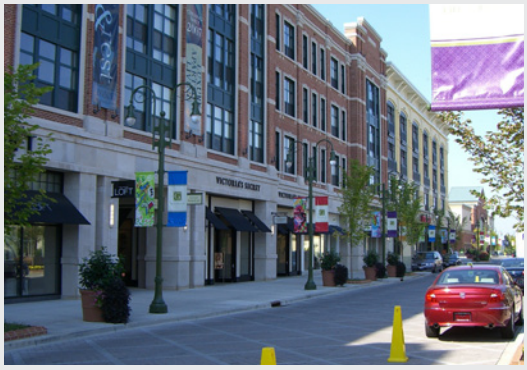
See the Material & Elements Standards section for additional criteria.

Overview

In Warfield, these building heights should range from 3 to 15 stories. Commonly, this type will be designed as a 5-story building, with four stories of residential over a tall retail base story. 2-story retail is also permitted. The dual goals of animating the ground-floor retail while creating a subdued environment for residential living demand thoughtful design. The upper stories should have a more calm and repetitive rhythm, while the ground level should express the individual character of the retail and restaurant tenants. Along the primary street(s), the ground level use should be designed to improve the public realm (see Urban Design, p.11). The lobby to the residences may be placed on the same street as the retail, but shall have a separate, distinct lobby as a legible element of the facade. An off-street drop-off may be used to access a building lobby, particularly for a senior living and care facility. Individual stoop entrances to ground floor residential units may be incorporated (see Streetscape, Residential A, p. 52). Balconies and rooftop terraces are encouraged. Parking is typically accommodated in garages above or below grade. Above grade garages are ideally located mid-block, wrapped on all sides. Separate, but direct access from mid-block parking to the retail and restaurants and to the residential units is desired and shall be welcoming, safe, and well-lit. Visitable units that can be lived in or visited by people with mobility impairments are encouraged.

Standards:

- Architectural bays should read in elevation.
- Typically, a strong base should be defined and delineated from upper stories by a cornice or other horizontal banding element.
- Walls, piers, and/or columns at the building base should visually transfer the wall load above, through the storefront, to the ground plane and shall relate in alignment to the wall areas above.
- Window types and patterns shall be varied in a logical, restrained manner.
- A residential unit is visitable when it meets the following three basic requirements: on the main living level, one zero-step entrance, doors with 32 inches of clear passage, and one bathroom that you can get into in a wheelchair (to note, a fully accessible bathroom is not a requirement).
- Visitable units are encouraged.
- Outside noise from surroundings, including nearby event spaces, should be considered in residential design; laminated glass or other measures may be used where noise is an issue.
- Wall and roof elements shall be employed to screen roof mechanical equipment from street-level view.



*** See the Material and Element Standards on the following pages for additional criteria.**

Office over Retail

Overview

Similar to the Residential over Retail building type, the design of the Office over Retail type requires a balanced approach. The ground floor level should animate the streetscape while the upper floor levels should convey a professional office environment. Along the primary street(s), the ground level use shall be predominantly retail space. 2-story retail is permitted. The office lobby should be distinct and have a strong presence on the street; it may be expressed vertically on or through the building. The upper story office elevations should have more glazing, as compared to residential elevations, to reflect the building's use and to provide more natural daylighting for the office workers. Parking is typically accommodated in garages above or below grade. Above grade garages are ideally located mid-block, wrapped on all sides. Direct access from mid-block parking to the retail and the office lobby is desired and shall be welcoming, safe, and well-lit.

Standards:

- Architectural bays shall read in elevation.
- A strong base shall be defined and shall be delineated from upper stories by a cornice or other horizontal banding element.
- Walls, piers, and/or columns at the building base should visually transfer the wall load above, through the storefront, to the ground plane. The walls, piers, and/or columns at the base shall relate in alignment to the wall areas above.
- The office lobby entrance shall be highlighted as a strong, legible element of the façade.
- Flat roofs shall be used to incorporate green roof systems and terraces where possible and where visible from other buildings to provide further visual amenity.
- Wall and roof elements shall be employed to screen roof mechanical equipment.

*** See the Material and Element Standards on the following pages for additional criteria.**

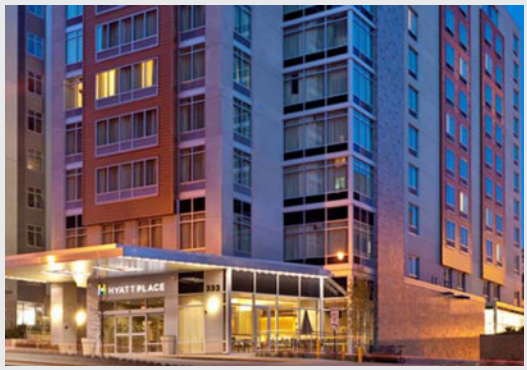
Overview

As a building welcoming visitors to Downtown, a hotel should have a distinctive character from other types. The primary entry shall have a prominent architectural read and a guest drop-off area, either curb-side or with a pull-off lane(s) separated from the street. Along the primary street(s), the ground level shall be activated and may accommodate retail and restaurant spaces as well as building amenity and meeting spaces. Guest rooms on the upper levels shall have a residential fenestration pattern. Penthouse guest rooms, large meeting and ball rooms, and rooftop terraces are encouraged at the top of the building. Parking is typically accommodated in garages above or below grade. Above grade garages are ideally located mid-block, wrapped on all sides. Direct access from mid-block parking to the retail and the hotel lobby is desired and shall be welcoming, safe, and well-lit.

Standards:

- Architectural bays shall read in elevation.
- A strong base and top shall be expressed and shall be delineated from the middle stories by a cornice or other horizontal banding element.
- The hotel lobby entrance shall be highlighted as a strong, legible element of the façade.
- Flat roofs shall be used to incorporate green roof systems and terraces where possible. Where visible from hotel common spaces and other buildings,green roofs provide further visual amenity.
- Wall and roof elements shall be employed to screen roof mechanical equipment.

*** See the Material and Element Standards on the following pages for additional criteria.**



Overview

Additional, new stand-alone retail buildings, whether with a single tenant or multiple tenants, are not anticipated as a primary type in the Warfield neighborhood. However, adjacent to the Mall, 1-2 story retail additions may be used to define the new Warfield Plaza. Small pavilion-scaled retail buildings may be located in or near amenity spaces to provide activity and serve people using the plaza, square, or green. Stand-alone commercial buildings housing a major tenant such as a movie theater, bookstore, or similar may be permitted. Retail buildings may vary in massing, but, will typically be limited to 1-3 stories in height as their programs necessitate. Although the program requirements vary, the goal for Warfield Neighborhood should be to enliven the streetscape with significant glazing on the ground and upper floors, using display cases, semi-transparent glass, or other methods where full glazing is not practical. Solar orientation should be considered.

Standards:

- Storefronts should be provided in all building elevations with primary street frontage (see Urban Design, p. 11). Display cases may be used where storefronts are not feasible due to specific program requirements.
- Significant glazing shall be incorporated, where possible, in the upper stories of all building elevations with primary street frontage.
- Canopies, awnings, and storefronts shall be varied per building. Native vegetation is encouraged on permanent awnings/canopies.
- Vertical proportions and architectural details appropriate to the architectural character shall be incorporated to enliven the façade and provide greater interest on street frontage elevations.
- Vehicular and pedestrian visibility from the streets shall be established to ensure the viability of the retail.

*** See the Material and Element Standards on the following pages for additional criteria.**

Structured Parking

Overview

The goal of the structured parking within Warfield Neighborhood is to be concealed mid-block with buildings surrounding the decks, where feasible. New, stand-alone structured parking garages are not encouraged, however, structured parking may be allowed due to unusual programmatic requirements or particular site constraints. (see Urban Design, p. 15) In locations where decks are exposed to public view, special effort shall be made to screen the decks from adjacent streets, businesses, and residences. In these cases, structures should be lined with activating uses at the ground level or otherwise designed to minimize their impact on the pedestrian environment and the public realm. Screening measures such as walls, green (vegetated) screens, and/or landscaping may be used, providing sufficient setbacks to accommodate rainwater planters for landscape screening or green screens. Greening methods such as green roofs and green screens are encouraged on parking structures for stormwater management, shading, and aesthetic benefits. Solar panels on the top decks of garages are encouraged to offer shade and provide power to recharge stations for electric vehicles.

Standards:

- Structured parking should be located mid-block to minimize visibility from the public realm of the street and open spaces.
- Parking decks exposed to the public realm should be designed to be compatible with adjacent buildings and shall be screened with walls, architectural detailing, green (vegetated) screens, landscaping, or other treatments.
- Garage entries shall be strongly signed but shall be carefully designed to not impact the continuity of the streetscape or retail storefront.
- Stairs and elevator cores shall be designed to provide a welcoming and safe environment. Pedestrian entrances to parking shall be well-articulated.
- Lighting (interior and exterior) shall be designed to avoid glare and excessive brightness (**see Streetscape Lighting section p. 76, for additional criteria**).

*** See the Material and Element Standards on the following pages for additional criteria.**

THIS PAGE INTENTIONALLY LEFT BLANK

5.3 Building Form

The primary building form elements can be described as follows:

Massing: The combined height and width of a building, including changes in plane such as projections, recesses, tower and corner elements, and similar.

Horizontal Elements: Any horizontal band line on a building elevation used to demarcate the boundaries between the base, middle, and top; a change in plane; or a change in materials. Horizontal elements include cornice lines, belt or water table courses, and band or skirt boards.

Recesses and projections: Any horizontal change in plane affecting a building's elevation.

Corner Elements: A pronounced building element, either recessed or projected and either taller or shorter than the surrounding building elevations, located at the intersection of two of the building's facades, typically at an important street intersection and/or gateway entrance to the neighborhood.

Solid/Void: On a building elevation, the relationship between continuous wall surface (solid) and openings (voids) such as windows and doors.

Overview

With the goal of emulating the best downtown neighborhoods in the United States, Warfield should reflect the urban form found in these precedents. In such places, the streetscape is fairly continuous and breaks between buildings are limited. Building mass predominantly defines the perimeter of each block. In an urban downtown environment, buildings not only define the streetscape, but, also define the amenity space.

The form of buildings in Warfield should respond to traditional building patterns and should respect the existing, surrounding neighborhoods in massing and form. The following standards shall be followed to ensure compatibility.

Standards:

- Buildings should predominantly define the perimeter of the block, built to the setback line.
- Buildings shall be a minimum of 2 stories or 30' measured from the ground plane to the eave.
- Buildings shall be no taller than 15 stories, not to exceed 170'. (excluding mechanical, penthouse, and tower elements)
- Buildings that are located at the edge of neighborhoods should take into account their relationship to buildings in adjacent neighborhoods including consideration of compatible building heights and uses. Upper story step backs, changes in materials or color, or changes in the roof plane may be used to transition appropriately
- Typically, each building should have a clearly defined base, middle, and top. Although the base of the building typically corresponds to the ground floor, on buildings taller than five stories, the base may be approximately two stories high. Similarly, on taller buildings, the top may be more substantial than the top floor alone. On buildings of five stories or less, the top may be defined as an enlarged frieze and cornice.
- Typically, architectural bays should read in elevation.
- Certain important walls, piers, and/or columns at the building base should visually transfer the wall load above, through the base, to the ground plane. The walls, piers, and/or columns at the base should relate in alignment to the wall areas above.
- Long elevations shall be visually broken into smaller sections through material and plane changes, variations in window groupings, and/or the addition of bays.

*** See the Material and Element Standards on the following pages for additional criteria.**

Horizontal Elements

Overview

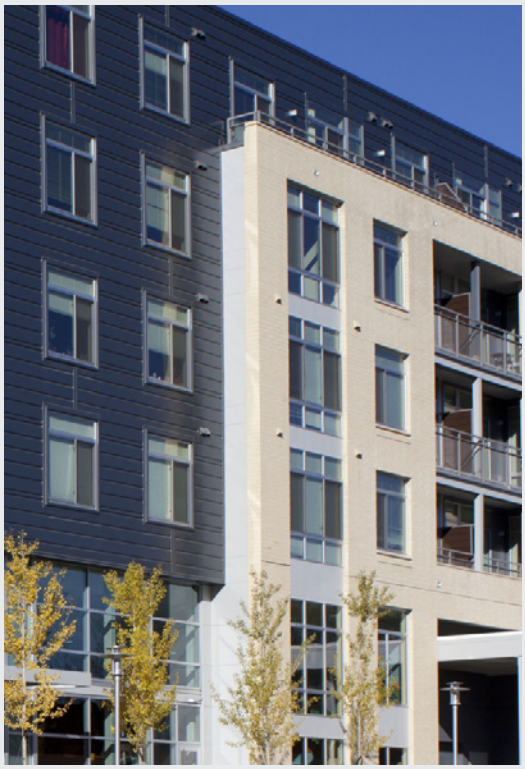
Building compositions of base, middle, and top relate to the human form (correlating to the feet, body, and head) and, therefore, follow a natural order. Horizontal elements, such as cornices at the building top and belt or watertable courses below, delineate the zones of a façade and give emphasis to the composition. They define the proportions of the building elevation while allowing for material transitions (much as a belt transitions between pants and a shirt). Continuous belt or watertable courses may be used to unify portions of elevations. Similarly, cornices and roof lines may be continuous to unify an elevation or differentiated to break up continuous massing. Horizontal elements may include shading devices such as canopies and brise-soleils. See pg. 125

Standards:

- In building compositions with a base, middle, and top, cornices at the top and belt or watertable courses below shall delineate between a building's elevation zones.
- Continuous belt or watertable courses may be used to unify portions of elevations.
- Similarly, cornices and roof lines may be continuous to unify an elevation or differentiated to break up continuous massing.
- A horizontal band line should be used on an elevation where there is a change in primary materials or colors.
- Furthermore, transitions between primary elevation materials should occur along horizontal lines.

See diagram on pg. 125 for reference.

*** See the Material and Element Standards on the following pages for additional criteria.**



Overview

Creating building frontage along primary streets and amenity spaces is a priority for redevelopment within the Warfield neighborhood. However, with the building types envisioned, long elevations may result. Recesses and projections may be used to animate long elevations by creating shadow lines and relief. Further, recesses and projections may create a visual rhythm on an elevation such as with a series of bays undulating across a flat façade. Additionally, recesses and projections may offer shading and cooling opportunities as well as locations for balconies.

In order to transition between materials appropriately, changes in materials should occur only at changes in plane. Recesses and projections can mitigate some of these transitions. While transitions between primary elevation materials shall occur only along horizontal lines, additional material changes may occur at recesses and projections. For example, materials may terminate and change at an inside corner of a recess or when butting into a projecting element such as a bay. In short, material transitions require definite starting and stopping points.

Standards:

- Long elevations shall be visually broken into smaller sections through material and plane changes including recesses and projections, variations in window groupings, and/or the addition of bays.
- Recesses and projections may be used to reinforce a vertical read; however, for large gestures, they should be used sparingly for emphasis.
- Recesses and projections should be reflected in variations in the roofline.
- Recesses and projections may be used to provide shading and cooling opportunities as well as location for balconies.
- Changes in materials should occur only at changes in plane.

*** See the Material and Element Standards on the following pages for additional criteria.**

Corner Elements

Overview

At the entry points into Downtown Columbia, along Broken Land Parkway at the intersection of Twin Rivers Road, along Little Patuxent Parkway at the intersection of Sterrett Place, and along Governor Warfield Parkways at the intersection of the Mall Access Road, new Warfield buildings shall act as gateway markers (see Urban Design, p.17). The buildings at these locations shall respond in design with the appropriate corner elements that announce the neighborhood and welcome visitors. Secondary intersections may have less pronounced or smaller scale corner elements as warranted.

The proportions of corner elements are important in achieving the correct read and first impression of the Downtown. Corner elements, especially towers, should be vertical in proportion and may be used to anchor a building to the ground.

Standards:

- At prominent locations, tower or other corner elements shall be used to terminate an important view or as a focal element.
- Corner elements should be vertical in proportion.
- Corner elements may be used as transitions to segue between varying building heights or between non-perpendicular building faces.

*** See the Material and Element Standards on the following pages for additional criteria.**

Overview

The relationship between solid and void is critical to the read and function of a building. For example, the ratio of glazing to wall surface shall be greater in retail conditions compared to residential. Additionally, the placement and groupings of windows and doors can order an elevation and provide hierarchy. A horizontal grouping of openings emphasizes the relationship between base-middle-top massing while a vertical grouping of openings may be used to highlight a portion of the elevation. Regardless of the arrangement, openings shall occur in rhythm with the building's architectural bays.

Standards:

- The relationship between solid and void is critical; the ratios shall vary according to the use (e.g., the ratio of glazing to wall surface shall be greater in retail and office conditions compared to residential).

Percentage of openings (void)	
Ground Floor Retail:	60-95%
Ground Floor Commercial:	40-90%
Ground Floor Residential:	15-80%
Upper Floor Office:	40-90%
Upper Floor Residential:	15-80%

- The placement and groupings of windows and doors shall be used to provide hierarchy and order to building elevations.
- Openings should occur in rhythm with the architectural bays to provide visual interest and order.
- The shape and proportion of the openings shall be in harmony with the architectural style.

*** See the Material and Element Standards on the following pages for additional criteria.**

5.4 Storefront Standards

Overview

In order for the mixed-use environment envisioned in Downtown Columbia to function and thrive, proper attention shall be paid to the storefronts. Transparency in and out of storefronts is key for retail to prosper, for a vibrant street life, and to maintain eyes on the street. Storefront design shall balance the needs of the tenant's individual expression with the overall aesthetic quality and sense of place. Additionally, storefront shall not intrude upon or obscure architectural elements such as columns, cornice lines, sills, and similar.

The Storefronts criteria comprise the following sections:

- Storefront Zone
- Materials
- Colors
- Door and Frames
- Windows
- Awnings and Canopies

STOREFRONT ZONE

The Storefront Zone is an area available for shop owners to extend their merchandising past the building plane without obstructing pedestrian circulation (see Sidewalk Zones on pages 46-48). The Storefront Zone, measured horizontally from the building wall out to the curb, is minimally two feet (2') in depth. The Storefront Zone is also limited vertically from the ground plane to the top of the building base (typically at the second floor level) and/or to a maximum of twenty six feet (26'). The Storefront Zone is reserved for the shop tenant/owner and may be used for signage, sidewalk displays, benches, and planters. This zone also accommodates door swings and projecting window bays.

REQUIRED:

- Building projections, such as bay windows or entryways, shall be a maximum of four feet (4') in depth (measured horizontally from the building wall out to the curb) and a maximum of twenty two feet (22') in width (measured parallel to the building wall). Projecting elements shall be separated from one another a minimum distance equal to the projection depth (e.g., two bays which are each four feet (4') deep shall have a minimum of four feet (4') of separation between them).
- All elements in the Storefront Zone are limited to twenty six feet (26') in height, measured vertically from the ground plane.

ENCOURAGED:

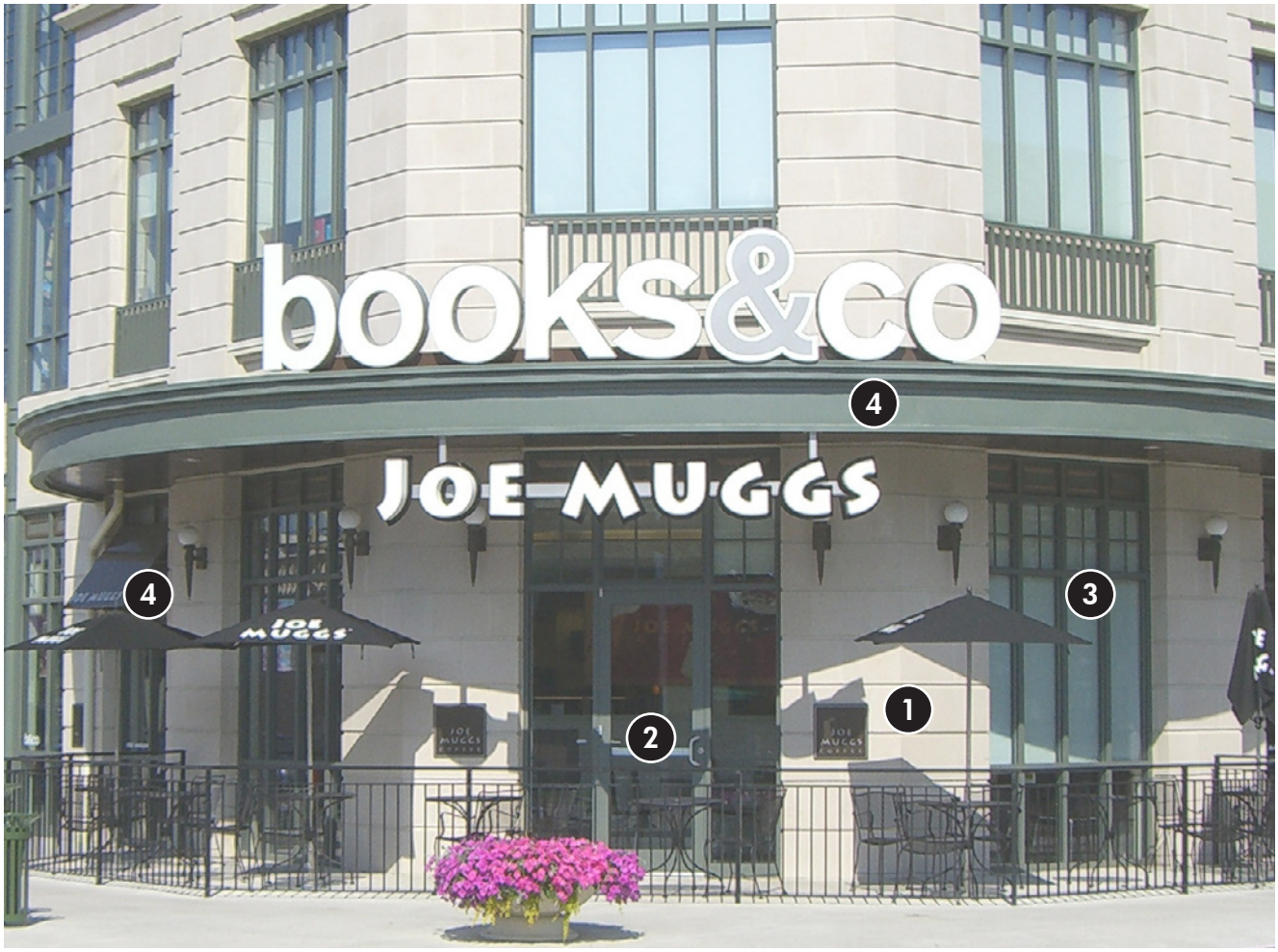
- The Storefront Zone may include semi-permanent elements such as benches, pots with flowers or shrubs, small awnings, bay windows, banners, blade signs, and merchandising displays. These elements shall reflect the quality and character of the shop or restaurant.

NOT PERMITTED:

- "Strip center", uniform storefront systems are not permitted. Storefronts shall be designed for and unique to each establishment.

*** See the Material and Element Standards on the following pages for additional criteria.**

Storefront Components Diagram



Storefront Components

1. Materials/Colors
2. Doors/Entry
3. Windows
4. Awnings/Canopy

Materials

Overview

Each restaurant and shop has the opportunity to uniquely display its merchandise to attract passing customers. The choice of storefront material is a key component of creating an alluring retail environment that reflects the individuality of a business. To this end, the fit and finish of all storefront components shall be of the highest quality.

REQUIRED:

- Storefronts shall be metal, stone, cast stone,glass pre-cast, and/or durable, smooth exterior grade hardwoods, or other high quality commercial materials.

NOT PERMITTED:

- Softwoods, EIFS, and pressure treated lumber are not permitted.

Reference plan on p. 137 for labels

1

1

1

Reference plan on p. 137 for labels

Overview

Flexibility and variety in storefront colors help create engaging streetscapes and welcoming retail environments. Therefore, the choice of colorful materials or paint is very important. Colors are encouraged to be complementary and reflect the store's unique character.

RECOMMENDED:

- A coordinated color palette should be used to tie all parts of the storefront's architecture together.
- Generally, muted colors are more appropriate for large areas and backgrounds while bright colors should be considered for accents.
- The color scheme of the storefront should take into consideration and complement the color of the upper levels of the building as well as adjacent storefronts.

NOT ENCOURAGED:

- The use of more than three colors on an individual storefront, conflicting color schemes on adjacent storefronts, or the same color on adjacent storefronts are not encouraged.

Doors and Frames

Overview

The entry to a shop or restaurant is one of the most important parts of any storefront as it helps provide identity and sets the tone for a patron's experience. Consider a door's shape, size, style, weight, and hardware when designing the storefront.

REQUIRED:

- Doors shall be compatible with, and complementary to, the overall storefront design.
- All doors shall conform to ADA regulations and consider various levels of mobility to accommodate all users.
- Doors shall have a high percentage of glass to increase visibility into the store's interior and out to the street.
- The primary entrance shall be clearly marked and sheltered a minimum of 30 inches via a recessed entryway, awning, or canopy. Secondary or side entrances may be unsheltered.

ENCOURAGED:

- Restaurants are encouraged to have additional doors to connect with their outdoor seating areas.
- Clear glass and maximum visibility are encouraged.

NOT PERMITTED:

- Tinted glass, opaque glass, plexiglass, and adhesive window film are not permitted.

2

2


2

Reference plan on p. 137 for labels

Reference plan on p. 137 for labels

Overview

Transparent storefronts contribute to safety, vibrancy, and merchandising. Large, clear glass areas provide visual connection between people inside and outside and contribute to the actual and perceived safety and pedestrian-friendly quality of the neighborhood environment. Removable windows or exterior storefront panel elements enhance the interaction between interior and outdoor street experience. Windows provide an opportunity for shop owners and restaurateurs to merchandise to passing pedestrians and motorists. They shall be used to display products and services as well as to enliven the sidewalk with light, character, and color.

REQUIRED:

- Glass should be clear glass. Opaque, smoked, or reflective glass may be used for accent/spandrel elements only.
- Opaque, semi-translucent, or fritted glass may be used for accent or spandrel elements only.
- Glazing shall be at least 60% (and no more than 95%) of the storefront surface area. Certain tenants, such as jewelry stores or other establishments with heightened security concerns, will be permitted to incorporate smaller display windows subject to design review approval.
- Glazing shall be a minimum of 8 inches, but no higher than 30 inches, above the sidewalk grade.
- Window glazing shall be flush with the window frame or slightly recessed up to 8 inches.

RECOMMENDED:

- High light quality, Low Emissivity (Low-E) rated glass is recommended to minimize discoloring of merchandise and moderate heat transfer for energy conservation.
- Large display windows are encouraged to establish a visual connection between the interior and the exterior.
- Removable windows are encouraged to enhance interaction between the interior and the exterior street experience.

NOT PERMITTED:

- Tinted glass (excepting for office use where the glass may be lightly tinted), opaque glass, plexiglass, and adhesive window film are not permitted.

Awnings and Canopies

Overview

Awnings shall be selected in a manner that balances the goals of merchant identity, vibrancy of the streetscape, and coherence with the building's architecture. Both fixed and retractable awnings are permitted as well as canopies. Awnings and canopies emphasize entrances and support the tenant's image. They add texture to the streetscape and introduce variety to the building façade, while also providing weather protection to patrons and protecting storefront displays from sun exposure.

REQUIRED:

- Materials shall be durable, fire-resistant, and fade-resistant.
- Awnings shall project a minimum of two feet up to twelve feet (2'-12')* from the building façade, but shall be limited to the storefront width. Canopies shall project a minimum of two feet up to twelve feet (2'-12')* from the building facade; canopies designed to be integral to the building's architecture may be continuous across the building facade; individual storefront canopies shall be limited to the storefront width.

  *(within the Storefront, Amenity, and Pedestrian zones) (see Street Design section p. 45)
- Awnings shall be mounted above display windows and below base cornices, awning between lower storefront glazing and transom allowed.
- Awnings and canopies shall be a minimum of eleven feet (11') above the sidewalk, measured from the ground plane to the lowest point of the awning.

RECOMMENDED:

- The structural supports of an awning or canopy should be finished to match or complement the awning fabric.
- Native vegetation is encouraged on permanent awnings/canopies.

NOT PERMITTED:

- Vinyl awnings are not permitted.
- Continuous awnings across several storefronts are not permitted.
- Bottom (soffit) panels on awnings are not permitted.
- Awnings shall not be backlit.

Reference plan on p. 137 for labels

5.5 Architecture: Material and Element Standards

Overview

All construction within Warfield neighborhood shall comply with the following criteria, excepting storefronts; **for storefront materials and components criteria refer to page 140-146**.

All applicable building codes, laws, Acts, life safety codes, ADA, environmental regulations, development approval processes, Howard County, State, and Federal regulations and permitting processes, and similar regulations must be adhered to and are not superseded by the Warfield Design Guidelines.

Throughout the Guidelines, the use of the word "shall" identifies mandated criteria. "Must," "required," and "mandated" are additional words with the same meaning. The use of the word "encouraged," "should," or "recommended" identify criteria which are desired. In some instances, words such as "prohibited" and "not permitted" identify practices, materials, or systems which are not allowed in the Warfield redevelopment.

EXTERIOR WALLS

This section applies to all exterior wall surfaces, excepting storefronts and parking structures. For storefront criteria, see the storefronts section above. For parking structure criteria, see the parking structure, service, and loading criteria below.

- Exterior walls with street or amenity space frontage shall be brick (brick veneer), cast stone, pre-cast, glass, metal components, or similar high-quality architectural siding or panels. For buildings of five stories or less, masonry or stone shall be the predominant building material. Additionally, cementicious siding or panels in a smooth or stucco finish or metal panels may be used at the second floor level and above where residential units are located on the ground floor
- Exterior walls, as they turn the corner from a street or amenity space frontage condition to a service or courtyard condition, shall be consistent in material and detail with the street or open space frontage façade to a minimum depth equal to the width of the alley, access, or service way (measured building to building).
- Building walls facing interior courtyards, service lanes, or parking structures (excepting as noted in the criteria above) shall be brick, architectural concrete block (excluding split-face), pre-cast, cast stone, or similar high-quality architectural siding or panels on the ground level; upper levels shall be masonry (brick, pre-cast, or cast stone), glass, metal components, stucco, cementicious, or similar high-quality architectural siding or panels in a smooth or stucco finish. or panels in a smooth or stucco finish. Exposed foundation walls may additionally be parged concrete or other approved finish.
- Vinyl and aluminum siding products are not permitted.
- While not encouraged, the use of EIFS on an exterior wall above 22 feet (measured vertically from grade) is allowed; the use EIFS on an exterior wall within 22 feet of grade is not permitted. The EIFS color(s) shall be complimentary, but not identical, to adjacent materials.
- Building walls, between the foundation and the eave, shall be no more than three primary materials (e.g., pre-cast on the ground floor, brick on the second through fourth floors, and cementicious panels on the fifth floor).
- Materials shall terminate or transition only in the following ways:
  1. Along horizontal lines consistent with the base, middle, and top of the building;
  2. At changes in building plane; or
  3. At pilasters, engaged columns, or other similar architectural elements.

  Additionally, the lighter appearing material (lighter in color, texture, and/or weight) shall be used above the heavier appearing materials.
- Arcades, piers, and columns shall be stone, cast stone, pre-cast, brick, or composite material (e.g., Permacast or equivalent).
- Arches shall have a distinctive thickness (on both the inside and outside surfaces) and width.

- All keystones and voussoirs shall have sides radial to the arch.
- Trim shall be metal, wood, cementitious fiber board, fiberglass composite, polymer composite, or solid cellular PVC (e.g., Azek, Versatex, or similar). The use of light-gauge aluminum trim on an exterior wall within 10 feet of grade is not permitted.
- For all masonry, mortar should compliment the masonry color and/or be a light earthly color such as beige, sand, light warm grey, or similar color.
- Masonry units shall have butt joints at outside corners with a minimum three inch overlap (i.e., no mortar joints within three inches of an outside corner).
- Brick should be coursed in common, Flemish, herringbone, basket weave, or horizontal running bond. However, patterned brick detailing and special brick shapes may be used as accents. Mortar joints shall be weathered, concave, V-shaped, or grapevine and shall not be greater than a half inch (½") in dimension. A variety of traditional brick colors are encouraged; glazed, faced, and painted brick are permitted as appropriate to the façade.
- Precast concrete and cast stone masonry units should be in a running bond pattern. Precast concrete and cast stone masonry units should have a smooth, ground, or molded finish resembling natural stone. Additionally, rustication may occur on the ground floor or building base.

WINDOWS

- Windows shall be wood, aluminum, fiberglass, or architectural-grade vinyl.
- Windows should be single-, double-, or triple-hung, fixed, or casement.
- Windows should be operable where residential is the use.
- Window openings, frames, lites, and sashes shall be square or rectangular in configuration and vertical in orientation. Circular, half-round, irregular, or elliptical accent windows may be used sparingly as accent windows only. Paired quarter-round windows may be used flanking an architectural feature.
- Muntins (grilles) should be real (as with true divided lites), permanently affixed to the exterior and interior, or permanently affixed to the exterior.
- Windows should not be closer than the width of the window to the corner of the building unless the windows wrap the corner as part of an architectural element, or are appropriate to the architectural style.
- Windows should align vertically within a façade, excepting at an attic story where windows or dormers may align with the centerline between two windows below.
- Windows should be recessed to develop shadow lines, when appropriate to the architectural style.
- On all walls clad with materials other than masonry or metal, a minimum four inch (4") nominal head and jamb trim should be used unless where appropriate to the architectural character. In addition, sill trim should be differentiated from the jamb trim.
- Glass shall not be tinted or mirrored excepting for office use where the glass may be lightly tinted.

SHUTTERS

Shutters are not anticipated on buildings in the Warfield neighborhood; however, if used, shall comply with the following:

- Shutters, where used, shall be wood or solid cellular PVC composite (e.g., Timberlane Endurian, Atlantic Premium shutters, or similar).
- Shutters shall be, or appear to be, operable and shall be of the required size both horizontally and vertically to cover the opening if closed.

DOORS AND ENTRIES

- All building addresses shall be visible from the street (and must comply with fire code requirements).
- Primary building entries shall be distinct and enhance the building façade. Residential lobby entries may be secondary but shall be identifiable from the street.
- Individual residential exterior unit entry doors should be steel or other durable, solid material and should be factory finished or painted. All residential exterior entry doors should have glass, recessed panel(s), or both.
- Roll down doors shall be painted and/or designed to blend with the building façade.

ROOFS

- Roofs shall be flat preferably, or symmetrically pitched between a 6:12 and 12:12 slope and only in the configuration of gables and hips.
- Flat roofs shall be a white or light membrane material, shall have light-colored pavers, or aggregate, and/or shall be vegetated. Sloped roofs shall be real or artificial slate, architectural shingles, copper, or standing seam metal in a green, gray, brown, or similar neutral color. Copper, if used, shall be allowed to age naturally. Green (vegetated) roofs and cool roofs are encouraged.
- Skylights shall be located only on the backside of the roof ridge or on nearly flat roofs.
- Rooftop mechanical equipment shall be screened from street and amenity space view using sloped roofs, parapets, and/or screens.

GUTTERS, DOWNSPOUTS, AND ROOF FLASHING

- Gutters and downspouts shall be constructed of aluminum, galvanized metal, steel, or copper. Copper, if used, shall be allowed to age naturally. Aluminum, steel, or stainless steel shall be pre-finished in a powder-coated color coordinated with adjacent materials (e.g., bronze downspouts on medium or dark brick, eggshell downspouts on light trim, and similar).
- Downspouts should be located at the rear of the building, unless required by specific conditions to be located elsewhere, or unless integral to an expressed stormwater management system.
- Attic vents shall not be visible from streets or amenity spaces.
- All flashing shall be painted to match the adjacent material, or, shall be stainless steel or copper and allowed to age naturally.

ARCHITECTURAL ELEMENTS

- Bays shall be brick (brick veneer), cast stone, pre-cast, glass, and/or metal components. Additionally cementicious panels and trim are allowed where the use is residential.
- Bay(s) on façades fronting streets and amenity spaces shall extend to the ground, extend to the retail cornice, or be structurally supported by brackets, unless counter to the architectural character.
- Privacy screens shall be consistent with the architectural style of the building in color and material.
- Terraces on podium roofs (above the commercial ground floor level) shall have pavers of concrete, brick, slate, flagstone, or tile and/or shall be vegetated.

ARCHITECTURAL LIGHTING

- Although individual expression of storefronts and highlighting of certain, prominent building elevations or corners may be desired, the emphasis of lighting shall be on the public realm and the streetscape.
- Strong, featured lighting emphasis on prominent corners and main entrances is encouraged.
- In buildings where the upper stories are residential, wall washers and other building lighting above the ground floor commercial shall be avoided, excepting as mentioned above.
- Retail Lighting: Storefront facades, recessed doorways, window display areas, and passageways are encouraged to be lit at all times. However, the interior lights beyond the window display area should be on automatic timers to conserve energy. **(See Signage p. 156-157 for Signage Illumination criteria.)**
- Event Lighting: Lighting may be used to announce a special event or time of year. Event lighting shall be limited in duration and time-controlled, rather than a constant, festival marketplace atmosphere.
- All building lighting fixtures shall be Dark-Sky compliant as approved by the International Dark Sky Association (IDA).
- Lighting controls and timers should be used to conserve energy for all non-essential exterior architectural lighting.

PARKING STRUCTURES, SERVICE, AND LOADING

- Parking garages shall not front onto streets or amenity spaces. (See Urban Design, p. 15)
- Where parking decks are located mid-block but exposed to a street or amenity space for a distance greater than forty feet (40') (measured parallel to the street or amenity space edge), the parking garage elevation shall be clad predominantly in masonry (brick, pre-cast, cast stone, or architectural concrete block) compatible with adjacent buildings. Additionally, screening measures (such as green (vegetated) screens and/or landscaping) shall be used to minimize the view of the parking deck and maintain the streetscape or amenity space edge.
- In the event that a deck is fronting a street or amenity space, it should be designed to minimize their impact on the pedestrian environment and public realm. The deck shall be architecturally compatible with adjacent buildings in character and materials. Additionally, details shall be incorporated to minimize the building bulk and break up long façades.
- Garage entries shall be strongly signed but visually minimized from street or amenity space view. The entrance to garages shall be carefully designed to not impact the continuity of the streetscape or retail storefront.
- Accessibility to sidewalks, amenity spaces, and building entries should be provided from parking garages when parking is shared with multiple user groups and the general public.
- Trash enclosures and other ancillary structures should be located away from streets and amenity spaces and should be screened from view using walls and/or landscaping. Enclosure walls should be brick, architectural concrete block, steel, or compatible with the materials of the primary building.
- Trash collection should be accommodated in alleys, service courts, service lanes, or enclosed loading bays.
- Service entries and loading areas should be located in the interior of blocks and screened from public view by walls, fences, and/or landscaping, or, minimized along a street edge and screened by an overhead door.
- Ramps visible from the streets or amenity spaces shall be architecturally compatible with the building.

UTILITIES AND MECHANICAL EQUIPMENT

The visual and noise impacts of utilities, mechanical equipment, data transmission dishes, towers, and similar equipment shall be minimized through the following design and installation criteria:

- All permanent utility lines shall be installed underground.
- Above-ground utility equipment shall be located away from primary street and amenity space view to the greatest extent possible. Additionally, transformers shall be located away from major pedestrian routes and outdoor seating areas. If equipment is located within fifteen feet (15') of the front façade of a building, screening measures shall be utilized to ensure that the equipment is visually minimized.
- Commercial antenna and communication towers should be permitted, subject to applicable zoning and other regulations.
- Electrical and mechanical equipment, other equipment, enclosed stairs, storage spaces, blank walls, and other elements that are not pedestrian-oriented should be located in alleys.
- See roofs section above for additional mechanical equipment criteria.

SITE WALLS

- Site walls (including screening, retaining, and accent walls) shall use materials, patterns, and colors consistent with the adjacent building(s) and, if visible from streets or amenity space view, should be brick, pre-cast, cast stone, cladded with steel, wood or other high-quality architectural siding or panels as used on the adjacent building(s), or vegetated screen wall.

RAILINGS, FENCING, AND GATES

- Railings, fences, and gates should be metal, unless a different material would be better suited to the safety needs of anticipated users. Metal materials should be pre-finished in a powder-coated color coordinated with adjacent materials, or, painted a low-lusterdark neutral color. Any field welding should be ground smooth and cleaned before painting.
- Terminal posts (corners, openings, and ends) shall be wider and taller than other posts.
- Railing picket spacing shall be no more than four inches (4") on center and must comply with life-safety code requirements.
- Chain link fencing (except where required by law or for temporary security), barbed wire, and paneled materials are not permitted.

PARKING/SERVICE ACCESS LANES AND SURFACE PARKING

- On-street parking should be provided on most retail streets to reduce the speed of traffic and to provide short term convenience parking.
- Access to sidewalks, amenity spaces, and building entries shall be provided from on-street parking to the greatest extent possible.
- Parking/Service access lanes within the Streetscape Zone should be constructed of scored concrete, concrete, or brick pavers complimentary to the sidewalk paving material.
- Access lane and parking pavement should have a grade no greater than six percent (6%). Pavement from the front building face of the street should have a grade less than five percent (5%).
- See the Streetscape section beginning on page 36 for additional information and criteria.

THIS PAGE INTENTIONALLY LEFT BLANK

6.0 SIGNAGE

6.1 Signage Introduction

Overview

The provisions governing signage in Downtown Columbia are intended to ensure that signs are an integral part of an overall plan aimed at achieving an aesthetically pleasing and high quality visual environment that reinforces the intended character of each of the six neighborhoods.

Signage criteria shall enable easy identification and wayfinding for pedestrian, bicycle, and vehicular traffic and establish a coordinated and harmonic urban streetscape while at the same time providing a signature environment for each unique neighborhood.

The provisions in the *Downtown-wide Design Guidelines*, (CR 138-2010) are aimed at achieving well-designed, coordinated signage and a process that encourages creativity in the use of signage to enhance the urban experience.

Purpose

The intent of the Signage criteria is to facilitate the overall vision for Downtown Columbia by creating a coordinated and aesthetically pleasing sign program for the Warfield Neighborhood that will be consistent with the envisioned character of Howard County's urban center.

These criteria encourage the use of artistic imagery, lighting, color, texture, graphics and materials to inspire creative design for signage to be implemented throughout the Warfield Neighborhood. Signage shall inform, direct and orient the public in a thoughtful and meaningful way. It shall also improve the aesthetic qualities of a building, a streetscape or landscape while having a positive visual impact on the entire neighborhood.

These criteria are intended to convey required standards and to provide visual and textual examples of a variety of signs that should be used to interpret the community's expectation for quality signage.

Goals

The goals of the Signage criteria are to accomplish the following:

- Promote an aesthetically pleasing, high-quality visual environment by encouraging signs that reinforce the planned character of the area, are complementary to their surroundings, and effectively communicate their message.
- Establish reasonable design standards for business identification and wayfinding.
- Encourage creative and innovative approaches to signage within the established framework.
- Assist property and business owners in understanding community expectations.
- Promote economic vitality.
- Include informational/educational signs highlighting sustainable methods and elements. These signs should be placed and designed as site-specific or building specific signage.

General Notes

These Signage Criteria build upon the Sign Guidelines in *Downtown-wide Sign Design Guidelines*. However, the current Howard County Maryland Sign Code for Downtown Columbia Maryland, Bill No. 56-2010 shall serve as the overriding document for all square footage requirements, sign setbacks, height limitations and any other sign descriptions found within this document. The Howard County Sign Code for Downtown Columbia shall be referenced and will serve as the final basis for approval by Howard County for the fabrication and installation of any sign item to be located with the Warfield Neighborhood in Downtown Columbia.

Warfield Neighborhood Primary Signage Framework Plan

KEY

- PERMANENT ID SIGNAGE
- VEHICULAR DIRECTIONAL SIGNAGE
- PEDESTRIAN DIRECTIONAL SIGNAGE
- DIRECTORY SIGNAGE

Final sign location, quantity, type and design to be determined during the Site Development Plan (SDP) phase.

General Provisions

The following items listed below are general provisions that shall apply to all sign items to be fabricated and installed within the Warfield Neighborhood. These provisions are in addition to the sign type specific guidelines listed within this document.

1. Signs should be designed, fabricated, and maintained comparable to signage found in first class, mixed-use projects in major metropolitan areas. The Warfield Neighborhood shall contain an eclectic mix of signage types that provide a layer of authenticity to this vibrant area within Downtown Columbia. While control and uniformity is needed for the signage in the Warfield Neighborhood, it shall not restrict the creative and artistic approach to signage design – individual expression and creativity is strongly encouraged.
2. Signs should be designed with the purpose or promoting retail and street activity while enhancing the pedestrian experience.
3. Signs should respect the immediate context of the building's location and the overall character of the Warfield Neighborhood.
4. Signs should relate to their surroundings in terms of size, shape, color, texture and lighting so that they are complementary to the overall design of buildings and their uses.
5. Signs should be located in logical "signable areas" which relate to the architectural pattern of the facade or storefront. Signage areas are often, but not always, continuous wall surfaces uninterrupted by doors, windows, or architectural detail.
6. Signs should enhance and relate to, not obscure, the architectural features of buildings.
7. Signs are to be kept in good repair such that they are always in clean, working condition and the copy text and graphics is not obscured or damaged.

Content

1. Signs that incorporate creative logos or graphic elements along with the business identity are encouraged.
2. Signs for businesses shall promote the "Trade Name" only. Tag lines, bylines, merchandise, or service descriptions shall not be used.
3. Signs, copy and graphic elements shall fit comfortably into sign area, leaving sufficient margins and negative space. Thickness, height, and color of sign lettering shall be visually balanced and in proportion to other signs located on the same building façade.

Illumination

Lighted signs help create the night streetscape while assisting with identification and wayfinding. It is important to illuminate signage carefully to ensure safety.

1. No internally illuminated, acrylic or flexible-vinyl faced box signs are allowed as a single identifying sign. Such signs may be allowed as a secondary or supportive identifying sign or feature.
2. Backlit, halo-lit illumination, or reverse channel letters with halo illumination are highly encouraged for lighting purposes but are non-exclusive; alternative illumination will be reviewed on a case by case basis. Such signs convey a subtle and attractive appearance and are very legible under moderate ambient lighting conditions.
3. Projecting light fixtures used for externally illuminated signs shall be simple and unobtrusive in appearance. They should not obscure the graphics of the sign and should be designed as part of the architecture of the sign.
4. Sign lighting shall be designed and installed to achieve appropriate illumination of the particular sign type and condition. Effort should be made to only illuminate the graphic surfaces, background and letterforms of the sign, while limiting light spill over to other adjacent uses, buildings, pedestrians, and vehicles and keep night sky effects and light pollution to a minimum.
5. Lighting for all business signage shall be turned off or reduced during certain non-business hours – to be determined.
6. All electrical connections, including junction boxes, transformers, conduit, raceways and tubing required for any

sign items, shall not be exposed; they shall be concealed and out of public view. Where the attachment of a sign may severely damage or impact the facade of a building or canopy, an architectural signage raceway may be allowed. If allowed, the raceway shall be fabricated to minimum dimensions to conceal all electrical wiring components and painted to match adjacent sign and/or building facade.

7. A sign shall not have blinking, flashing, or fluttering lights or other illuminating devices which have a changing light operated to create an appearance or illusion of writing or printing.
8. Sign illumination shall promote energy conservation by utilizing energy efficient illumination techniques. This may include, but are not limited to, LED lighting components and solar-based illumination techniques where applicable.

Sign Design & Materials

1. Quality materials and creative design shall be used as a means to attract attention rather than excessively bright colors or over-scaled letters.
2. Dimensional signs, letterforms, and decorative brackets are encouraged.
3. Sign letters should be pin-mounted and have dimensional returns to give the appearance of solid dimensional material.
4. Internally lit plastic letters or plastic box signs are not allowed.
5. Signage for the Warfield Neighborhood shall employ numerous materials and illumination including:

Painted aluminum/metals
Natural finish metals, including bronze, aluminum, steel, and stainless steel
Etched and polished metals
Cast metals/plaques
Metal screens, grids, and mesh
Natural, opaque, hard surface materials, such as granite and stone
Glass – including frosted, colored, patterned and clear
Exterior grade vinyl materials
Exterior grade fabric materials, such as Sunbrella Fabric or equal
Acrylic, poly-resin materials
High Density Urethane
LED illumination
Neon illumination
Concealed fluorescent illumination

Prohibited Sign Types

1. Internally illuminated awnings
2. Conventional, plastic faced box
3. Formed, plastic faced box or injection molded plastic signs
4. Signs with exposed raceways, conduit, junction boxes, transformers, lamps, tubing, or neon crossovers of any type (unless part of the overall design)
5. Rotating, animated, and flashing signs
6. Rooftop signs mounted above the building roof line
7. Signs placed within the public right-of-way, outside of the individual business' allowable sign area, including placement of signs on public items such as benches, fences, trash cans, bus shelter, etc.
8. Any sign designed to be mobile and moved from place to place (excepting sandwich boards and similar)
9. Balloons or inflatable signs
10. Signs that emit sound or odor

Downtown-Wide Signage

Certain elements within the Warfield Design Guidelines are envisioned to be consistent throughout Downtown Columbia to create a coherent character. These elements include street lighting, benches, trash and recycling receptacles, tree grates, primary sidewalk material, Downtown Columbia permanent identification signs, neighborhood permanent identification signs, vehicular and pedestrian directions signs, and parking signs.

Sign Placement

The architecture of the building often identifies specific locations for signs and these locations should be used.

1. The size of signs should be in proportion to the size of their location.
2. Repetitious signage information on the same building frontage should be avoided, regardless of the sign area square footage allowed in the Sign Code.
3. To minimize irreversible damage to masonry, mounting and supports should be inserted into mortar or other joints and not into the face of the building skin. This technique minimizes damage to the building and allows for easy removal.

Sign Style

Well-designed signage that coordinates multiple uses and messages is more effective than disjointed, or overly-abundant signage.

1. Sign titles should be as brief as possible, to promote ease of use and readability.
2. Sign fonts should be selected to provide both clarity and artistic integrity and adhere to brand vision.

Creativity and Innovation

Creativity in signage is encouraged in the Warfield Neighborhood. Not all creative signs will meet the requirements of the Sign Code, but a variance process exists to facilitate innovative design. The variance process can be found in Title 3 Buildings, Subtitle 5 signs, Section 3.513 of the Howard County Sign Code.

6.2 Signage Types

The primary types of signage in the Warfield Neighborhood will include:

Permanent Identification Signs: Located at key perimeter locations, these signs announce the primary entry points (or gateways) to Downtown Columbia and the Warfield District. This sign type shall be part of a designed family of signs and shall be integrated with the overall wayfinding plan for the neighborhood and the Downtown District.

Directional Signs: Promote convenient wayfinding throughout Downtown and the neighborhoods.

1. Vehicular Directional Signs
    a. Vehicular Wayfinding Directional Signage
    b. Parking (Site) Directional Signage
    c. Downtown Columbia Street Name Signage
2. Pedestrian Directional Signs
3. Informational Wayfinding Directories

Free-Standing Monument signs: Have a lower height configuration and are used for building complexes that are separated from adjacent streets by setbacks.

Building Mounted Signage: Signs affixed securely to a building wall, that should be legible and easily distinguished and serve to guide and orient pedestrian and vehicular traffic going to the building.

1. Flat Wall Signs
2. Projecting Signs
    a. Blade Signs
    b. Grand Blade Signs
    c. Awning (Canopy) Signs
    d. Under Canopy Signs
3. Marquee Signs
4. Roof Signs
5. Tall Building Signs – (1) Bldg in Warfield over 100'
6. Storefront Window Signs

Banners: Permanent, temporary, seasonal signs that add visual interest and color to facades of buildings and/or streetscapes . They are vertically oriented and compatible with the overall character and color of the building/streetscape.

1. Building Mounted Permanent Banners
2. Seasonal Banners
3. Temporary Banners

Digital Displays: Electronic signs that are integrated into the overall wayfinding signage program of the Warfield Neighborhood or used by individual businesses. These signs can be used to identify or provided direction, such as providing up-to-date parking availability within a parking structure. Electronic signs can also be implemented and used within an informational directory.

Digital Displays may also be used to advertise a business and it's services within the Warfield Neighborhood, as long as it is integrated into the surrounding architecture and does not adversely impact any residential area adjacent to.

Signage Types

Permanent Identification: Downtown Columbia

Permanent Identification: Warfield Neighborhood

Vehicular Directional

Color Palette

Recommended

Dark Bronze Metallic | Pantone 7533c | Pantone 7529c

Alternate 1

Copper Metallic | Pantone 8624c | Pantone 7502c

Alternate 2

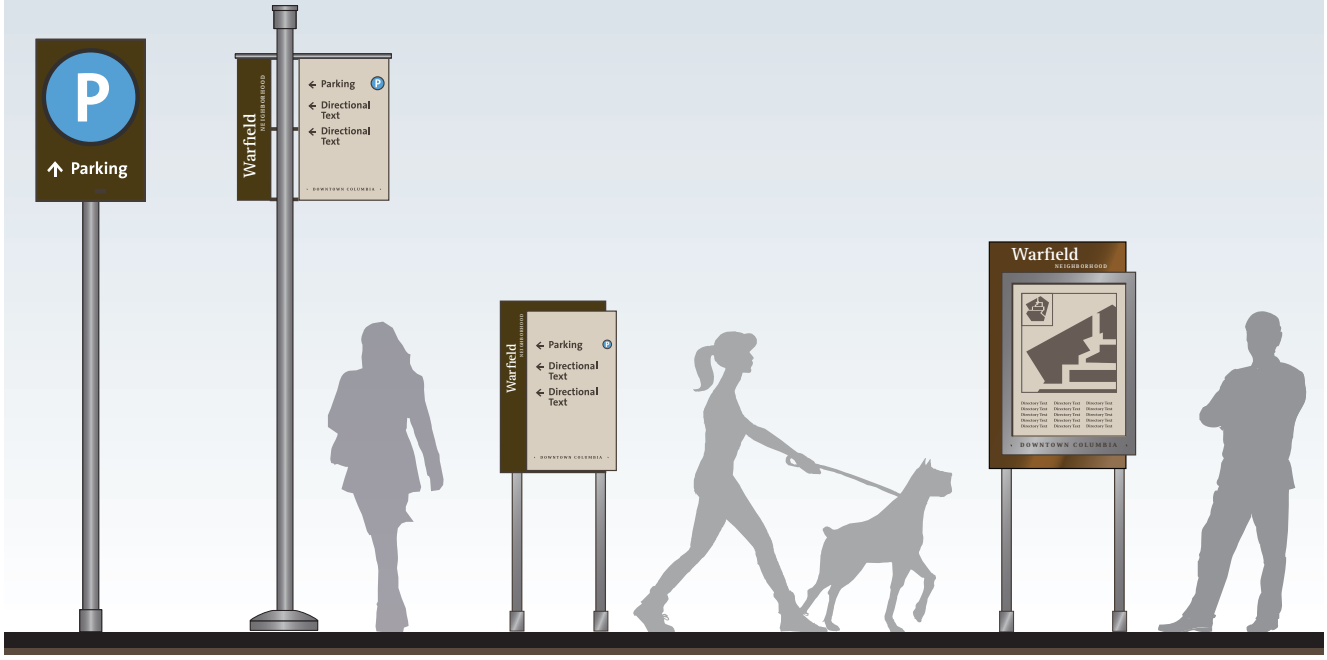
Pantone 167c | Pantone Black 2c | Pantone 7499c

Alternate 3

Pantone 133c | Pantone 627c | Pantone 1245c

Sign types shown above are Proposed Designs

** These conceptual sign drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign design shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.*



Parking | Pedestrian Directional | Directory

Typefaces Palette

Downtown and Neighborhood Name Fonts:

ABCDEFGHIJKLNOPQRSTUV
WXYZ & ? . $
abcdefghijklmnopqrstuvwxyz
123456789

Rotis Serif Std Bold

ABCDEFGHIJKLNOPQRSTUV
WXYZ & ? . $
abcdefghijklmnopqrstuvwxyz
123456789

Eidectic Neo Black

Identifying and Directional Information Fonts:

ABCDEFGHIJKLNOPQRSTUV
WXYZ & ? . $
abcdefghijklmnopqrstuvwxyz
123456789

The Sans Bold

ABCDEFGHIJKLNOPQRSTUV
WXYZ & ? . $
abcdefghijklmnopqrstuvwxyz
123456789

The Sans Condensed Bold

Sign types shown above are Proposed Designs

Permanent Identification Signs

Overview:

Located at key perimeter locations, these signs announce the primary entry points (or gateways) to Downtown Columbia and the Warfield District. This sign type shall be part of a designed family of signs and shall be integrated with the overall wayfinding plan for the neighborhood and the Downtown District.

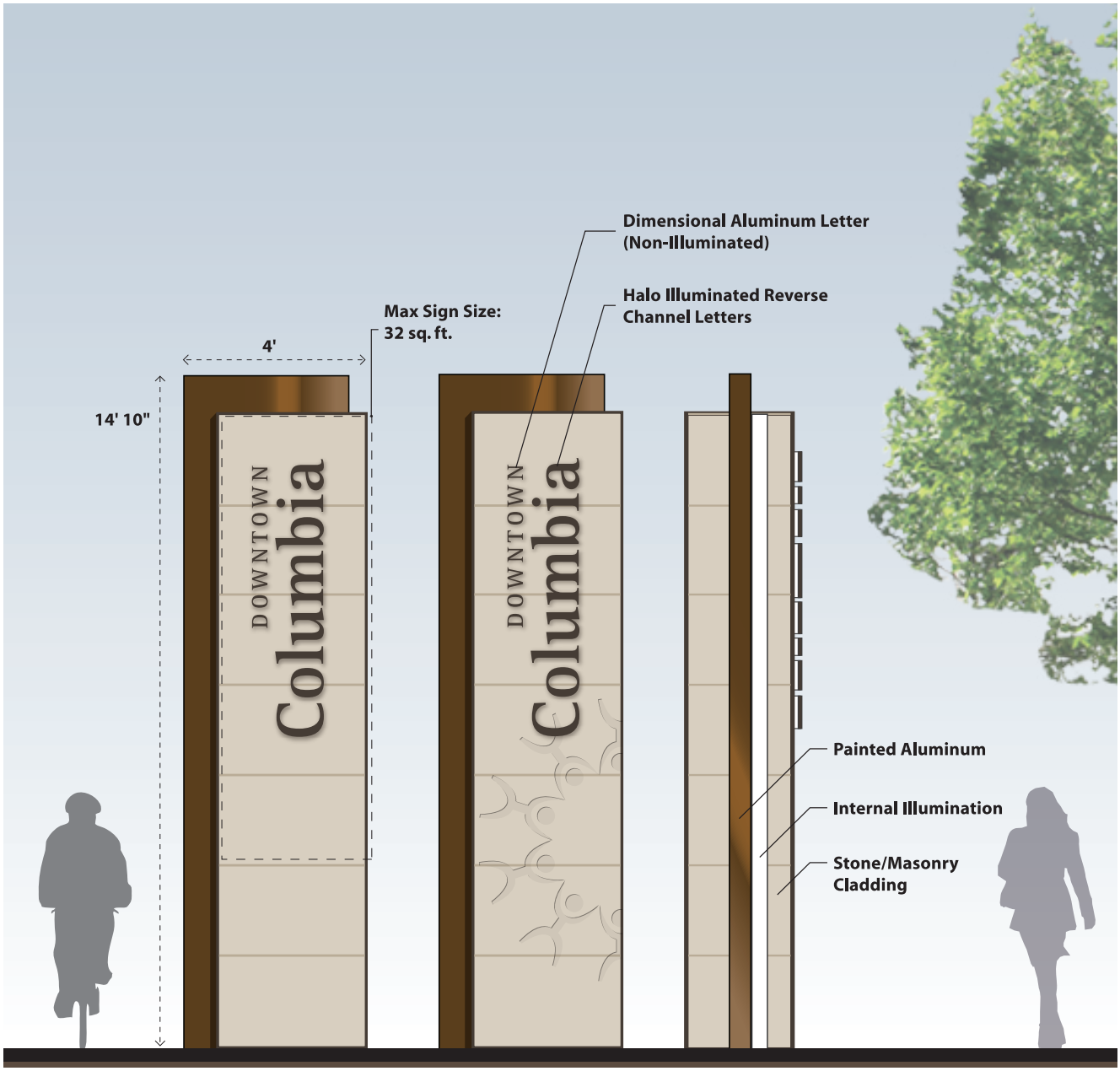
General Description:

- Shall be designed as an integral part of the Neighborhood hardscaping and landscaping
- Shall be compatible with the architecture of the Downtown Columbia Neighborhoods.

Sign Materials and Requirements:

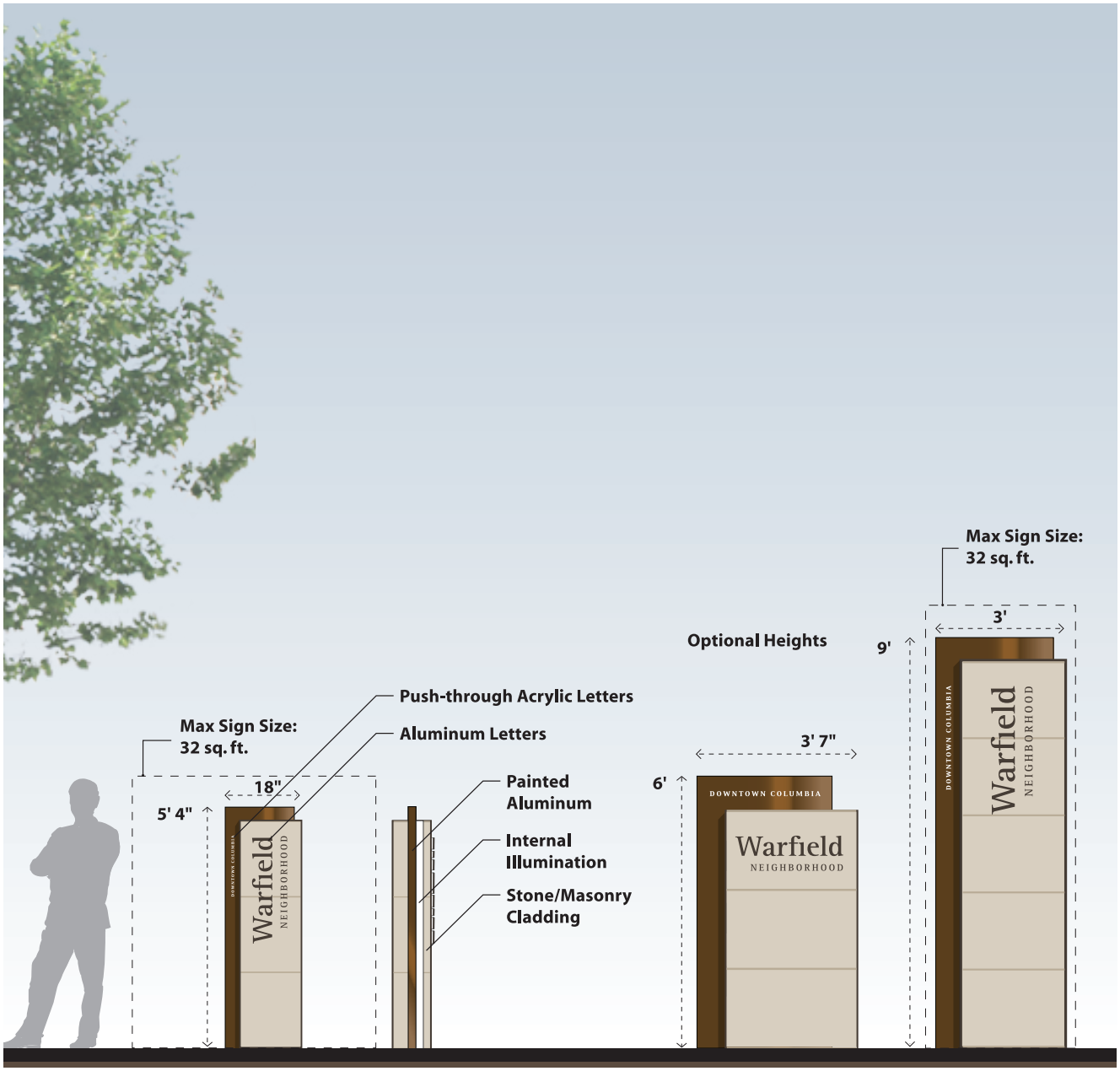
- Sign Materials may include, fabricated aluminum, natural metals, stone, masonry and glass
- Messages on Downtown Columbia and Downtown Columbia Neighborhood Identification Signs should be limited to the Downtown Columbia, Neighborhood and/or District Name, as branded. Building name may also be included.
- Signs may contain internal and/or remote illumination.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

Permanent Identification Signs



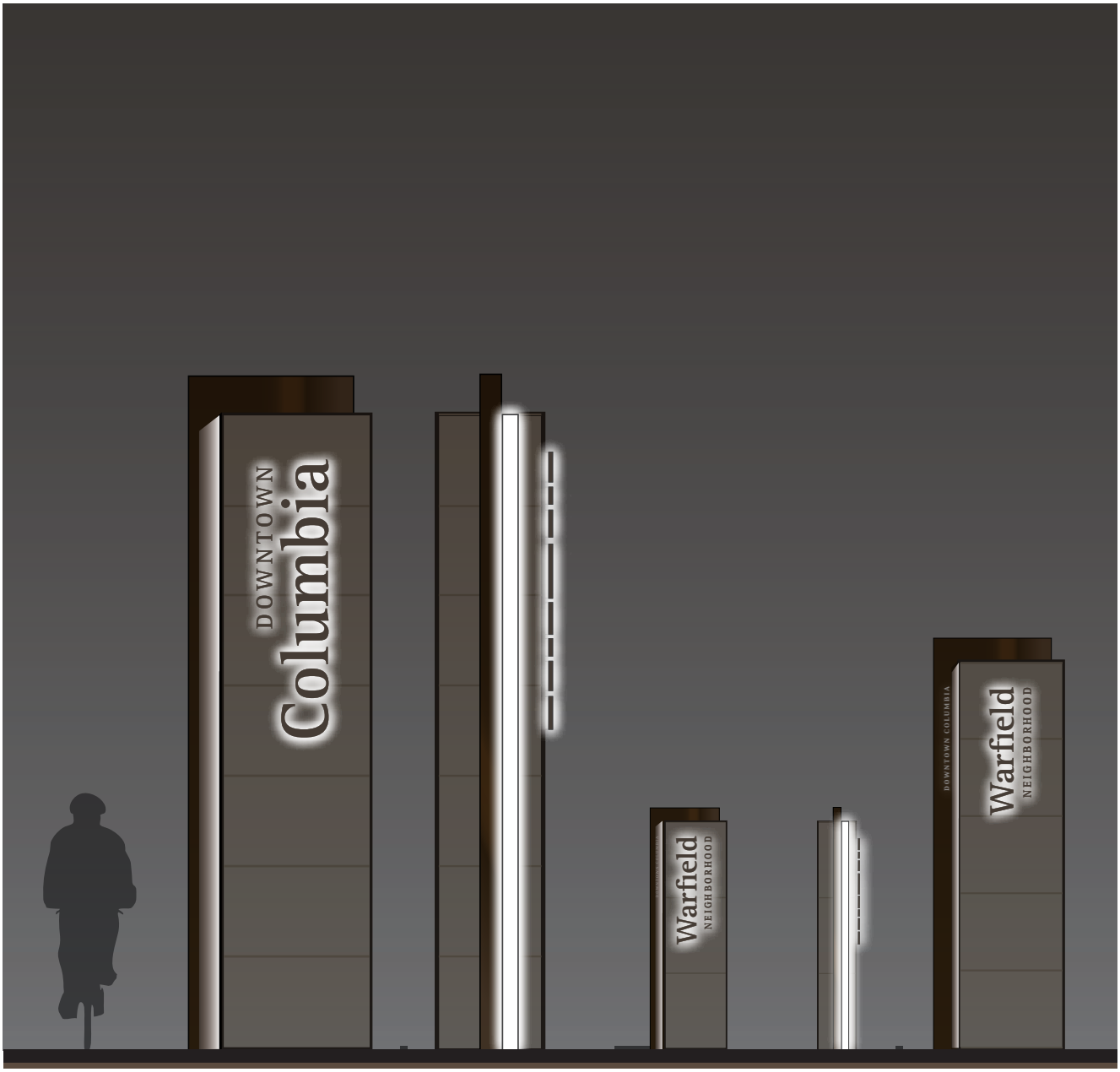
Permanent Identification Sign Diagram * - Proposed Design

* *These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.*



Permanent Identification Sign Diagram for Warfield Neighborhood * - Proposed Design

*These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.



Permanent Identification Sign Diagram - Night View * - Proposed Design

These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.

Directional Signs

Overview:

These signs shall implement the overall wayfinding sign plan for Downtown Columbia and the Warfield Neighborhood. The directional signs shall promote convenient wayfinding within the neighborhood and Downtown, helping to create a pedestrian-friendly environment that is easy to navigate.

Designed and constructed as a family of signs, the Directional Signage program for the Warfield Neighborhood shall first welcome the visitor arriving by car and then easily navigate them to public parking facilities. After the Warfield Neighborhood visitor has exited their car, they will be introduced to the pedestrian signage items that will help expedite movement by providing direction to key areas throughout the neighborhood and Downtown Columbia.

Designed and constructed as a family of signs, Directional Sign Types shall include:

1. Vehicular Directional Signs
    a. Vehicular Wayfinding Directional Signage
    b. Parking (Site) Directional Signage
    c. Downtown Columbia Street Name Signage

2. Pedestrian Directional Signs

3. Informational Wayfinding Directories

Directional Signs

Signage Wayfinding System: Charlotte, NC

Vehicular Directional Sign

Vehicular Directional Sign

Pedestrian Directional Sign

Informational Wayfinding Directory

1a. Vehicular Directional Signs

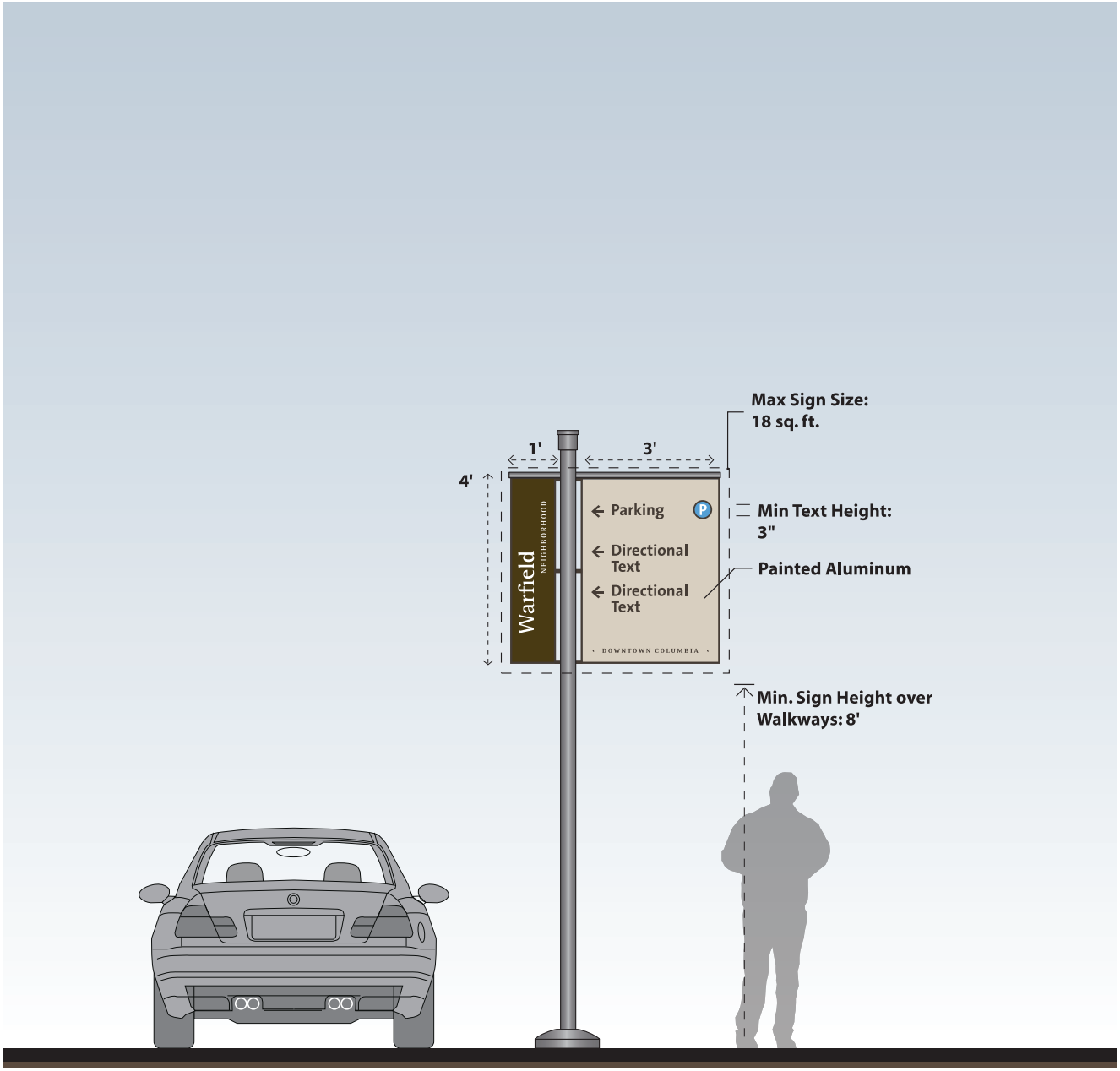
Overview:

- Shall be designed with an emphasis on clarity and readability for vehicular occupants, taking into account vehicular speeds and sightlines.
- Signs shall be placed to expedite movement throughout the Warfield neighborhood and Downtown Columbia.
- Signs may contain the "Downtown Columbia", Neighborhood and/or District Name, as branded or coordinated logotype.
- Vehicular directional signage shall be designed to be consistent and uniform throughout Downtown Columbia and shall not be designed to be neighborhood specific with exception to the allowable inclusion of the neighborhood name and or logotype.
- Directional text shall contain generic uses (such as "Parking", "Library", "Plaza", "Shops", "Hotel", "Restaurants", "Grocery", "Theatre", etc.) and wording of a directional nature, or public service information (such as information concerning transit routes and schedules, transportation demand management activities, community events, weather, and similar information).
- Signs may be placed on private land or in the public right-of-way, subject to Howard County approval.

Materials and Standards:

- Fabricated aluminum ground and/or post mounted signage panel located within the urban streetscape context.
- As per the MUTCD, an alternative background color other than the normal guide sign color of green (blue, brown or white) may be used for vehicular directional signage. This is dependent upon the approval from the Howard County jurisdictional authority for roads.
- Any projecting overhead sign item located within the public streetscape shall be mounted no less than eight feet above the ground level.
- Signs shall not contain internal illumination, to be illuminated by ambient or remote sources.
- Text for signage shall be fabricated and/or cast painted aluminum letters and applied vinyl.
- All text shall take vehicular speed and sightline visibility into consideration when determining the appropriate font sizes to be used. A minimum text height of three inches is recommended. This has a readable distance for maximum impact of thirty feet and a maximum readable distance of one hundred feet.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

1a. Vehicular Directional Signs



Vehicular Directional Sign Diagram * - Proposed Design

These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.

1b. Parking (Site) Directional Signage

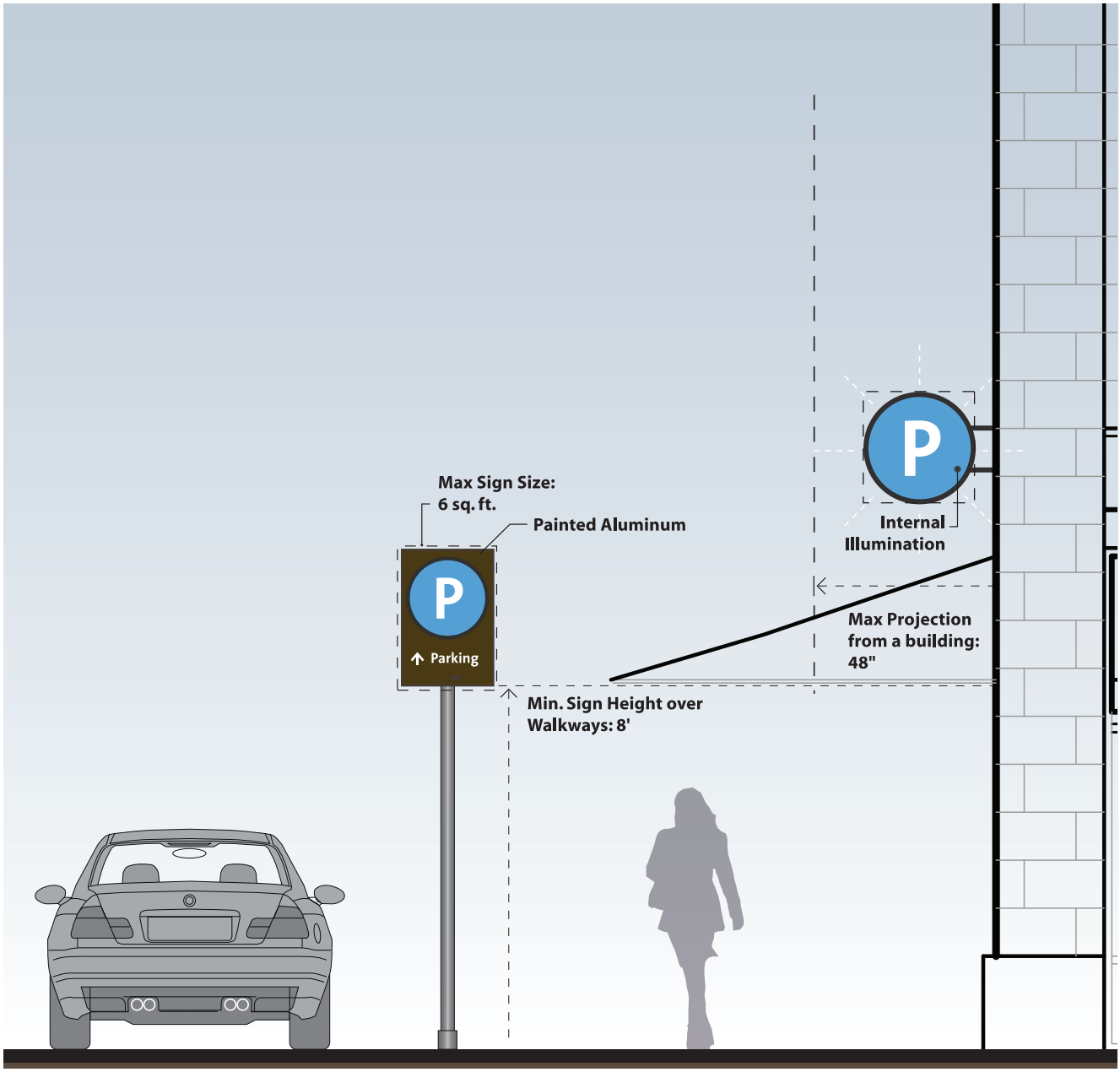
Overview:

- Shall be designed with an emphasis on clarity and readability for vehicular occupants, taking into account vehicular speeds and sightlines.
- Parking Identification signage shall be designed to be consistent and uniform throughout Downtown Columbia and shall not be designed to be neighborhood specific.
- Signs shall not contain any message other than the directional text.
- Each sign may contain an arrow or graphic to accentuate its' message.
- Signs may be placed on private land or in the public right-of-way, subject to Howard County approval.

Materials and Standards:

- Fabricated aluminum ground, post mounted or building mounted signage panel located within the urban streetscape context.
- Any projecting overhead sign item located within the public streetscape shall be mounted no less than eight feet above the ground level.
- A projecting building mounted sign may not project more than forty-eight inches from a wall of a building.
- Signs may contain internal illumination or can be illuminated by ambient or remote sources.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

1b. Parking (Site) Directional Signage



Parking (Site) Directional Sign Diagram * - Proposed Design

These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.

1c. Downtown Columbia Street Name Signage

Overview:

- Shall be designed with an emphasis on clarity and readability for vehicular occupants, taking into account vehicular speeds and sightlines.
- Street signs shall be designed to be consistent and uniform throughout Downtown Columbia and shall not be designed to be neighborhood specific.
- All design standards shall follow the Manual on Uniform Traffic Control Devices and the Howard County Code.

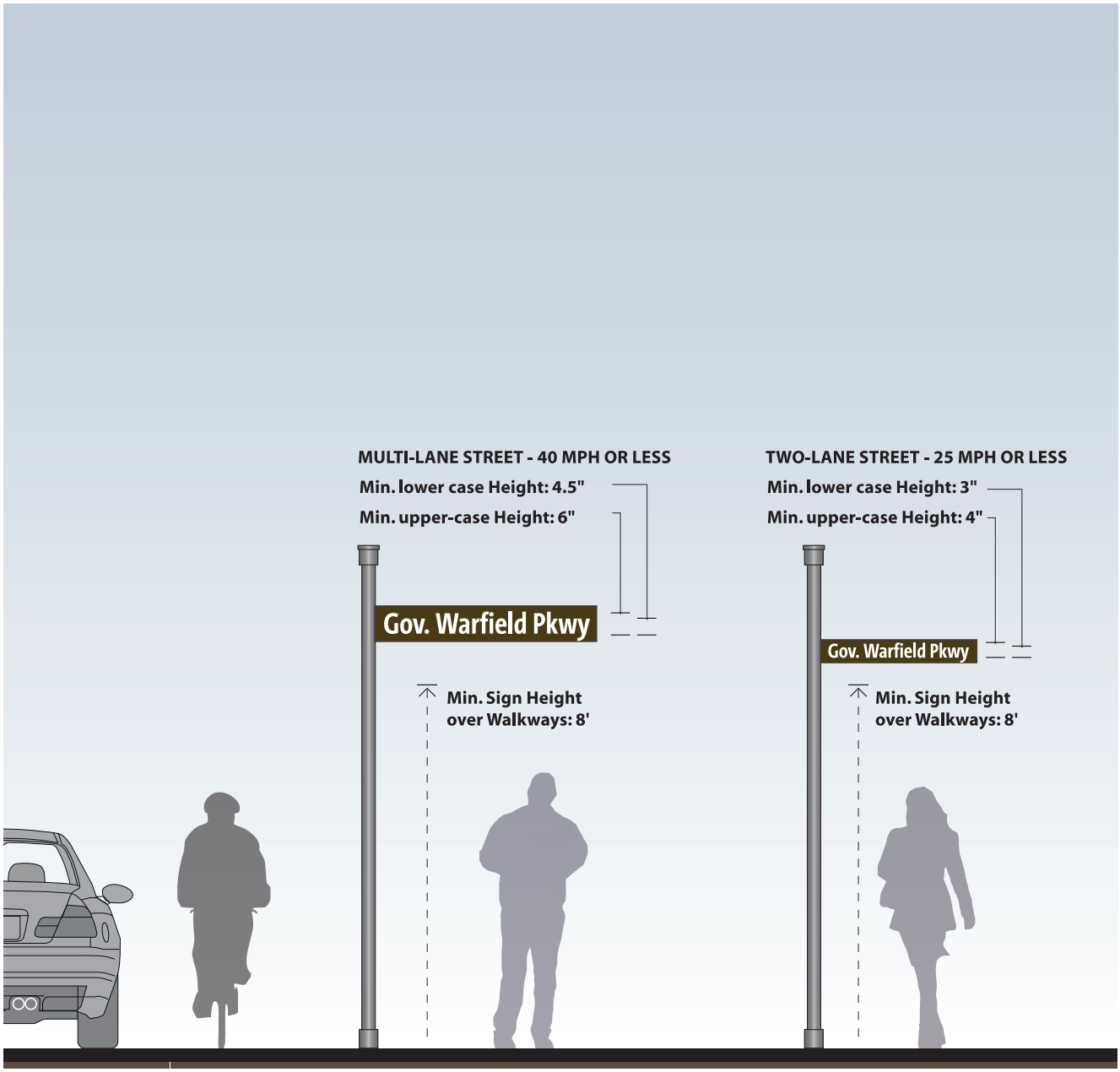
Materials and Standards:

- Fabricated aluminum post mounted panel containing white reflective vinyl text.
- As per the MUTCD, an alternative background color other than the normal guide sign color of green (blue, brown or white) may be used for Street Name Signs. This is dependent upon the approval from the Howard County jurisdictional authority for roads.
- Recommended Minimum Letter Heights for post-mounted street signs:

Multi-lane Street:	40 mph or less:
Initial Upper-Case Min. Height	6 inches
Lower-Case Min. Height	4.5 inches
Two-lane Street:	25 mph or less:
Initial Upper-Case Min. Height	4 inches
Lower-Case Min. Height	3 inches

- Any projecting overhead sign item located within the public streetscape shall be mounted no less than eight feet above the ground level or eighteen feet above any road, driveway or alley.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

1c. Downtown Columbia Street Name Signage



Downtown Columbia Street Name Sign Diagram * - Proposed Design

These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.

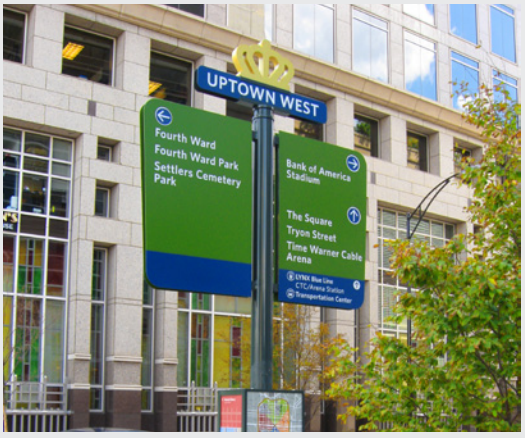
2. Pedestrian Wafinding Directional Signage

Overview:

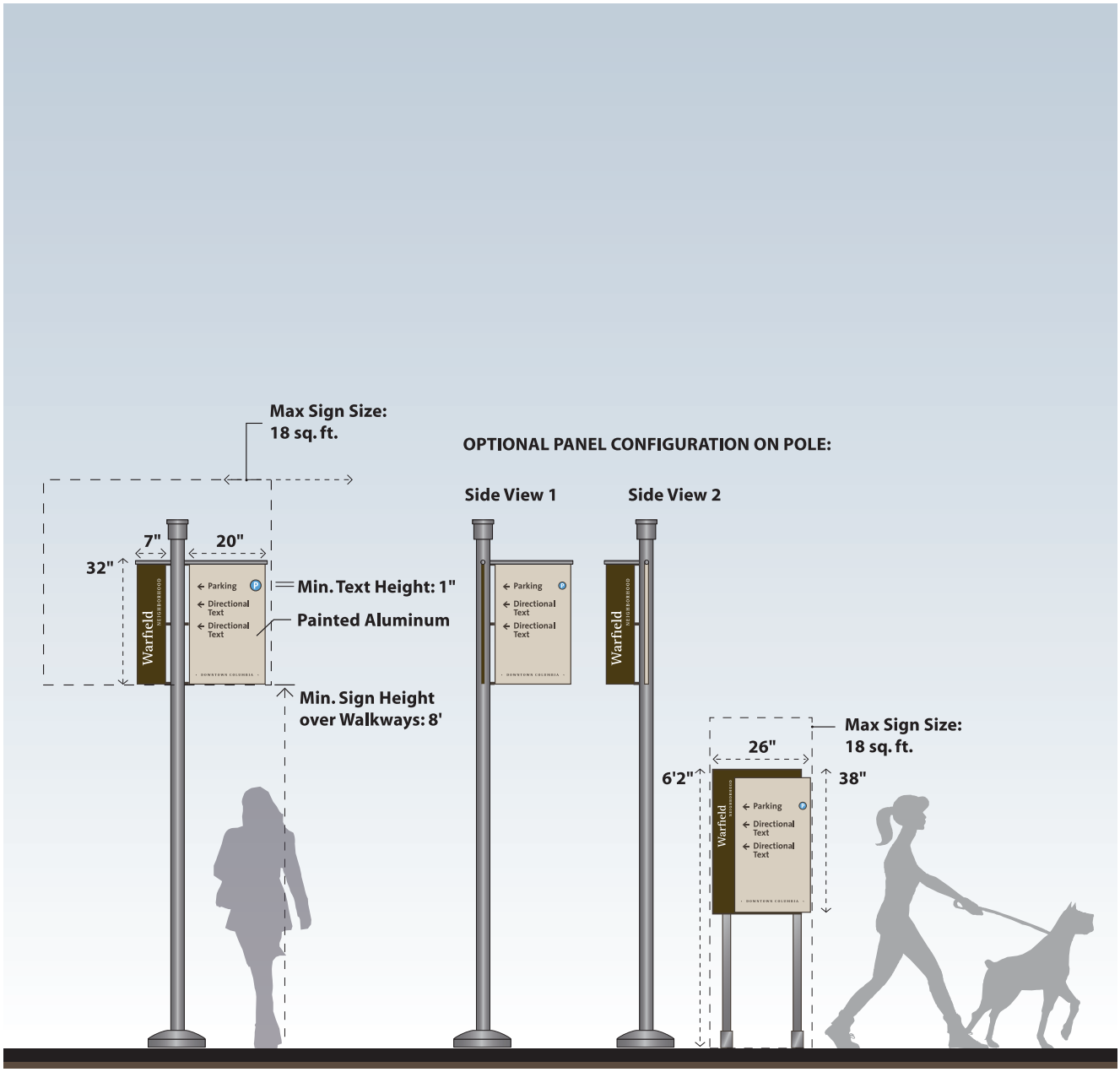
- Signs shall be designed and constructed as a family of signs that enhances the pedestrian experience.
- Shall be pedestrian in scale and height.
- Shall be used to direct and inform pedestrians throughout the Warfield Neighborhood.
- Signs may contain the "Downtown Columbia", Neighborhood and/or District Name, as branded or coordinated logotype.
- Pedestrian directional signage shall be designed to be consistent and uniform throughout Downtown Columbia and shall not be designed to be neighborhood specific with exception to the allowable inclusion of the neighborhood name and or logotype.
- Directional text shall contain generic uses (such as "Parking", "Library", "Plaza", "Shops", "Hotel", "Restaurants", "Grocery", "Theatre", etc.) and wording of a directional nature, or public service information (such as information concerning transit routes and schedules, transportation demand management activities, community events, weather, and similar information).
- Signs may be placed on private land or in the public right-of-way, subject to Howard County approval.

Materials and Standards:

- Fabricated aluminum ground and/or post mounted signage panel located within the urban streetscape context.
- Any projecting overhead sign item located within the public streetscape shall be mounted no less than eight feet above the ground level.
- Signs shall not contain internal illumination, to be illuminated by ambient or remote sources.
- Text for signage shall be fabricated and/or cast painted aluminum letters and applied vinyl.
- All text shall take sightline visibility into consideration when determining the appropriate font sizes to be used. A minimum text height of one inch and maximumcap text height of three inches is recommended.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.



2. Pedestrian Wafinding Directional Signage



Pedestrian Wafinding Directional Sign Diagram * - Proposed Design

These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.

3. Informational Wayfinding Directories

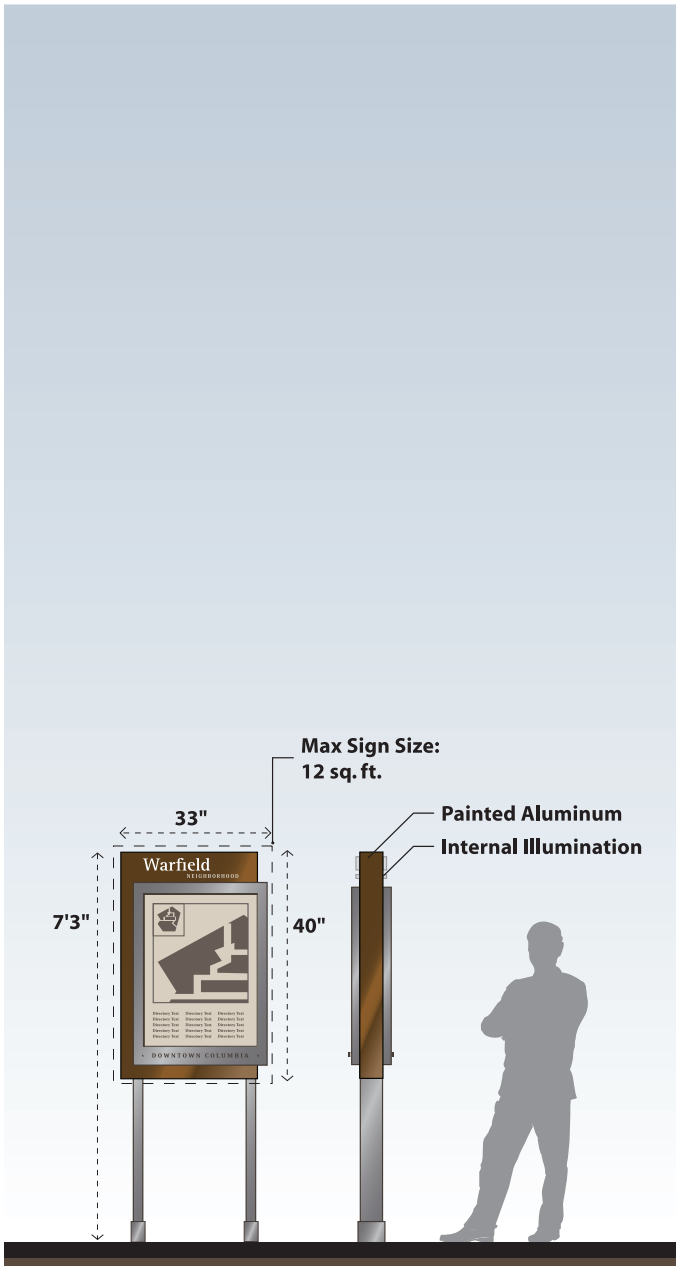
Overview:

- Signs that shall contain specific retail and/or office tenant names and information, directional information and/or public service information (such as information concerning transit routes and schedules, transportation demand management activities, community events, weather and similar information)
- Shall be scaled to inform pedestrians.
- Directories may contain the "Downtown Columbia", Neighborhood and/or District Name as branded, building name, building address or coordinated logotypes.

Materials and Standards:

- Directories shall be constructed of materials that compliment its surroundings and its use.
- Materials may include fabricated aluminum, acrylic, glass and digitally printed graphic panels.
- To be mounted flush against a wall surface or incorporated into a freestanding sign.
- Signs may contain internal or remote illumination.
- Signs may be placed on private land only.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

3. Informational Wayfinding Directories



Informational Wayfinding Directories Diagram * - Proposed Design

200% Enlargement

These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.

Free-Standing Monument Signs

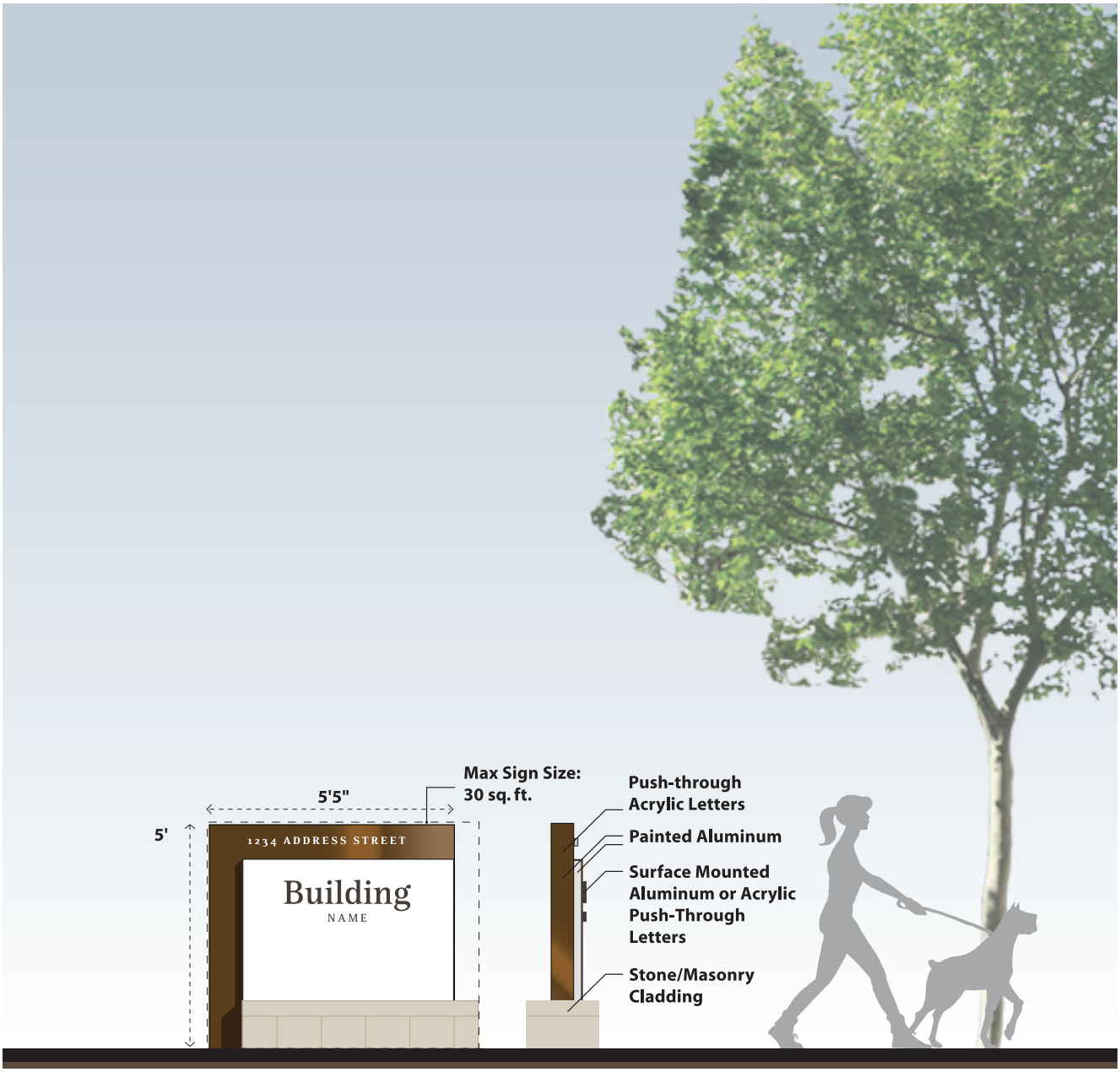
Overview:

Free-standing Monument Signs may be used within the Warfield Neighborhood for building complexes that are separated from adjacent streets by setbacks. Placement is subject to Howard County approval.

Materials and Standards:

- Signs shall be constructed of materials that complement building structures and their uses.
- Materials may include, but are not limited to, natural stone, aluminum, stainless steel and glass.
- Signs shall have architectural lines that complement the building.
- Shall have a low profile and be flanked by either columns or decorative uprights, or have a solid base at the ground.
- Signs shall be illuminated either by external fixtures designed to complement the appearance of the sign, backlit to create a halo effect around the lettering or internally lit so that only the lettering and logo are visible after dark.
- Internally illuminated plastic faced signage cabinets are not allowed.
- Information shall be limited to the building or project name, logos, and the business address.
- Signs may be placed on private land only.
- Signs are exempt from setback requirements, subject to Howard County approval.
- Allowable size: A Monument Building Sign, including its structure, shall not be more than six feet in height. The maximum sign area for a Monument Building Sign is thirty square feet per side or face.

Free-Standing Monument Signs



Free-Standing Monument Sign Diagram *

These conceptual drawings are for the sole purpose of expressing overall visual design intent only and are not intended for fabrication or construction purposes. The sign designs shown above are Proposed Concept Designs; final sign design to be determined during Site Development Plan (SDP) Stage.

Building Mounted Signage

Overview:

The following sign items pertain to signs that identify an individual tenant or business within the Warfield Neighborhood that are directly attached to the building façade in which they occupy.

These sign types include:

1. Flat Wall Signs
2. Projecting Signs
   a. Blade Signs
   b. Grand Blade Sign
   c. Awning (Canopy) Signs
   d. Under Canopy Signs
3. Marquee Signs
4. Roof Signs
5. Tall Building Signs
6. Storefront Window Signs

1. Flat Wall Signs

Overview:

Flat Wall Signs are affixed securely to a building wall. These signs should be legible and easily distinguished from other signage on each building and serve to guide and orient pedestrian and vehicular traffic going to the building.

Materials and Standards:

- Signs shall be placed within a clear signable area.
- Sign locations shall respect the design of a building, including the arrangement of bays and openings.
- Signs shall not obscure windows, grillwork, piers, pilasters and ornamental features. Typically, wall signs should be centered on horizontal surfaces (i.e. over a storefront opening).
- Acceptable signage materials and applications may include::

  Painted aluminum/metals
  Natural finish metals to include bronze, aluminum, steel, stainless steel
  Etched and polished metals
  Cast metals/plaques
  Metal screens, grids and mesh
  Natural opaque hard surface materials, such as granite and stone
  Glass – frosted, colored, patterned and clear
  Exterior grade vinyl materials
  Acrylic, poly-resin materials
  High Density Urethane
  LED illumination
  Neon illumination
  Concealed fluorescent illumination

- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.
- Signs can be internally illuminated, illuminated from attached fixtures or illuminated by surrounding ambient lighting.

2. Projecting Signs

Overview:

Projecting Signs are signs that are affixed perpendicularly to a building. In the Warfield Neighborhood and throughout Downtown Columbia, Projecting Signs include the following:

a. Blade Signs
b. Grand Blade Sign
c. Awning (Canopy) Signs
d. Under Canopy Signs

2a. Projecting Signs: Blade Signs

Overview:

Blade Signs are affixed perpendicularly to the face of a building. These signs bring creativity and fun to the streetscape and shall be oriented to pedestrians passing on the sidewalk in front of buildings. A Blade Sign is typically mounted adjacent to a storefront at or above the entrance within the first level streetscape environment. This sign type is intended to be viewed at the pedestrian level.

Materials and Standards:

- Blade Signs should complement the architecture of each building, or portion thereof, or relate to the design of a storefront.
- Signs shall reflect the character of each business while fitting comfortably with other adjacent signage.
- Signs shall be creatively designed with visually interesting elements such as geometric or irregular outlines with painted or applied letters, two or three dimensional symbols or icons and/or internal cutouts.
- Signs shall have mounting hardware that is attractive and integral to the sign design.
- Signs can be internally illuminated, illuminated from attached fixtures or illuminated by surrounding ambient lighting
- Materials may include:

  Painted aluminum/metals
  Natural finish metals to include bronze, aluminum, steel, stainless steel
  Etched and polished metals
  Cast metals/plaques
  Metal screens, grids and mesh
  Natural opaque hard surface materials, such as granite and stone
  Glass – frosted, colored, patterned and clear
  Exterior grade vinyl materials
  Acrylic, poly-resin materials
  High Density Urethane
  LED illumination
  Neon illumination
  Concealed fluorescent illumination

- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

2b. Grand Blade Signs

Overview:

These Blade Signs are affixed perpendicularly to the face of a building, but unlike a typical street level blade sign, these signs are larger and intended to be viewed from a distance. These signs are mounted above the first floor, typically near the ends or corner of buildings. This sign type is used to announce and identify an individual tenant's identity and/or brand. This sign type is used to aid in orienting pedestrian and vehicular traffic going to a particular business.

Materials and Standards:

- Blade Signs should complement the architecture of each building, or portion thereof, or relate to the design of a storefront.
- Signs shall reflect the character of each business while fitting comfortably with other adjacent signage.
- Signs shall be creatively designed with visually interesting elements such as geometric or irregular outlines with painted or applied letters, two or three dimensional symbols or icons and/or internal cutouts.
- Signs shall have mounting hardware that is attractive and integral to the sign design.
- Signs can be internally illuminated, illuminated from attached fixtures or illuminated by surrounding ambient lighting
- Materials may include:

  Painted aluminum/metals
  Natural finish metals to include bronze, aluminum, steel, stainless steel
  Etched and polished metals
  Cast metals/plaques
  Metal screens, grids and mesh
  Glass – frosted, colored, patterned and clear
  Exterior grade vinyl materials
  Acrylic, poly-resin materials
  High Density Urethane
  LED illumination
  Neon illumination
  Concealed fluorescent illumination

- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

2c. Projecting Signs: Awning (Canopy) Signs

Overview:

Awning signs are printed on, applied vinyl or attached to an awning or canopy above a business door or window. They generally serve to bring color to the streetscape and are oriented towards pedestrians.

While only the signage on an awning is regulated by the Howard County Sign Code, the following design advice is presented to ensure well-built, aesthetically pleasing awnings and canopies as the backdrop for the awning signs.

Materials and Standards:

- Awnings and canopies must be sturdy and permanently attached to buildings.
- Awnings must be mounted at a height, which ensures that when under canopy signs are included, they will be a minimum or eight feet from ground level at the base of the building.
- Open-ended awnings are preferred.
- Awnings should be designed to project over individual window and door openings and not project as a single continuous feature extending over masonry piers or arches.
- Materials shall include: metal, glass, outdoor-grade marine fabric/canvas, vinyl mesh and applied vinyl graphics.

2d. Projecting Signs: Under Canopy Signs

Overview:

Under Canopy Signs are similar to blade signs except that they are suspended below a marquee or under an awning or canopy. These signs are generally smaller than blade signs and are oriented to pedestrians passing under them.

Materials and Standards:

- These signs shall be permanently attached to an overhead canopy or awning.
- Signs shall be used primarily at ground floor locations but can be considered for upper floor businesses with covered entry porches and balconies.
- Signs shall impart a sense of creativity in their design.
- Blade Signs should complement the architecture of each building, or portion thereof, or relate to the design of a storefront.
- Signs shall reflect the character of each business while fitting comfortably with other adjacent signage.
- Signs shall be creatively designed with visually interesting elements such as geometric or irregular outlines with painted or applied letters, two or three dimensional symbols or icons and/or internal cutouts.
- Signs shall have mounting hardware that is attractive and integral to the sign design.
- Signs can be internally illuminated, illuminated from attached fixtures or illuminated by surrounding ambient lighting
- Materials may include:

  Painted aluminum/metals
  Natural finish metals to include bronze, aluminum, steel, stainless steel
  Etched and polished metals
  Cast metals/plaques
  Metal screens, grids and mesh
  Glass – frosted, colored, patterned and clear
  Exterior grade vinyl materials
  Acrylic, poly-resin materials
  High Density Urethane
  LED illumination
  Neon illumination

  Concealed fluorescent illumination

- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

3. Marquee Signs

Overview:

A marquee sign is aligned with a building façade and affixed to the face of a building marquee (a permanent canopy often of metal and glass projecting over an entry). This sign type is used to accentuate primary building entrances, major tenant entrances or other significant building entry points and aid in orienting pedestrian and vehicular traffic going to the building.

Materials and Standards:

- Sign shall compliment the architecture of the marquee or canopy structure.
- Signs shall be designed as an integral part of the overall building or storefront architecture.
- Signs shall be scaled so that the signs appear proportional to and well supported by the marquee.
- Theaters, cinemas and performing arts facilities are encouraged to utilize this sign type.
- In Downtown Columbia, marquee signs may project below or above the vertical face or a marquee or structural canopy, provided a vertical clearance of eight feet is maintained between the bottom of the sign and the grade below.
- The horizontal clearance between a marquee or structural canopy and the street curb line shall not be less than three feet.
- Materials may include:

  Internally illuminated channel letters
  Face-lit letters, illuminated by a remote source
  Backlit halo-illuminated letters
  Painted aluminum/metals
  Natural finish metals to include bronze, aluminum, steel, stainless steel
  Etched and polished metals
  Metal screens, grids and mesh
  LED illumination
  Neon illumination

  Concealed fluorescent illumination

- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

4. Roof Signs

Overview:

Roof Signs are flat signs mounted at the top of a building that enhance the skyline by announcing the identity of a building. These signs are intended to be easily seen from a distance both day and night.

Materials and Standards:

- Single-faced signs shall be permitted on the front profile of a building provided that the top of the sign does not exceed the height of the building, as defined in the Howard County zoning regulations.
- Signs shall be integrated with distinctive building type whenever possible.
- Logos and logotypes shall be used over lengthy business names as clear identifiers.
- Signs shall be constructed of high quality, durable materials that are compatible with the building materials. Materials may include fabricated aluminum and other natural metals.
- Signs are encouraged to consist of channel letters that are individually pin-mounted and backlit creating an illuminated halo effect.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

5. Tall Building Signs

Overview:

Tall Building Signs are flat signs mounted at the top of a building that is over one hundred feet tall. They shall enhance the skyline by announcing the identity of a tenant or building name. These signs are intended to be easily seen from a distance both day and night.

Materials and Standards:

- On a flat-topped building, tall building sign shall be located between the top of the windows on the topmost floor and the top of the roof parapet or within sixteen feet below the top of the roof parapet.
- Shall be located on a wall and may not be located on a roof, including a slopping roof, and may not block any windows.
- A building may have tall building signs and the area of all tall building signs is included in the computation of the building's allowed tall building sign area. If a building has tall building signs on two or more sides of the building, the signage on each side shall consist of the same combination of names or corporate logos, provided that the names and logos on the signs need not be identical in appearance.
- The area for tall building signs are not counted toward the total sign area of the building.
- Signs shall be integrated with distinctive building top whenever possible.
- Signs shall consist of channel letters that are individually pin-mounted.
- Signs shall be constructed of high quality, durable materials that are compatible with the building materials. Materials may include fabricated aluminum and acrylic faces where applicable.
- Illumination. Channel letters shall be internally illuminated only, either backlit creating an illuminated halo effect, face lit or a combination of both illumination methods.
- DILP shall review specific area calculation exemptions proposed for Tall Building Sings.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

6. Storefront / Window Signs

Overview:

Window Signs are professionally painted, posted, displayed, or etched on interior translucent or transparent surfaces, including windows or doors. This type of signage generally contains only text but can express a special business personality (or brand) through the use of graphic logos or images combined with color.

Materials and Standards:

- Permanent window signs may cover up to 20% of the glass area and should be designed so that visibility into and out of the window is not obscured.
- Windows signs shall be created from high-quality materials, which may include: paint, gold leaf, transparent, opaque and frosted vinyl materials.
- Window signs may also utilize techniques such as sandblasting and etching.
- Window Signs shall be applied directly to the interior face of the glazing or hung inside the window concealing all mounting hardware and equipment.
- The current Howard County Sign Code for Downtown Columbia shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

Banner Signs

Overview:

Banners can add color and visual interest to the Warfield Neighborhood streetscape environment. In Downtown Columbia. Permanent and temporary banners are allowed on private land and may be mounted on buildings, streetlights, and similar pole-like structures.

Banner types include:

1. Building Mounted
2. Pole Mounted
3. Temporary

1. Building Mounted (Permanent) Banner Signs

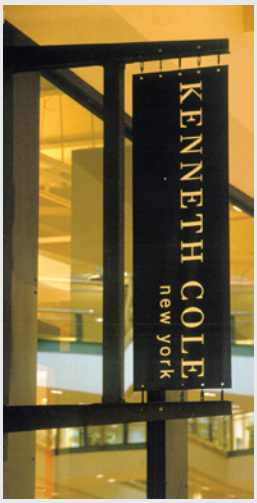
Overview:

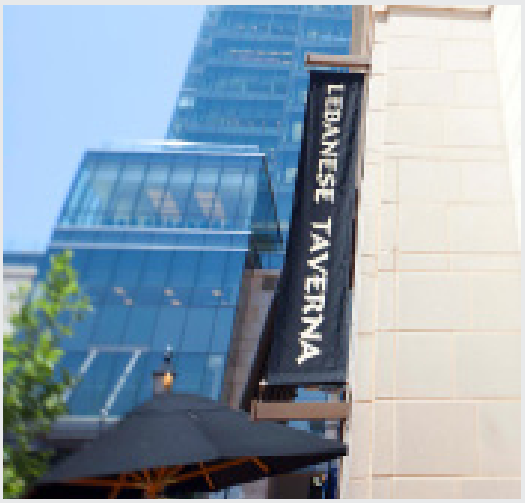
Banners mounted on a building façade can help add dimension, interest and color. They shall be vertically oriented and compatible with the overall character and color of the building.

Materials and Standards:

- Banners shall look or complement purposeful elements of the building.
- Materials may include:

  Durable heavy weight exterior grade canvas fabric
  Exterior grade, digitally printed vinyl and vinyl mesh materials
  Metal
  Glass
- Banners shall be mounted perpendicularly to the building façade at both the top and bottom form metal brackets of a size and design that are appropriate to the banner and the architectural character of the building.
- Banners shall contain easily recognized business names and/or logos
- A Building Mounted Banner is a projecting sign, therefore the requirements for projecting signs within Downtown Columbia shall apply, they include:
- A projecting sign or supporting structure shall not project more than forty-eight inches from the wall of a building, nor be less than eight feet from the ground level at the base of the building and eighteen feet above any road, driveway, or alley.
- The horizontal clearance between a projecting sign and the curb line shall not be less than three feet.
- A projecting sign shall not be higher than the parapet line of the building or twenty-five feet from the ground level to the top of the sign, whichever is less.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations. Banners are counted towards the total sign are of a building.
- Building mounted seasonal banners are permitted and may be displayed up to ninety days and do not count towards the total sign area of a building, provided the banner does not





1. Building Mounted (Permanent) Banner Signs

identify any specific commercial business. Seasonal Banners shall not exceed sixteen square feet per side. Seasonal Banners shall be coordinated as to size, style and placement.

2. Seasonal (Temporary) Pole Mounted Banners

Overview:

Banners added to the streetscape environment of the Warfield Neighborhood will help enliven, add color and promote a sense of community. This can be done by using banners to help celebrate holidays and advertise community events.

Materials and Standards:

- Pole Mounted Seasonal Banners may be displayed up to ninety days.
- Banners shall be scaled for both pedestrians and vehicular occupants.
- Materials may include:

  Durable heavy weight exterior grade canvas fabric
  Exterior grade, digitally printed vinyl and vinyl mesh materials

- Size: Banners shall be appropriately scaled to the light post to which they will attach, taking wind load into consideration. Banners shall not exceed sixteen square feet per side.
- Pole Mounted Banners shall not be mounted less than eight feet above grade.
- Seasonal Banners shall be coordinated as to size, style and placement.

3. Temporary Banners

Overview:

Temporary Banners may be used to announce a grand opening, entertainment, or other event and do not count towards the total sign area of a building. Temporary banners shall be removed after fourteen days.

Materials and Standards:

- Materials may include:

  Durable heavy weight exterior grade canvas fabric
  Exterior grade, digitally printed vinyl and vinyl mesh materials
- Banners shall not be mounted less than eight feet above grade.

Digital Displays

Overview:

Digital Displays allow electronic display of text, images, video, animation, motion images and interactivity. It is envisioned that this technology will primarily be used to enhance the overall experience in Downtown Columbia by displaying creative images, graphics and other information to complement the distinctive, vibrant and dynamic character envisioned for Downtown.

Selective and imaginative use of digital displays as part of the overall signage plan the Warfield Neighborhood will help create a sense of place that is unique to Howard County and will further the continuing evolution of Downtown Columbia as the County's urban center.

Materials and Standards:

- Digital displays shall employ unique designs to include creative imagery that emphasizes graphics and color over text.
- Shall be programmed to include public service messaging and other programming designed to enhance the streetscape and provide a benefit to the community.
- Utilize LED, LCD, plasma displays, projected images and other emerging technologies.
- Signs shall complement and enhance the architectural elements of buildings and be of a size that is in scale with the setting and intended audience.
- These sign types shall be located in such a way that existing communities surrounding Downtown Columbia are not adversely impacted.
- Signs shall be placed so as to avoid visual clutter.
- Although not the primary use, digital displays may also identify or advertise businesses, products and services. Advertising should be designed to emphasize the unique and creative capabilities of this technology.
- Digital signs including advertising shall be located on private land only.
- The current Howard County Sign Code for Downtown Columbia, shall serve as the over-riding regulating document for all square footage requirements, sign setbacks, height limitations.

THIS PAGE INTENTIONALLY LEFT BLANK

THIS PAGE INTENTIONALLY LEFT BLANK

7.0 DEFINITIONS

7.0 DEFINITIONS

The definitions in Section 103.A of the Howard County Zoning Regulations are to be applied to the terms used in the Warfield Design Guidelines. The following definitions explain terms used in the Warfield Design Guidelines that are either not defined in the Zoning Regulations or have a different meaning in the Guidelines.

Alley: A street that typically has one or two lanes and is designed to provide access to parking garages and service areas.

Amenity Space: A separate lot or area designated for plazas, promenades, greens, gardens, parks, pedestrian and bicycle circulation systems, enhanced streetscapes, and Downtown Arts, Cultural and Community uses. Amenity Space also includes the enhancement or rehabilitation of environmentally sensitive areas.

Arcade: A continuous walkway or passageway adjacent to a building, which runs parallel to and opens to a street or Amenity Space, or a passageway within a building open to public use, usually covered by a canopy or permanent roofing.

Avenue: A street that typically has 2 to 4 lanes, intended to provide access to or links between Downtown neighborhoods.

Bioswale: Landscape element designed to remove silt and pollutants from surface runoff water in open areas. Swales are typically lined with stone and are planted with wet/dry tolerant vegetation in order to filter and infiltrate rainwater, allowing for improvements in water quality and reduction in volume before discharge to water bodies.

Block: An increment of urban land, typically circumscribed by thoroughfares and/or streets.

Boulevard: A divided street that typically has 4 lanes and a center median.

Build-To-Line: A line established on a parcel to indicate the placement of the principal structure upon the parcel, parallel to the frontage and/or right-of-way, facing a street or Amenity Space. The intent of the build-to-line is to align structures framing a street or Amenity Space.

Civic Building: A structure whose principal purpose is a public or civic use, such as government offices, school, post office, Columbia Association headquarters, meeting house or community center.

Downtown Arts, Cultural and Community Use: Land areas, uses, and facilities established for cultural, civic, recreation, educational, environmental, entertainment or community use or benefit, whether or not enclosed and whether publicly or privately owned or operated for profit, including, but not limited to, libraries, fire stations, schools, museums, galleries, artistic work, transit facilities and eating, seating and gathering areas.

Downtown Building Frontage: Means each linear segment of a building perimeter located within Downtown Columbia which adjoins a private street, public right-of-way, Downtown Community Commons, or Downtown Parkland.

Downtown Columbia: Means that area defined as "Downtown Columbia", in the Howard County Zoning Regulations

Downtown Columbia Illustrative Master Plan: The Downtown Columbia Illustrative Master Plan identifies possible locations and configurations of uses, the potential layout and dimension of streets, blocks, and amenity spaces, within the six distinctive neighborhoods.

Downtown Columbia Plan: The General Plan Amendment for Downtown Columbia approved by County Council Bill No. 58-2009.

Downtown Signature Building: An existing or proposed structure which requires premier attention to its architectural design because of its cultural significance or prominent location in relationship to the public realm, such as its position on a street or open space, or as the terminus of a vista.

Expression Line: An architectural treatment extending or offset from the surface plane of the building wall, or change of material, color or other treatment of the facade. Expression Lines typically delineate the transition between floor levels and base-middle-top of a building.

Frontage Coverage: The percentage of a block occupied by building facades. The frontage coverage is calculated as the sum of the length of the building facades divided by the block length.

Frontage Facade: The front facade of a built structure parallel to a street or public right-of-way and coinciding with the build-to-line.

Frontage Street: The street bordering on a property toward which the front facade and main entrance are oriented.

Green Roof: A roof that is partially or completely covered with vegetation and a growing medium, typically placed over a drainage layer above the roof's waterproofing. Benefits include reduction in stormwater runoff, increase in roof life span, heat and noise insulation value, reduction of the urban heat island effect, and creation of wildlife habitat.

Mixed-Use Building: A structure consisting of multiple uses, whose ground floor use is typically, but not limited to, retail, restaurant or similar service businesses, with residential, office or other uses on upper floors.

Porous Pavement: Permeable pavement such as porous asphalt, concrete, and pavers to be considered for pedestrian walkways and bike paths, plazas, and low traffic volume streets and parking lanes. Benefits include water quality treatment and infiltration, storm water flow control, reduction of water pooling/ponding on paved surfaces and reduction of urban heat island effect by cooling paved surfaces. For pervious pavements a standard section per MDE shall be used, and any deviation from that standard shall require approval from MDE.

Primary Pedestrian Street: A Primary Pedestrian Street is intended to be the focus of pedestrian activity. Primary Pedestrian Streets typically have wide sidewalks with amenity spaces, or other pedestrian features.

Private Street: A privately-owned roadway including, Alleys, Driveways, Avenues, Streets, or Boulevards that provide access to and through Downtown.

Rainwater Planter: An area designed to capture stormwater runoff from sidewalks, roadways, and other paved areas, in order to reduce peak stormwater flows, volume, and pollution. Plant beds along street edges and walks might be designed as a series of small infiltration beds filled with plants and linked to drainage systems in natural areas by means of covered channels below the pavement.

Storefront: The facade or portion of a building's front facade (typically the ground level only) with business or retail uses typically aligned along the frontage line with the entrance to the business or retail use at sidewalk grade.

Street: A roadway that typically has 2 lanes and is designed to provide local access and disperse traffic within Downtown. Street and Block Plan: The Street and Block Plan frames a possible layout and dimension of streets, blocks, open spaces, and illustrates how buildings, streets and landscape support and reinforce the urban grid of Downtown Columbia.

Streetwall: The vertical plane of a building façade along a roadway.

Street Type: A street classification based on the distinctive character of the roadway and sidewalks, which may be defined by number of potential lanes, and the presence of medians or other special treatment of the vehicular and pedestrian ways.

Vista: A view framed by buildings, landscape, or other structures.

Vista Terminus: A building, significant feature of a building, or site element that terminates or punctuates a framed view. Civic buildings, sculptural pieces, iconic natural areas, and special building elements serve as the most appropriate view terminators.

THIS PAGE INTENTIONALLY LEFT BLANK

A APPENDIX

THIS PAGE INTENTIONALLY LEFT BLANK

A.1 SUSTAINABILITY

08 SUSTAINABILITY GUIDELINES

INTRODUCTION AND OVERVIEW

THE DOWNTOWN COLUMBIA SUSTAINABILITY PROGRAM

The Sustainability Program is an ambitious effort to use holistic thinking to guide further development of Downtown Columbia and the design of a livable community. A sustainable community is a place that pursues a quality of life, for all life, now and into the future. Attributes that support a community's effort toward becoming sustainable include:

- Public spaces and amenities where residents can socialize, work, shop, and play
- An increased ease in mobility, where residents can walk to accommodations or access public transit more readily
- Buildings that are healthy and use natural resources, such as water and energy, efficiently
- A healthy environment with clean water, clean air, and increased connections to the natural environment

The Downtown Columbia Sustainability Program establishes goals for Downtown Columbia and is comprised of many integrated and codependent programs, philosophies, and guidance documents which will inform the design, construction, operations and programming of land and building development in Downtown Columbia. The intent of the Program is to fulfill a vision for a livable, socially, economically, and environmentally sustainable urban community. Collectively, the Sustainability Program consists of the following six documents and guidance tools, representing a "kit of parts", that strives to deliver the most comprehensively sustainable development possible. These documents (described on the following page) include:

1. The original Columbia plan
2. Smart Growth Principles
3. The Downtown Columbia Sustainability Guidelines (The Land Component & The Community Component)
4. The Howard County Green Building Law
5. Town Center Merriweather and Crescent Environmental Enhancements Study, September 2008
6. Best Management Practices for Symphony Stream and Lake Kittamaqundi Watersheds, September 2008

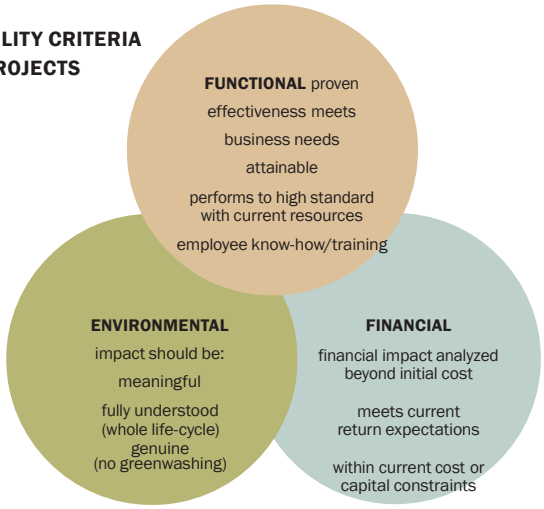
The program aims to establish goals to be pursued as each phase or project in Downtown progresses toward full build out over the ensuing years. As new technology emerges, innovative strategies will be pursued to conserve natural resources. The sustainability program is designed to allow future flexibility, to learn, adapt and evolve as the project moves from developer, to builder, to community ownership.

The plan recognizes the importance of realistic criteria to sustainability which must meet multiple business goals. Each project must be:

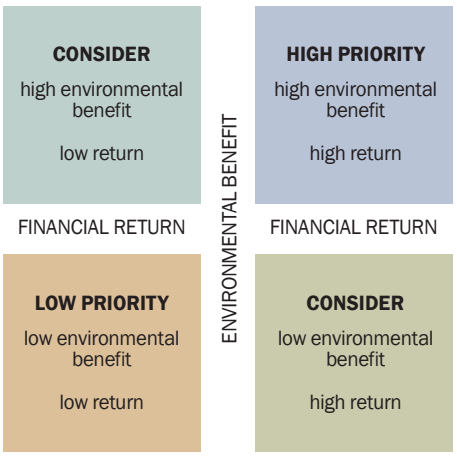
- Functional and effective to meet the needs of the business and perform as designed
- Environmentally sound to reduce impact in a meaningful way throughout the project's life cycle
- Financially viable considering all risks and ensuring initiatives to achieve return on investment

Those initiatives which can realize a high environmental benefit as well as high return are priorities. Solutions that are of a genuine and meaningful benefit to the environment should become priority projects versus ineffective but highly visible solutions.

SUSTAINABILITY CRITERIA FOR NEW PROJECTS



DECISION-MAKING FRAMEWORK



THE SUSTAINABILITY PROGRAM GUIDANCE DOCUMENTS

1. **The original Columbia plan** - Columbia is unique in that it was originally designed and developed to embody some of the key elements of sustainability. In fact, one of the main objectives was to “create a comprehensively balanced community”, planning for people while respecting “the stream valleys, the forests, the southeastern slopes ... allowing the land to impose itself as a discipline on the form of the Community." These principles continue to guide Downtown development through a balance of natural and open spaces, commercial uses, housing, public amenities, arts as well as a an economically sustainable tax and profit base.

2. **Smart Growth Principles** – Smart Growth is a phrase coined in Maryland by Governor Parris N. Glendening. It is now a common term used nationwide to describe the desire and strategy to accommodate new growth and development in the most suitable areas while protecting our most vital natural resources. Since 1997, with the passage of the Smart Growth and Neighborhood Conservation initiative, Maryland has led the nation in this endeavor. Maryland’s efforts were recognized by Harvard University in 2000 as one of the ten most innovative governmental programs in the country. The concept of Smart Growth embodies the following ten principles:
   - Smart Growth Planning - Mix of land uses
   - Takes advantage of existing community assets
   - Creates a range of housing opportunities and choices
   - Fosters "walkable," close-knit neighborhoods
   - Promotes distinctive, attractive communities with a strong sense of place
   - Includes the rehabilitation and use of historic buildings
   - Preserves open space, farmland, natural beauty, and critical environmental areas
   - Strengthens and encourage growth in existing communities
   - Provides a variety of transportation choices;
   - Makes development decisions predictable, fair, and cost-effective
   - Encourages citizen and stakeholder participation in development decisions

   The Downtown Columbia plan approved in Howard County Council Bills 58-2009 and 59-2009 as well as its enabling and conforming legislation was crafted around these ten principles as a part of the foundation for its sustainability program.

3. **The Downtown Columbia Sustainability Guidelines** – These guidelines are comprised of two interdependent subsections: the Land Component and the Community Component. The Land Component focuses on the land development elements of sustainability that are the result of land planning, site design, construction and management: water, transportation, energy, ecology, materials and livability. The Community Component addresses social elements of sustainability, such as justice, relationships, collaboration, steward- ship, vitality and service. The Community Component and its elements must be developed, refined, implemented and managed by the community itself through an extensive community stakeholder effort over time that could include the Community, the Downtown Partnership, the County’s Environmental Sustainability Board and others..

4. **The Howard County Green Building Law** – As part of the Downtown Columbia plan conforming legislation, all Downtown Columbia new construction 10,000 square feet or larger will achieve a LEED certification from the US Green Building Council of certified-level rating or higher. This guidance will assure that all major vertical building development in Downtown will target compliance with the USGBC’s five environmental categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environment as well as creative design and building expertise through additional Design Innovations.

5. **Town Center Merriweather and Crescent Environmental Enhancements Study, September 2008** – A natural resources assessment was performed by General Growth Properties on over 5000 linear feet of streams and 120 acres in the Merriweather-Symphony Woods & Crescent neighborhoods of Downtown Columbia. The report describes the findings of the assessment and articulates proposed environmental improvements to streambeds, wetlands, forests and vegetation management. These mitigations and improvements to be implemented by property Owners in these neighborhoods strive to enhance the ecological environment by restoring and maintaining the current Symphony Stream and Little Patuxent River riparian corridors. The environment will be enhanced through corridor management activities such as invasive species management, reforestation, stream bed restoration, wetlands enhancement and creation, and understory plantings.

6. **Best Management Practices for Symphony Stream and Lake Kittamaqundi Watersheds, September 2008** - General Growth Properties and its ecological consultant Biohabitats, performed watershed assessments for the three Columbia sub watersheds of Symphony Stream, Wilde Lake and Lake Kittamaqundi located up stream of *Downtown Columbia’s Town Center Merriweather and Crescent Environmental Enhancements Study* area. Watershed assessments were performed to target storm water retrofits and riparian corridor restoration opportunities for the watersheds of the two streams flowing through Downtown Columbia. The Land Component of the Downtown Columbia Sustainability Guidelines identifies the locations of those projects and the Downtown Columbia Plan makes specific recommendations about their implementation.

THE DOWNTOWN COLUMBIA SUSTAINABILITY GUIDELINES LAND COMPONENT

The Downtown Columbia Sustainability Guidelines Land Component focuses on physical or built elements of the community, as it is planned, designed, constructed and managed. It is principally crafted to provide residents and businesses with the tools to reduce their environmental footprint that will enable them to live lightly on the land.

The Land Component is fully integrated with the Downtown Columbia Design Guidelines. The Land Component is comprised of six Elements: Livability, Water, Transportation, Energy, Ecology, and Materials. Each Element is guided by an overarching goal and split into topics and sub-topics. Each sub-topic includes goals, targets, and strategies.

Although Downtown Columbia will achieve many sustainability targets at its outset, some targets will require the participation and partnership of other stakeholders. These stakeholders include Howard County, the Columbia Association, Maryland Transit Authority, future developers and the community at large. Moreover, some targets and the means of achieving them must be evaluated through the lens of a cost benefit life cycle analysis.

Designing a more sustainable community requires understanding the interrelationships among the primary physical design elements that power, shelter, move, nourish and sustain life.

- Vitality and health are encouraged by producing space that is comfortable, engaging, beautiful and inspiring
- Dense and compact mixed use development allows easy access to stores, entertainment, services, jobs and recreation
- Air and water are naturally purified by a native living landscape, providing habitat for wildlife and natural cooling
- Natural energy and water resources will be harvested for use and conserved preciously with innovative technology and high performance buildings.
- Downtown Columbia seeks to learn and mimic nature's processes to produce a community that is responsible, beautiful, inspiring, healthy, productive and enduring.

A sustainable community is not an endpoint; rather it is a continuous process of adapting and improving, so that each generation can progressively experience a higher quality of life. Like nature, Columbia must have the resources and flexibility to adapt and evolve. Moving toward sustainability requires recognition that today's practices may yet be improved. Downtown Columbia redevelopment aims to address many needed improvements while planning for an enriching future. This Plan strives to reach beyond green buildings and technology and consider all of the elements that comprise the fabric of the community.

6 ELEMENTS AREAS

The Sustainability Guidelines Land Component is organized by 6 elements:

1 LIVABILITY

2 WATER

3 TRANSPORTATION

4 ENERGY

5 ECOLOGY

6 MATERIALS

OVERARCHING GOALS

Overarching goals for each of the 6 elements guide this document.

TOPICS AND GUIDELINES

Each of the 6 elements are split into topics and sub-topics. Each sub-topic includes goals, targets, and strategies:

0.0 TOPIC

SUB-TOPIC

Goal: Sub-topic goals state the intention for specific targets and strategies, working towards the larger element goal.

Target:

- Targets list measurable metrics to achieve goals

Strategy:

- Strategies list techniques to achieve targets

SUPPORTED FRAMEWORKS & REFERENCES

The guideline goals, targets, and strategies are based on, and support, relevant County legislation and sustainability frameworks including:

- Howard County Code Green Building Law
- Howard County CB58-2009
- Howard County CB59-2009
- Howard County Green Neighborhood Guidance Document for Sites
- USGBC LEED for New Construction (NC)
- USGBC LEED for Neighborhood Development (ND)
- Living Building Challenge
- Sustainable Sites Initiative

I. LIVABILITY

Goal: Downtown Columbia will be a vibrant, walkable, and economically sustainable community in which to live, work and play. Its ability to nurture and establish connections among people and the land will create a distinct attachment to place. With a focus on meeting the needs and desires of its diverse inhabitants, Downtown Columbia embodies a commitment to equality and healthy environments.

II. WATER

Goal: Downtown Columbia will work to restore natural hydrologic processes that sustain surrounding ecosystems. New development should be designed to reduce and optimize water consumption while improving its quality upon release.

III. TRANSPORTATION

Goal: Downtown Columbia seeks to reduce regional transportation impacts by planning dense compact neighborhood facilities and fostering choice and convenience in a variety of transportation modes. Downtown Columbia will strive to restructure transportation systems to promote walking, bicycling and transit.

IV. ENERGY

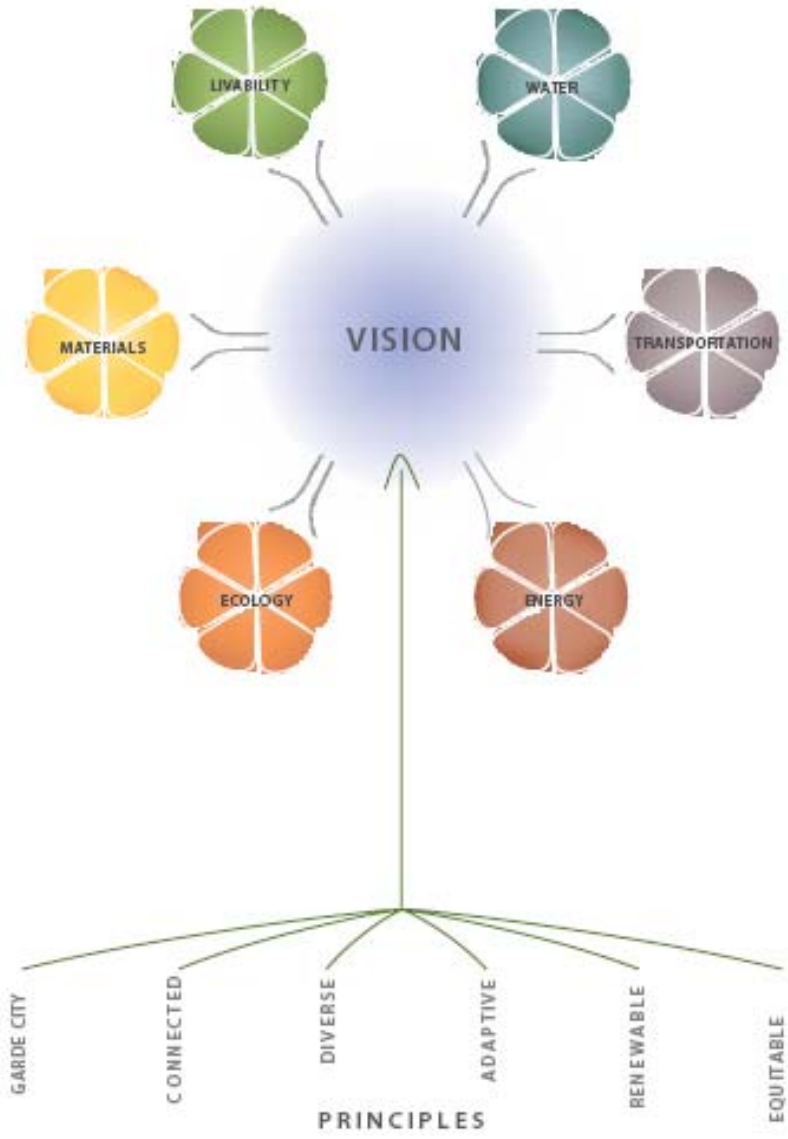
Goal: Downtown Columbia should strive to meet its energy needs through renewable sources towards becoming a carbon neutral community.

V. ECOLOGY

Goal: Downtown Columbia will work to restore and maintain a resilient, self-sustaining and diverse site ecology. The site will exist as a whole system that connects and complements the biodiversity of the region. The urban core will include a vital ecology for both humans and wildlife that focuses on healthy soil, air and water.

VI. MATERIALS

Goal: Downtown Columbia should seek to utilize materials that have been responsibly sourced, harvested and manufactured. Materials will be chosen to limit direct and indirect impacts to human health and natural systems. Downtown Columbia will be designed to be adaptable so that changes in use, maintenance, and management are easily facilitated, limiting future material needs and waste.



LIVABILITY

1.1 SENSE OF PLACE

SENSE OF PLACE

Goal: Preserve and emphasize the distinctive qualities that make Downtown Columbia unique

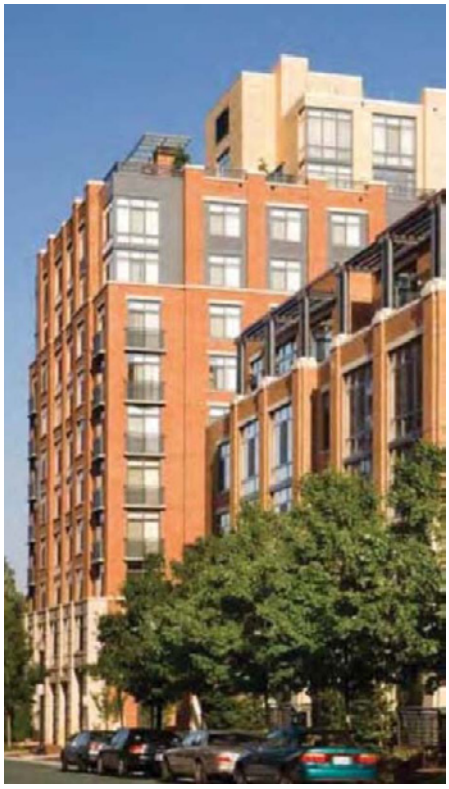
Target:

- Preserve and restore existing cultural elements and amenity spaces

Strategy:

- Make Lake Kittamaqundi and Symphony Woods Park the primary open space elements of Downtown Columbia by activating pedestrian spaces
- Preserve and restore forest and waterways and native plant communities
- Preserve such art and artifacts as “the People Tree”, “the Bear”, “the Hug”
- Commission a study to preserve and renovate the former Rouse Company Headquarters as a signature building
- Use appropriate 'artisan-quality' fixtures and outdoor furnishings

1.2 HOUSING



DIVERSITY, AFFORDABILITY, AND PROXIMITY

Goal: Create a full spectrum housing program for Downtown Columbia that will establish a flexible model that aspires to make new housing in downtown affordable to individuals earning across all income levels.

Target:

- Establish the Downtown Columbia Community Housing Foundation (“DCCHF”), as detailed in CB 58, to satisfy affordable housing requirements for downtown.

Strategy:

- Establish the DCCHF and fund the program through contributions as outlined in the Downtown Columbia CB 58-2009
- The DHCCF should be notified by the developer or joint venture of land for all residential units offered for initial sale in each new residential or mixed use building in Downtown Columbia
- The DCCHF also should be notified by the developer of all apartment units offered for rental in each new residential or mixed-use building containing rental units
- Use of DCCHF funds will be limited to providing full spectrum, below market housing in Downtown Columbia that may include, but is not limited to, funding new construction; acquiring housing units; preserving existing homes; financing rehabilitation of rental housing; developing senior, family or special needs housing; providing predevelopment, bridge, acquisition and permanent financing; offering eviction prevention and foreclosure assistance

1.3 GREEN BUILDINGS

Goal: Create buildings which limit impact to natural resources and are healthy for the environment and people

Target:

- All buildings over 10,000 gross feet or more of gross floor area, as detailed in CB 14-2010, will comply with energy and environmental site design standards of the Howard County Green Building Law

Strategy:

- Use an appropriate green building standard, such as the United States Green Building Council LEED rating system, in accordance with CB 58-2009, Howard County Code Green Building Law, and CB 14-2010

1.4 RECREATION AND RELAXATION

RECREATION AND RELAXATION

Goal: Create spaces for active and passive recreation within Downtown Columbia to promote human health and well being

Target:

- Provide a primary amenity space of at least 25,000 square feet for each neighborhood.
- Provide a minimum of 5% of the land (excluding designated open space or public right of way) within Downtown Columbia as community commons

Strategy:

- Provide a diversity of parks, promenades, plazas, or other public or semi-public open spaces connected and accessible by sidewalks

1.5 ACCESSIBILITY

ACCESS TO SERVICES, TRANSPORTATION, AND RECREATION

Goal: Provide safe and secure access between housing and diverse services, transportation, and recreation areas

Target:

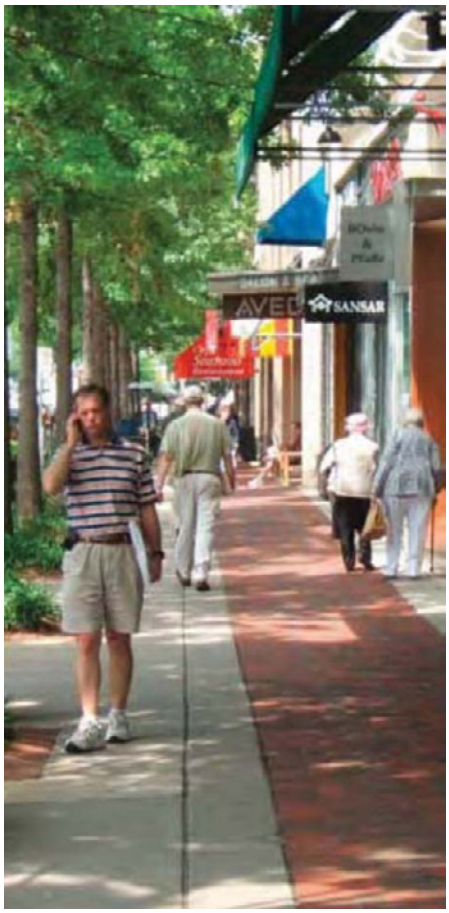
- Create a density of 50 dwelling units per net acre or more in Downtown Columbia
- Provide access to retail services within 3/4 mile or less for 90% of Downtown Columbia residents
- Locate 100% of all residential and commercial activity within a 1/4 mile of a bus or transit stop*

Strategy:

- Use mixed-use development to integrate housing, businesses, and services provide neighborhood retail and community spaces
- Integrate transportation networks throughout Downtown Columbia
- Provide adequately sized pedestrian and bicycle routes with appropriate lighting designed to meet Downtown Columbia's Pedestrian and Bicycle Guidelines

**Requires coordination with Howard County*

1.6 HUMAN SCALE AND PEDESTRIAN-ORIENTED DESIGN



WALKABILITY

Goal: Promote walkable neighborhoods for economic vitality and healthy lifestyles

Target:

- Include sidewalks for all primary pedestrian streets as specified in the Design Guidelines and Design Manual
- Design sidewalks with at least the minimum width as specified in the Design Guidelines and Design Manual per street type
- Limit driveways and sidewalk breaks on commercial and retail streets
- Provide amenities for safety, comfort and aesthetics on all sidewalks and pathways specified in the Design Guidelines and Design Manual
- Design all Downtown Columbia Neighborhoods to be within a 15 minute walk or less of the Downtown Core and a transit hub

Strategy:

- Create mixed-use neighborhoods
- Provide diverse building street frontages and ground floor use
- At least 50% of total linear feet of mixed-use and nonresidential street facades is within 1 foot of a sidewalk or equivalent provision for walking
- Comprise ≥ 75% of building's street level facade of wall openings such as windows and doors on primary pedestrian streets
- Provide street trees, appropriate landscaping, and furnishings on pedestrian streets
- Provide adequate width for accessibility and sidewalk furnishings such as light standards, benches and bike racks;
- Plant street trees at a maximum of 40 foot intervals or to shade at least 40% of the sidewalk within 10 years;
- Provide seating and landscape furnishings at regular intervals as specified in the design guidelines
- Provide clear way finding signage and visual cues for pedestrian navigation

1.7 HEALTHY FOOD

ACCESS TO LOCAL AND SUSTAINABLE FOOD

Goal: Provide access to healthy and sustainable local foods

Target:

- Do not restrict the growing of produce and fruit or nut trees on individual properties or on balconies or other outdoor private spaces
- Facilitate a farmers market within Downtown Columbia or within a 1/2 mile walk distance of Downtown Columbia

Strategy:

- Allow space for community gardening in parks or other public spaces
- Allot space for a community farmers market

WATER

2.1 STORMWATER

STORMWATER QUALITY AND GROUNDWATER RECHARGE

Goal: Improve stormwater runoff quality and groundwater recharge

Target:

- Use a combination of impervious area reduction and Environmental Site Design to reduce and treat stormwater runoff from at least 50% of the existing impervious area, including buildings, roads, sidewalks, and parking lots, in Downtown Columbia

Strategy:

- Incorporate into new development and retrofit existing infrastructure with a combination of impervious area reduction, Environmental Site Design, and other green technology solutions to water quality and quantity problems from roads, sidewalks, and parking lots
- Use vegetated roadside infiltration swales, structured soil tree pits, stormwater planters, pervious paving, forested wetlands, and vegetated buffer areas
- Consider green roofs for a substantial reduction in stormwater runoff through storage, vegetative uptake, evaporation and plant transpiration
- Implement stormwater management structure Best Management Practices remediation for conditions identified in the Best Management Practices for Symphony Stream and Lake Kittamaqundi Watersheds study and as identified on the map and chart at the end of this chapter. Work should proceed during any revitalization that includes these identified conditions.

STORMWATER QUANTITY

Goal: Reduce stormwater runoff quantity

Target:

- Do not exceed the average annual pre-development runoff volume on the site

Strategy:

- Reduce impervious cover, capture and reuse rainwater from roofs, and apply other ESD practices

STREAM CHANNEL PROTECTION

Goal: Protect stream channels and reduce sediment load to streams and the lake

Target:

- Prevent future stream channel degradation from stormwater runoff

Strategy:

- Utilize regenerative stormwater conveyance (RSC) systems, or other appropriate design practices, to reduce potential for erosion from stormwater runoff at outfalls while creating unique habitat and improved water quality
- Remediate existing stream channels as outlined in the Downtown Environmental Enhancements documents

2.2 LANDSCAPE WATER USE

POTABLE WATER REDUCTION*

Goal: Reduce potable water use in the landscape

Target:

- No potable water use for irrigation after initial plant establishment
- Minimize potable water use in landscape water features

Strategy:

- Use native and adaptive plants
- Amend and maintain soil health to retain water
- Harvest rainwater for irrigation
- Use filtered grey water or recycled water

WATER QUALITY IMPROVEMENT

Goal: Improve water quality in waterways and receiving water bodies

Target:

- Use landscape management and maintenance practices and materials that will not negatively impact waterways and water bodies
- Use landscape areas to filter and infiltrate stormwater, grey water, and recycled water

Strategy:

- Use native and adaptive plants
- Amend and maintain soil health
- Design and maintain appropriate landscape buffers to protect receiving waters
- Ensure the use of non-synthetic amendments/fertilizers/pesticides in appropriate quantities and application regimes for all landscape planting and maintenance activities

**Potable water efficiency measures in buildings shall be captured by the requirement that all buildings shall be LEED certified*

TRANSPORTATION

3.1 TRANSIT OPTIONS (SYSTEMS/NETWORKS)

DIVERSITY AND CONNECTIVITY OF TRANSPORTATION OPTIONS

Goal: Create a connected and diverse network of transportation options within Downtown Columbia to reduce vehicle miles traveled per individual in single-occupancy vehicles

Target:

- Develop a Transportation Demand Management Program (TDMP)*
- Include sidewalks, bike lanes, and transit stops on all primary pedestrian streets with a maximum block length of 400-600 ft.

Strategy:

- Facilitate pedestrian, bicycle, public transportation, and vehicular traffic within the street grid (Complete Streets)
- Create clearly demarcated lanes for different forms of transportation (bike lanes, etc.)

LOCAL AND REGIONAL CONNECTIONS*

Goal: Link transportation options within Downtown Columbia to other local and regional transportation networks

Target:

- Provide a transit hub as a central point for connections to local and regional transportation networks within Downtown Columbia

Strategy:

- Work with local stakeholders and agencies to map existing or planned local and regional transportation networks outside of Downtown Columbia and plan for local connection hubs
- Prepare transit studies as outlined in CB 58-2009

TRANSIT ACCESS AND ROUTES*

Goal: Provide convenient transit options and routes

Target:

- Establish a Transportation Management Association
- Provide access to a transit hub within a 15 minute walk for all neighborhoods and the Columbia Downtown Core
- Provide transit stops within 1/4 mile walk-distance of all retail districts, within 1/4 mile walk-distance of minimum 50% of dwelling units, and within 1/4 mile walk of all public parks and open space areas

Strategy:

- Work with stakeholders and local agencies to map and determine transportation routes to and from Downtown Columbia
- Provide infrastructure to support safe and accessible bus or shuttle stops

**Requires coordination with Howard County and/or MTA*

TRANSIT HUB AND STOP AMENITIES

Goal: Create safe, comfortable, and convenient transit hub and stops to encourage use of public transit system

Target:

- Provide adequate signage, lighting, seating, and shelter from sun, wind, and rain for transit hub and stops

Strategy:

- Provide clear signage to direct transit users to hubs and stops
- Post route maps and schedules at transit hub and stops
- Provide enclosed, sheltered areas for all transit hub and stops with seating

3.2 BICYCLE TRANSPORTATION

BICYCLE INFRASTRUCTURE

Goal: Facilitate and encourage biking as transportation

Target:

- Provide secure bicycle storage for at least 5% of planned occupancy in commercial and retail areas and at least 15% planned occupancy in residential areas
- Designate bike lanes on streets as defined in the Design Guidelines and Design Manual
- Create bike lanes or multi-use pathways to connect all major parks and open space, residential neighborhoods, and commercial centers

Strategy:

- Include bike lanes or multi-use pathways on main commercial and retail streets and neighborhood connector streets
- Provide bike racks on commercial and retail sidewalks and/or on street parking spaces and/or in parking garages
- Provide weather protected bike storage in multifamily residential buildings, and in office buildings over 10,000 square feet
- Encourage bike sharing and rental programs

3.4 CARS AND PARKING

REDUCE VEHICULAR TRIPS AND PARKING

Goal: Reduce vehicular trips through "park once" design scenarios and alternative transportation measures and limit surface parking areas within Downtown Columbia

Target:

- Provide 5% preferred parking for low emission, fuel efficient, car share, and carpool vehicles
- Distribute 80% of parking between on-street parking and parking structures

Strategy:

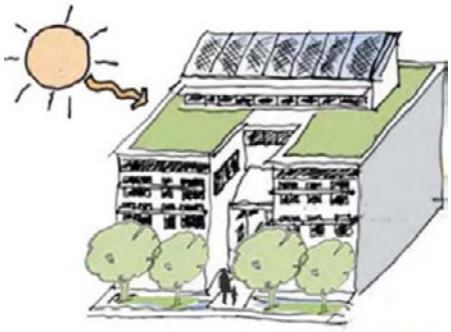
- Encourage a "park once" scenario for residents and visitors
- Encourage shared parking scenarios
- Promote car-sharing programs
- Provide convenient pedestrian, bicycle, and transit connections for parking structures to promote residents and visitors to park only once within Downtown Columbia
- Promote the shift to transit through incentives and demand management programs such as cash-out programs or price of parking

ENERGY

4.1 DEMAND-SIDE MANAGEMENT

BIOCLIMATIC DESIGN

Goal: Maximize site design to reduce building heating and cooling energy use and provide desirable landscape microclimates



Target:

- When possible, orient buildings to maximize southern exposure for passive solar gain
- Use deciduous street trees or landscaping trees within 30 feet of the south facing building façade where practical
- Create a diversity of sun and shade areas in parks and open space
- Plant trees along paved streets and parking areas to maximize shade
- Provide parks with a diversity of solar exposure and shading including amenities such as benches or seating in both sun and shade

Strategy:

- Plan streets and buildings to allow solar access for passive solar gain, and natural lighting
- Use roof and window shades to screen summer sun on south, east and west sides of buildings
- Plant deciduous trees along the south, east and west facing building facades to shade the buildings in summer and allow solar access/gain in winter

INFRASTRUCTURE ENERGY EFFICIENCY*

Goal: Reduce environmental impacts of landscape and site energy use

Target:

- Reduce site infrastructure and landscape energy use by at least 15% from base- line energy use

Strategy:

- Install LED traffic lights
- Install energy efficient street and landscape lighting
- Install street and landscape lighting with photo sensors
- Install street and landscape lighting with integral solar panels
- Install timed lighting or manually controlled additional lighting for occasional special needs in public spaces (sports fields, outdoor theatres, etc.)
- Install energy efficient irrigation and water pump infrastructure of landscape features
- Install photovoltaic systems on public amenity buildings (rest rooms, maintenance, etc.) surface parking areas, and other locations to provide an alternative energy source supplement for infrastructure needs

**Requires coordination with Howard County*

4.2 SUPPLY AND HARVESTING

ON-SITE ENERGY GENERATION

Goal: Generate renewable energy at a building, neighborhood, or community scale with appropriate technologies to reduce impacts from use of fossil fuels

Target:

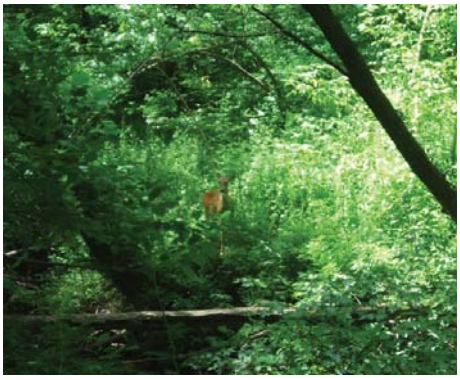
- Provide some form of on-site renewable energy for at least 20% of new buildings by build out

Strategy:

- Facilitate/design/construct a variety of options for alternative energy production including solar photovoltaic, solar thermal, micro wind turbine, district heating and cooling
- Use net metering with local utility
- Covenants, conditions and restrictions (CC&Rs) will not restrict solar thermal or PV installations on rooftops or south facing facades
- Use photovoltaic panels as shade structures on bus stops, surface parking, building awnings, and park facilities

ECOLOGY

5.1 ENVIRONMENTAL ENHANCEMENTS



ENVIRONMENTAL ENHANCEMENTS

Goal: Restore and enhance the natural environment and ecosystem services provided by natural and formal landscapes and open spaces

Target:

- Complete all environmental enhancements based on the Merriweather and Crescent Environmental Enhancements Study

Strategy:

- Restore native plant communities and remove and manage invasive species by following the recommendations set in the Environmental Enhancements Report
- Provide and ensure long term funding for maintenance

5.2 ECOLOGICAL CONNECTIVITY

Goal: Preserve and restore natural corridors for wildlife, seed dispersal, and ecosystem services

Target:

- Complete all environmental enhancements based on the Merriweather & Crescent Environmental Enhancements Study.

Strategy:

- Enhance Symphony Stream and Little Patuxent River riparian corridors through stream and wetland restoration, invasive species management, reforestation, and under story planting
- Provide low-impact pedestrian trails through ecological corridors for recreation and education
- Provide wildlife corridor roadway crossings through the use of arched bottomless culverts at the locations and as shown in the Merriweather & Crescent Environmental Enhancements Study.
- Provide and ensure long term funding for maintenance

5.3 URBAN ECOLOGY

Goal: Create a green infrastructure network within the Downtown Columbia Core Area through urban forestry, soil health conservation, integrated stormwater management, and patches of native habitat where space allows within the urban fabric

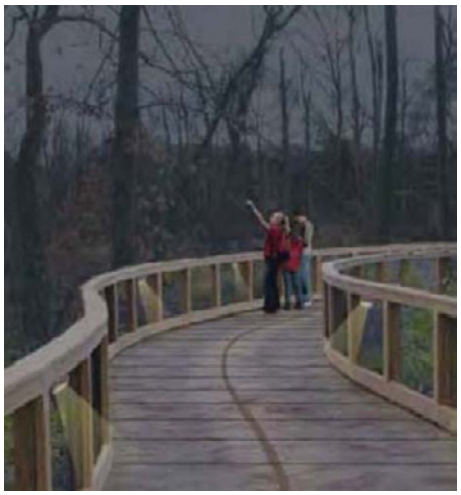
Target:

- Create a connected network of street trees on 90% of streets
- Plant streets with a diversity of tree and other plant species

Strategy:

- Use streets, green areas, open space, and rooftops to create an urban forest with healthy soil for stormwater and habitat benefits
- Use a mix of regionally appropriate native and adaptive species
- Provide and ensure long term funding for maintenance

5.4 PROTECT/RESTORE/ENHANCE LAKEFRONT ECOLOGY



Goal: Enhance the ecology/habitat in and around Lake Kittamaqundi

Target:

- Design lakefront areas to reduce direct stormwater and irrigation runoff to lake

Strategy:

- Provide landscape buffers of native plants or meadow areas adjacent to the lake edge
- Plant native species in bio-regionally appropriate habitat assemblages to improve local ecology and provide desirable bird, butterfly and pollinator species habitat
- Minimize impervious pavement in areas near lakefront
- Create interpretive access points

5.5 LIGHT POLLUTION*

REDUCE LIGHT POLLUTION

Goal: Promote energy-efficient lighting for public safety which minimizes light pollution impacts to habitat and dark sky visibility

Target:

- Utilize photo sensors and/or timers and/or motion sensors
- Use shielded or directional exterior lighting
- Reduce use of directional up-lighting

Strategy:

- Use energy efficient luminaries
- Use luminaries with shield or directional lighting; choose and install accent lighting that will shine directionally on specific locations or objects without light trespass beyond 45 degrees above horizontal
- Use luminaries that comply with ranking published in LEED ND or approved by the International Dark-Sky Association

**Requires coordination with Howard County*

6.1 SMART DESIGN

DESIGN BASED ON AVAILABLE MATERIALS

Goal: Avoid creation of material waste at the design stage

Target:

- Use or plan for reuse of 90% or more of purchased/acquired materials in construction

Strategy:

- Design based on material availability and standard dimensions

6.2 CONSTRUCTION MATERIAL SELECTION

USE SUSTAINABLY SOURCED MATERIALS

Goal: Use environmentally preferable materials that minimize toxicity and embodied energy in the design and construction of infrastructure

Target:

- Acquire ≥ 50% of all site construction materials from reused, recycled content, regional, and rapidly renewable sources

Strategy:

- Reuse materials on-site in their original form or location
- Reuse materials on site in another form or location
- Use material with recycled content
- Use materials sustainably sourced or manufactured locally
- Use rapidly renewable materials
- Use materials certified and sustainably harvested
- Choose materials based on a life cycle analysis
- Use materials with non-toxic materials sealants or additives
- Choose materials based on life span, maintenance and recyclability considerations

HEAT ISLAND EFFECT

Goal: Reduce heat island effect from paving

Target:

- Use light-colored and/or high albedo materials with a minimum Solar Reflectance Index of 29 for at least 30% of site hardscape surfaces
- Use light-colored and/or high albedo shade structures over dark-colored and/or low albedo surfaces such as parking and top level of parking structures

Strategy:

- Use lightly colored or high albedo materials for paved surfaces (walkways, plazas, streets, parking lots/structures, etc)
- Use pergolas, trees, and/or photovoltaic arrays to shade surface parking or the top level of parking structures

6.3 CONSTRUCTION WASTE

MANAGE CONSTRUCTION WASTE

Goal: Reduce the amount of construction waste sent to landfills

Target:

- Divert 80% or more of non-hazardous construction waste from landfills or incineration

Strategy:

- Reduce quantity of construction waste through smart design inspect, store and manage materials carefully to prevent damage and rejected materials
- Plan for separation of different types of construction wastes for reuse or recycling

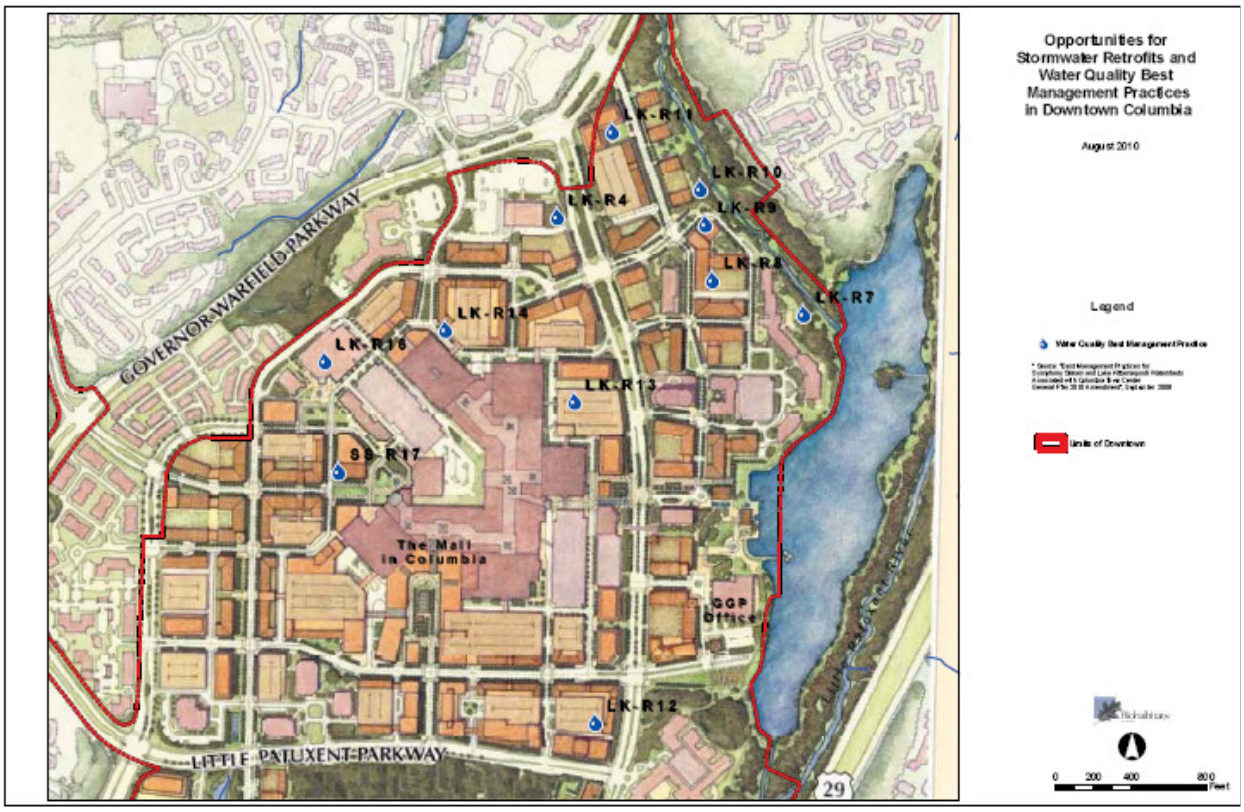
BEST MANAGEMENT PRACTICES FOR SYMPHONY STREAM AND LAKE KITTAMAQUNDI

Remediation locations

General Growth Properties and its ecological consultant Biohabitats, performed watershed assessments for the three Columbia sub watersheds of Symphony Stream, Wilde Lake and Lake Kittamaqundi located up stream of *Downtown Columbia's Town Center Merriweather and Crescent Environmental Enhancements Study* area. Watershed assessments were performed to target storm water retrofits and riparian corridor restoration opportunities for the watersheds of the two streams flowing through Downtown Columbia.

The chart to the right captures projects located within Downtown Columbia from this study. As Downtown develops, property owners should consult this list and the recommendations and suggestions in the Best Management Practices document for ways to include environmental restoration and enhancements in their projects.

Location	Existing Conditions	Drainage Area (acres)	Target Water Quality Volume (cubic ft)
LK-R04 (One Mall North on Little Patuxent Parkway)	West side of parking lot drains to single storm drain inlet that is upstream of an unutilized swale and depression.	1.50	3,790
LK-R07 (Sheraton Hotel)	Outfall conveying flows from hotel, adjacent parking lot, and commercial areas discharges to channel behind the Sheraton. The channel cuts through an open space with trees and grass before crossing the recreational path and entering Lake Kittamaqundi	8.50	17,550
LK-R08 (Sheraton Hotel)	Outfall conveying flows from hotel parking lot and adjacent commercial areas discharges to top of steep streambank.	3.40	9,860
LK-R09 (Parking Lot between Chamber of Commerce and Sheraton Hotel on Little Patuxent Parkway)	Outfall conveying flows from parking lot and commercial areas discharges to top of steep streambank, causing pipe sections to separate and large scour hole and eroded channel.	4.70	8,850
LK-R10 (Chamber of Commerce Office Building on Little Patuxent Parkway)	Existing pond lacks direct inflow and may or may not have been designed for stormwater management.	6.90	14,030
LK-R11 (Chamber of Commerce Office Building on Little Patuxent Parkway)	Small portion of Chamber of Commerce parking lot drains to eroded swale via curb cut.	0.60	1,190
LK-R12 (10-70 Columbia Corp Center)	Outfall conveying flows from parking deck, adjacent parking lot, and commercial areas discharges to open channel/ existing stormwater facility. The vegetated channel cuts through an open space with trees and grass before passing under Governor Warfield P	6.70	13,750
LK-R13 (Columbia Mall)	The east parking structure of the mall appears to drain to the storm sewer system with no stormwater treatment.	1.80	5,560
LK-R14 (Columbia Mall)	The north parking lot of the mall appears to drain to the storm sewer system with no stormwater treatment.	10.20	28,950
LK-R16 (Columbia Mall)	The roof drains of the AMC Columbia 14 Cinemas building appear to drain to the storm sewer system with no stormwater treatment.	1.70	4,930
SS-R17 (Columbia Mall)	The west parking lot of the mall appears to drain to the storm sewer system with no stormwater treatment.	18.70	46,790



COLUMBIA TOWN CENTER MERRIWEATHER AND CRESCENT ENVIRONMENTAL ENHANCEMENTS STUDY

A natural resources assessment was performed by General Growth Properties on over 5000 linear feet of streams and 120 acres in the Merriweather-Symphony Woods & Crescent neighborhoods of Downtown Columbia. The report describes the findings of the assessment and articulates proposed environmental improvements to streambeds, wetlands, forests and vegetation management. These mitigations and improvements to be implemented by property Owners in these neighborhoods strive to enhance the ecological environment by restoring and maintaining the current Symphony Stream and Little Patuxent River riparian corridors. The environment will be enhanced through corridor management activities such as invasive species management, reforestation, stream bed restoration, wetlands enhancement and creation, and understory plantings.

TABLE 5. SUMMARY OF PROPOSED IMPACTS & ENHANCEMENTS
(all numbers approximate)

	EXISTING	IMPACT	RESTORATION CREATION	RESTORATION ENHANCEMENT	TOTAL
Forest (Acres)	106	41	34	56	90
Wetland (Acres)	5	0.1	2	5	7
Stream (Linear Feet)	5000	945	0	4880	4880
Floodplain (Acres)	40	2.74	2	47	49
Trees (Individuals)	1214	588	13600[1]	5600[2]	19200

[1]Based on reforestation using 400 trees per acre. [2]Based on supplementation of existing forest using 100 trees per acre.

This plan was created prior to adoption of CB58-2009, may not reflect the actual roadway network or neighborhood configurations identified in the final legislation.

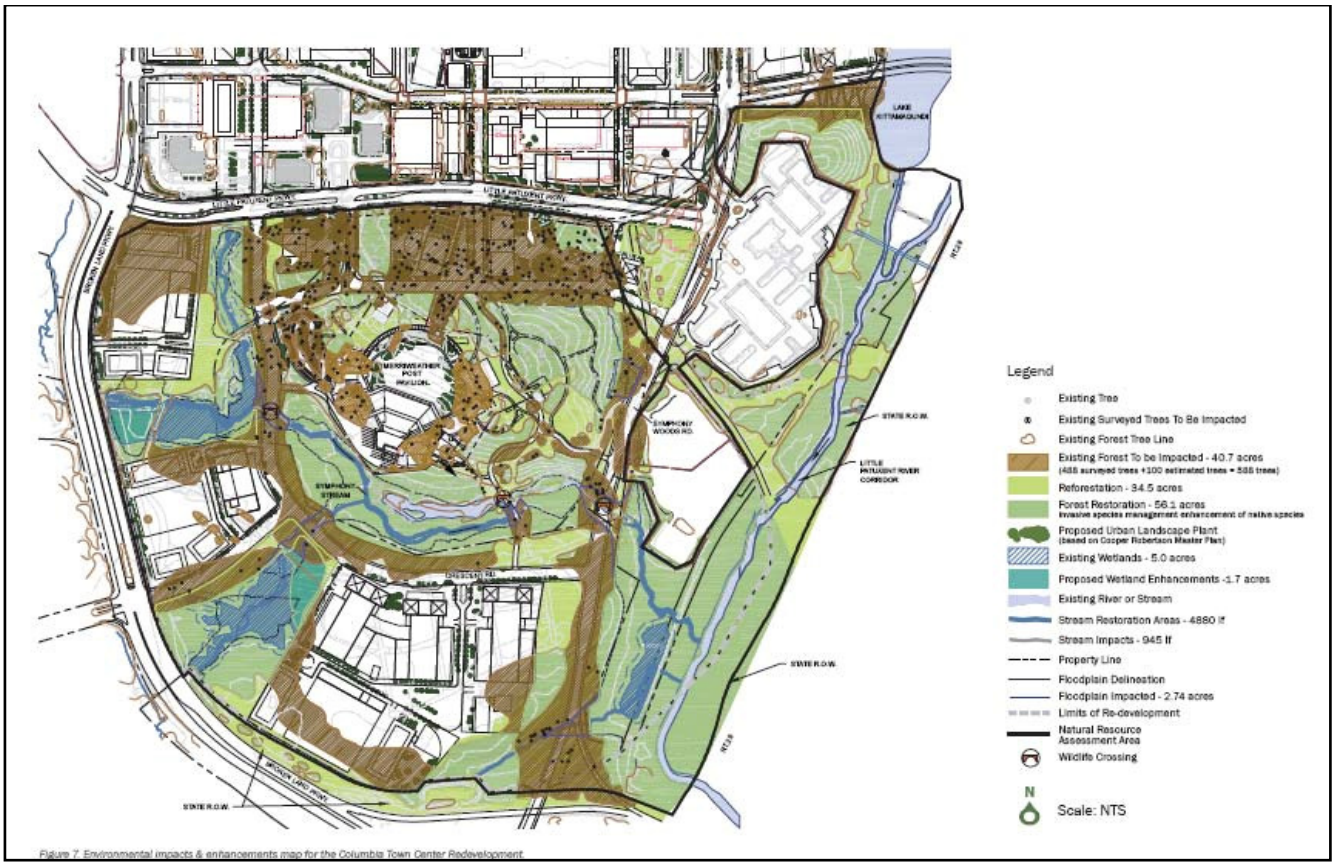


Figure 7. Environmental impacts & enhancements map for the Columbia Town Center Redevelopment

A.2 ON-ROAD BICYCLE FACILITIES

ON-ROAD BICYCLE FACILITIES
DESIGN GUIDELINES

Downtown Columbia, MD

TooleDesignGroup

These guidelines are intended to compliment the Howard County Downtown Columbia Downtown-Wide Design Guidelines and provide supplemental guidance for the planning and design of on-road bicycle facilities and bike parking areas within Downtown Columbia, MD. These guidelines are intended to supplement Federal, State, and local design standards and specifications for the planning and design of bicycle facilities. An Engineering Analysis is recommended when designing all on-road bicycle facilities.

The following guidance and standards are referred within this guideline:

AASHTO Guide for the Development of Bicycle Facilities
AASHTO A Policy On Geometric Design of Highways and Streets
Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration
APBP Bicycle Parking Guidelines, Association of Pedestrian and Bicycle Professionals

Revised: August 29, 2011

Table of Contents

Section 1

On-Road Bicycle Facilities

Standard Bike Lanes
Marked Shared Lanes
Buffered Bike Lanes
Cycle Tracks

Standard Bike Lanes

Description / Purpose

On-road bike lanes provide an exclusive space for bicyclists through the use of lines and symbols on the roadway surface. Bike lanes are for one-way travel and are normally provided in both directions on two-way streets and/or on one side of a one-way street. Bicyclists are not required to remain in a bike lane when traveling on a street, and may leave the bike lane as necessary to make turns, pass other bicyclists, or to properly position themselves for other necessary movements. Bike lanes may only be used temporarily by vehicles accessing parking spaces, entering or exiting driveways/alleys, or making turns onto intersecting streets.

Application

Bicycle lanes should be a minimum of 5' wide when adjacent to a curb or parking lane, and 4' wide minimum with no adjacent obstructions. (Bike lane between travel lanes).

Bicycle lanes are normally placed on the right side of the road to reflect the general principle of slower traffic keeping to the right.

Wider bicycle lanes may be desirable when adjacent to a narrow parking lane with high parking turnover, in areas of high bicycle use, or along higher speed roadways.

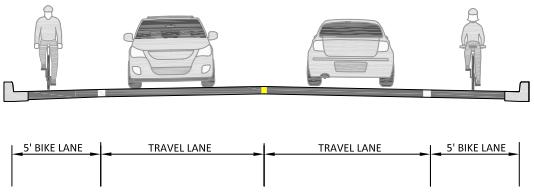
Design Considerations

- Where additional space is available, consider providing a buffered bike lane (Refer to Buffered Bike Lanes).
- Bike Lanes should have a smooth riding surface. Utility covers should be adjusted flush with the surface of the lane.
- Bike lanes should be provided with adequate drainage (bicycle-safe drainage grate) or slope to prevent ponding, debris accumulation, and other hazards for bicyclists.
- On streets where sustained downhill grades are long enough to result in faster bicyclist speeds, a bicycle lane may be provided in the uphill direction with a shared lane marking in the downhill direction. (Refer to Marked Shared Lanes).

Sources for Design Guidance

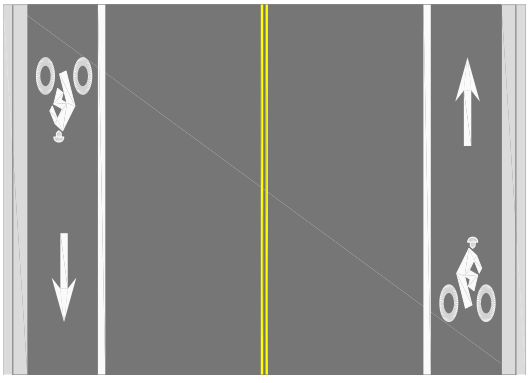
- AASHTO Guide for the Development of Bicycle Facilities
- AASHTO A Policy On Geometric Design of Highways and Streets
- MUTCD

Bike Lane
Source: TDG Library



Section

Bike Lane
Source: TDG Library



Plan

Marked Shared Lanes

Description / Purpose

Marked shared lanes are shared lanes that have special bicycle markings to provide a higher level of guidance to bicyclists and motorists. The symbols (called "shared lane markings") alert motorists of locations where bicyclists should be expected to ride and encourage safer passing behaviors.

Application

Shared lane markings are typically used on streets where right-of-way constraints limit the possibility of providing bike lanes.

On streets with narrow lanes, the shared lane marking is typically placed in the center of the lane to indicate that motorists must change lanes to pass bicyclists.

On narrow travel lanes adjacent to on-street parking, shared lane markings should be placed in a location that is outside of the door zone of parked vehicles.

Shared lane markings can be used to fill a gap between two sections of roadways that have bike lanes or between a shared use path and a nearby destination.

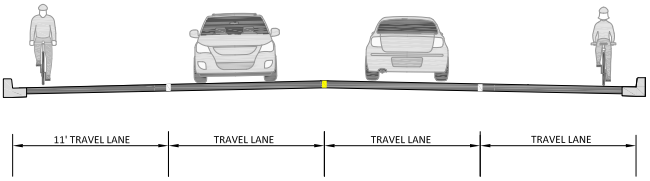
Shared lanes can be used to complete connections between bike lanes and other bicycle facilities.

Design Considerations

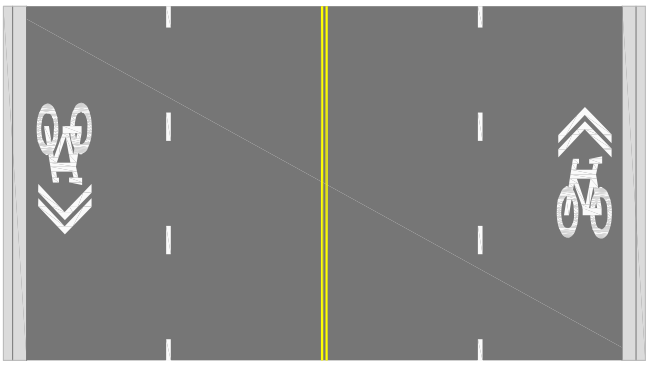
- Marked shared lanes should not be used on roads with a speed limit above 35mph.
- Marked shared lanes should be provided only after other measures to provide bike lanes or other facilities have been proven to not be feasible.
- Shared lane markings should be marked on an alignment that represents a practical path of bicycle travel under typical conditions. For some streets, this may be the center of a shared travel lane.
- Minimum marking placement is 11' from face of curb where parking is permitted and beyond door zone, or 4' minimum from face of curb, when parking is not permitted.
- Bike Chevron (sharrows) symbol dimensions are 9'-3" x 3'-3" and should be placed at a minimum at beginning and end of each block, or more frequently.
- Shared lane markings are not appropriate on paved shoulders or in bike lanes.

Sources for Design Guidance

- AASHTO Guide for the Development of Bicycle Facilities
- AASHTO A Policy On Geometric Design of Highways and Streets
- MUTCD



Section



Plan

Shared Lane Marking
Source: TDG Library

Buffered Bike Lanes

Description / Purpose

Buffered bike lanes are created by painting a flush buffer zone between a bike lane and the adjacent travel lane. While buffers are typically used between bike lanes and motor vehicle travel lanes to increase bicyclists comfort, they can also be provided between bike lanes and parking lanes in locations with high parking turnover to discourage bicyclists from riding too close to parked motor vehicles.

Application

Buffered bike lanes can be provided on any street with sufficient space for a bike lane and additional separation from either motor vehicle travel ways or parking lanes.

Buffered bike lanes provide space for cyclists to pass other bicyclists without encroaching into the travel lane, mitigate for obstacles in the bike lane (i.e. drainage inlets, debris, or manholes), or provide additional separation on roadways with higher speeds.

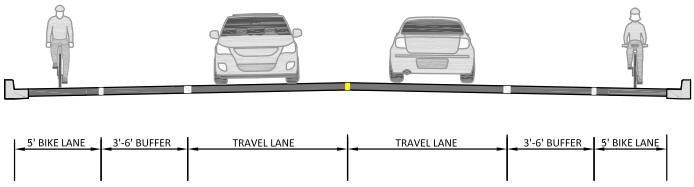
Design Considerations

- The buffered space should strive to be 3-ft minimum width, however width may vary depending upon the available space, and need for separation. Buffers should be painted with solid white lines and cross hatches per MUTCD.

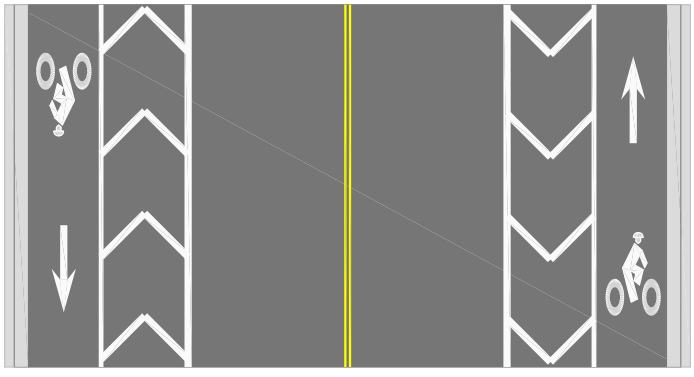
Sources for Design Guidance

- AASHTO Guide for the Development of Bicycle Facilities
- AASHTO A Policy On Geometric Design of Highways and Streets
- MUTCD

Buffered Bike Lane
Source: TDG Library



Section



Plan

Cycle Tracks

Description / Purpose

Cycle tracks are bikeways that are physically separated from the adjacent roadway through the use of a raised median, striped buffer, or on-street parking. Cycle tracks are for the exclusive use of bicyclists and provide added separation that enhances the experience of bicycling on urban streets. Cycle tracks can either be one-directional or two-directional and can be provided on both sides of two way streets, or on one side of one-way streets.

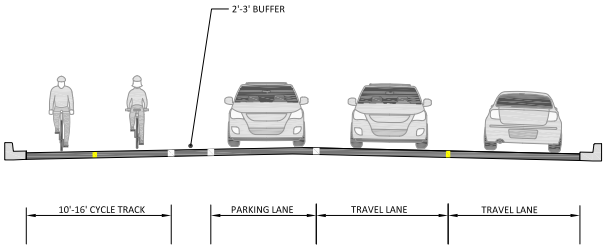
Application

Cycle tracks are typically installed on streets with higher traffic volumes and speeds, with long blocks and therefore fewer intersections.

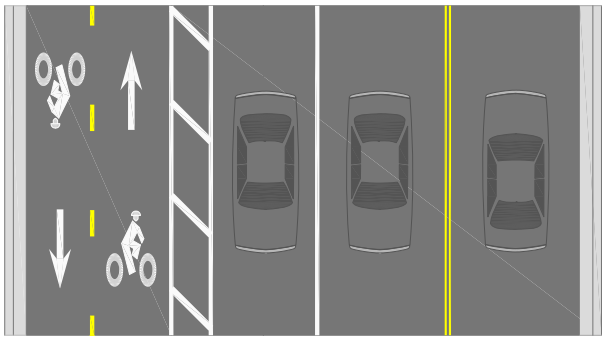
Cycle tracks are often placed between a parallel parking lane and the curb.

Cycle tracks may be useful on streets that provide connections to off-street trails, since bicyclists on these streets may be more accustomed to riding in a space separated from motor vehicle traffic.

Cycle Track
Source: TDG Library



Section



Plan

Design Considerations

- Intersection design for cycle tracks is complex and requires careful attention to conflicts with turning vehicles, signal phasing and operations, stop bars, crosswalk design, and ADA compliance.
- The desired width of a single directional cycle track is 5 feet, when adjacent to on-street parking. A 3-foot buffer should be provided between parking and the cycle track, which serves as a pedestrian loading and unloading zone.
- In areas with higher bicycle volumes, single direction cycle tracks should be 7 feet wide to allow bicyclists to pass one another.
- At driveway and low volume street crossings, pavement markings should be provided to indicate that bicyclists have the right-of-way.
- Cycle tracks require increased parking restrictions compared to bike lanes to provide for visibility between bicyclists and motorists at intersections.
- When cycle tracks are provided on the same side as transit operations, stops, and waiting areas, a buffer should be provided between the cycle track and the roadway to reduce conflicts between bicyclists and pedestrians loading and unloading.

Sources for Design Guidance

- AASHTO Guide for the Development of Bicycle Facilities
- AASHTO A Policy On Geometric Design of Highways and Streets
- MUTCD

Cycle Track
Source: TDG Library

Section 2

Bicycle Parking

Standard Bike Rack Design - Exterior
Bike Rack Site Design - Exterior
Bike Shelter Design - Exterior

Standard Bike Rack Design - Exterior

Description / Purpose

Bicycle racks allow bicyclists to safely park their bikes if they wish to stop along the way or have arrived at a destination. Bicycle racks also prevent damage to trees and street furniture, as well as keep bicycles in an orderly appearance and from blocking pedestrian passageways. Bicycle parking is an important component in order to encourage and accomodate bicyclists throughout Town Center.

Application

Bike racks should be located in locations easy to locate and access at parking areas, commercial areas, and within close proximity to possible destinations.

A bicycle rack should provide proper support with two or more points of contact on the frame of the bicycle. Bicycle racks that only support the wheel of the bike are not recommended.

Two general bike rack styles include:

Inverted "U"- recommended bicycle rack for most site conditions, allowing the bicycle's frame to be supported at two points while also holding two bicycles.

Post and Ring - recommended bicycle rack for constrained sites, allowing the bicycle's frame to be supported at two points of contact. This rack is within the footprint of the bicycle and may also be incorporated into the design of parking meters.

Design Considerations

- Bike racks should be located without interfering with traffic flow or routine maintenance; this includes the space needed for a locked bicycle. (Refer to Bike Rack Site Design - Exterior).
- Bike racks should accommodate the dimensions of a conventional bicycle of 72" in length, 48" in height, and 24" handlebar width.
- Bike racks should be properly located and fit the context of a site's streetscape and/or landscape setting.
- Opportunities for art or customized racks are possible; however, they should be recognizable as bike parking.
- Racks should be located in highly visible locations to promote usage and security.

Sources for Design Guidance

- APBP Bicycle Parking Guidelines
- AASHTO Guide for the Development of Bicycle Facilities

Post and Ring Bike Rack
Source: TDG Library

"Inverted U" Bicycle Rack
Source: TDG Library

"Inverted U" Customized Bicycle Rack
Source: TDG Library

Bike Rack Site Design - Exterior

Description / Purpose

Bike rack site design should facilitate movement around and between bike racks. Short-term bike parking may consist of a single rack, while long -term parking may include a group of racks beneath a shelter. Specific parking needs should be determined through a site specific needs analysis.

Application

Short term bicycle parking consists of simple bicycle racks located in front of a building or destination, and therefore site design focuses on convenience, utility, and security. Short-term bicycle parking should be convenient to the entrance of the cyclist's destination, visible from the destination to reassure cyclists about the security of the rack, and located in high-traffic areas with passive surveillance or eyes on the street.

Bicycle racks perpendicular to the curb should have a minimum spacing of 36" from the curb.

Bicycle racks parallel to the curb should have a minimum spacing of 24" from the curb.

Typical bicycle rack spacing of 48" is recommended, (36" minimum).

Avoid handlebar/rack/basket conflicts through proper rack spacing.

Allow two feet of clearance around each rack for users to be able to access and securely lock bicycles from the side.

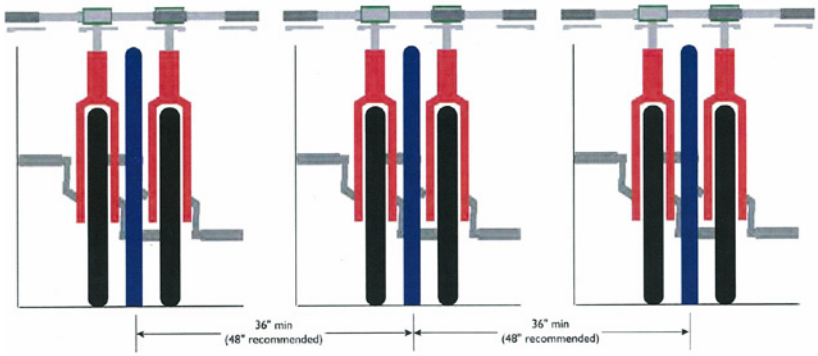
Design Considerations

- Racks placed too close together or too close to nearby objects such as walls or trees may be completely unusable.
- Distance to other racks
  - aligned end to end - 96" between racks
  - side by side - 36" minimum, 48" preferred
- Distance from curb
  - perpendicular to curb - 36"
  - parallel to curb - 24" minimum from back of curb
- Ensure adequate end and side clearance for users to maneuver bicycles around the parking area.
- A greater buffer space from moving traffic can be achieved by positioning bicycle racks at a 60 degree angle.
- Bike racks should be placed at locations near front entrances of buildings and should not be hidden from view to prevent theft.
- For long term bicycle parking, shelters are recommended. The location of the shelter is considered by the setback requirements, providing enough space for pedestrians, overhead, and visibility clearances. (Refer to Bike Shelter Design - Exterior)

Sources for Design Guidance

- APBP Bicycle Parking Guidelines
- AASHTO Guide for the Development of Bicycle Facilities

Covered Parking
Source: TDG Library



Typical Rack Spacing
Source: APBP Bicycle Parking Guidelines

Inverted "U" Bicycle Parking
Source: TDG Library

Bike Shelter Design - Exterior

Description / Purpose

Bike Shelters have many benefits for cyclist as well as pedestrians since both parties can benefit from the shelter from inclement weather as well as protection from the sun and cold. Kiosk shelters can also provide cyclists and pedestrians with travel information, such as bicycle maps and transit routes.

Application

Typical bike shelters should be placed on sidewalks or on curb extensions, which minimizes encroachment into the pedestrian path.

Bike shelter roof span should be a minimum of 9 feet to clear the length of the bikes underneath,

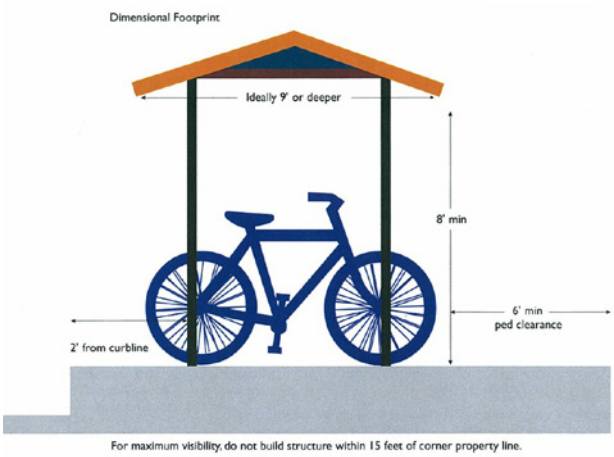
Bike shelters should be placed at locations where bicyclists frequently park for longer periods of time. The design of bike shelters should be context sensitive and site specific while considering the character of nearby amenities.

Design Considerations

- Setback, clearances, and building requirements per local and state guidelines should be considered when installing bicycle shelters.
- The consideration of lighting should be taken into account to assure safety in a bike shelter. Glass roofs provide light from street lamps to pass through the shelter.

Sources for Design Guidance

- APBP Bicycle Parking Guidelines
- AASHTO Guide for the Development of Bicycle Facilities



Sample Clearance Guidelines
Source: APBP Bicycle Parking Guidelines

Covered Shelter Bicycle Parking
Source: TDG Library

Covered Shelter Bicycle Parking with Informational Kiosk
Source: APBP Bicycle Parking Guidelines

DESIGNCOLLECTIVE

ARCHITECTURE
PLANNING
INTERIORS
LANDSCAPE ARCHITECTURE
GRAPHICS

601 EAST PRATT STREET, SUITE 300
BALTIMORE, MARYLAND 21202
TEL 410.685.6655 FAX 410.539.6242

312 BLACKWELL STREET, SUITE 100
DURHAM, NORTH CAROLINA 27701
TEL 919.381.9322 FAX 919.381.9323

WWW.DESIGNCOLLECTIVE.COM