



## TOWN OF BOONE

### Wellness District Small Area Plan



Adopted August 20, 2015

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# ACKNOWLEDGEMENTS

## **The Town of Boone**

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Mayor Andy Ball

Council Member Quint David

Council Member Lynne Mason

Mayor Pro-Tem Rennie Brantz

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Council Member Jennifer Pena

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Vice-Chair Yogi Collins

Christopher Jackson-Jordan

Linda Wise

### **Tree Board:**

Chair Loretta Clawson

Dr. James Hamilton

Vice-Chair Michael Kirk

### **Town Staff:**

John Ward, Town Manager

Jane Shook, Development Coordinator

Chris Miller, GIS Coordinator

Bill Bailey, CPM, CZO, Planning Director

Brian Johnson, Urban Design Specialist

Marlene Crosby, Administrative Support Specialist

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## Introduction

### Why A Small Area Plan?

The Boone area is a growing community and health care technology is changing at an ever-increasing rate. That's why the Town has developed a Small Area Plan to assure our community has the capacity to meet its future medical needs.

Our service area now includes more than 350,000 people from several counties and two states and that number is expected to increase as our community grows. In response to rapid changes in the field of health care and a realization that our current facilities are spread all over town and are reaching capacity, the Town Council authorized the preparation of this Small Area Plan to guide the growth and development of health care providers, facilities and supporting uses.

### Intent

Boone's Wellness District Small Area Plan (The Plan) is designed to meet the expanding health care needs of Boone and surrounding areas in the years to come. The purpose of The Plan is to support economic development and direct investment efforts of the various existing and future institutional users located within the Plan Area.

The Plan is intended to provide for a mix of uses with a concentration on medically related academic, wellness, multifamily residential, commercial and support uses within a more urban, pedestrian-friendly environment.

Urban design (the design of buildings, streets and other public spaces and their interrelationships) are a major factor in determining the district's economic, social and cultural sustainability. The Town's zoning and planning documents, as well as other development standards and input from stakeholders were influential in guiding these decisions and shaping the Plan area's character, quality of life and sustainability.

### District Area

The proposed Wellness District (See Figure 1: District Map) is located in the southeastern portion of the Town of Boone bounded by Watauga Medical Center to the east, US Highway 321 (Blowing Rock Road) to the south, Winklers Creek to the west and the Middle Fork South Fork New River to the north totaling approximately 101 +/- acres. The area is comprised of a hospital, medical offices, multi-family residential complexes and small office buildings.

### District Background

Development in the area has occurred over several decades with no design consistency. Most of the structures were constructed in the 1960's and 70's reflecting the automobile and thoroughfare-oriented development standards predominant at the time. Many sites have large parking lots fronting streets with buildings set furthest away. Most structures are one or two stories with no predominate style of architecture, signage or lighting. There are some sidewalks in the area, but very little interconnectedness between buildings and parcels. Pedestrians, reportedly, feel unsafe crossing parking lots to access businesses. Few sites share access, parking, landscaping or other amenities.

In recent years, Appalachian State University began exploring the opportunity to relocate the College of Health Sciences to an 8.98+ acre site adjacent to and north of Watauga Medical Center at the intersection of State Farm Road and Deerfield Road. The plan includes a 203,000+ SF academic facility with associated parking and amenities. With the combined growth of Appalachian State University (the Town's largest employer), and Watauga Medical Center (the Town's second largest employer), the relocation of the university's College of Health Sciences is anticipated to spur economic development and revitalization that will "lift" the entire district.



*Existing Site Conditions*

# Introduction

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## Guiding Principles

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The Boone 2030 Land Use Plan identifies the area around Watauga Medical Center as a regional, mixed-use activity center appropriate for commercial and employment development as well as the area's highest density housing in the form of an urban transect zone or district. The Wellness District will become a vibrant, mixed-use, urban neighborhood with general development principles shaping its redevelopment. The following principles serve as the basis for the design standards contained in this document:

- Promote a pedestrian-oriented, human-scale, mixed-use urban form.
- Facilitate infill redevelopment with higher densities and a more urban feel.
- Maximize connectivity and access. Successful revitalization requires a multimodal circulation network where workers, visitors and residents may conveniently walk, bike, drive or ride public transportation to destinations within and outside of the district.
- Establish building forms and street standards to shape the public realm
- Create a sense of place and neighborhood identity.
- Require excellence in the design of the public realm and of buildings fronting public spaces.
- Encourage creativity, architectural diversity and exceptional design. Standards are intended to support creativity and exceptional design while discouraging uniformity.
- Promote sustainable development that minimizes negative impacts on natural resources.
- Encourage the integration of public art into public and private development.

## Defining Design Standards

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Design standards are objective, measurable regulations, often illustrated through diagrams and sketches, with which all projects must comply.

The Wellness District Design Standards are intended to be clear and concise while the development review process is intended to be predictable, flexible and facilitate the timely approval of conforming projects. If a project of exceptional design is clearly consistent with the guiding principles but does not conform to a certain design standard, the Community Appearance Commission and Town Council may approve a plan that cites the project's compliance with those principles. For projects not conforming to the height and setback regulations, a variance approved by the Board of Adjustments may also be required.

Design standards contained in this document are largely form-based standards of a mixed use classification. Form-based standards differ from conventional zoning standards in their emphasis on shaping the form of buildings and public spaces rather than the segregation of different land uses.

- Design Standards within a form-based code allow for flexibility in accommodating greater densities and a mix of uses within the district.
- These design standards have been developed to create a unified vision and define the character of the Wellness District.
- These design standards are consistent with the intent of the Town of Boone Unified Development Ordinance, 2006 Comprehensive Plan Update, Boone 2030 Land Use Plan and other adopted plans and policies of the Town.

These design standards shall be incorporated into the UDO. The Wellness District Design Standards are intended to minimize references to other sections of the Town's Unified Development Ordinance. Developers are responsible, however, for reviewing and complying with all pertinent zoning and subdivision standards, including those not directly referenced in this document. All development must comply with all federal, state, and town regulations.

## Applicability

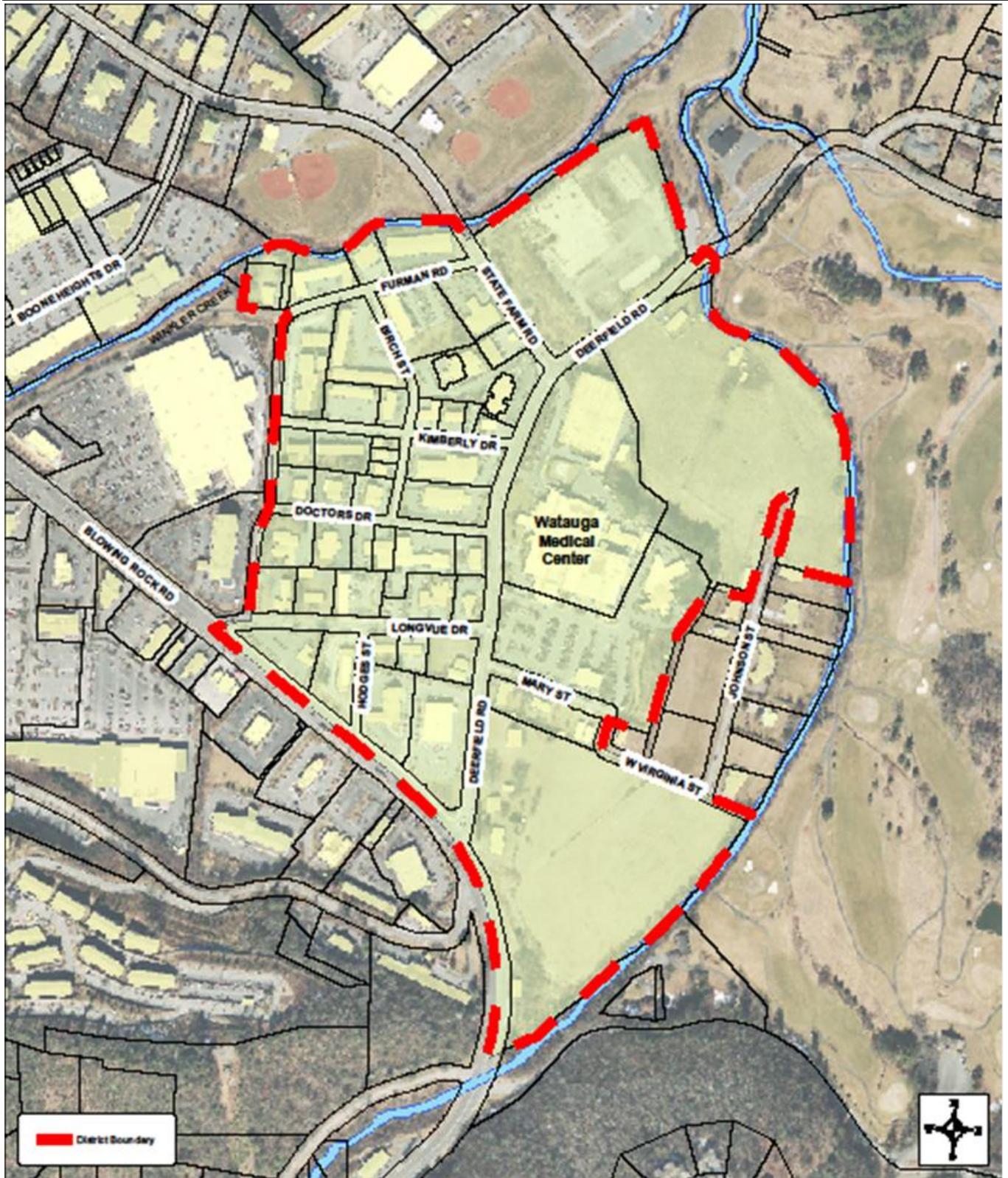
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To encourage use of the Wellness District Design Standards, incentives such as expedited review and approvals and/or reduced submittal fees may be used. Proposed developments following the Wellness District Design Standards shall be approved administratively through the Preliminary Site Plan Process. The Wellness District Design Standards shall apply to:

- All new building construction.
- All building expansion with removal of more than 25% of existing wall facing a public street or removal of more than 50% of existing exterior walls.
- All existing buildings not in conformance with the requirements of the underlying district or this overlay district at the time of adoption shall be governed by the Town of Boone, Unified Development Ordinance, Article 7 Nonconformities.

# Introduction

Figure 1: District Map



## Land Uses

### Mix of Use Requirements for Large Developments

The Wellness District is intended to promote a diverse mixture of medical, education, office, retail and residential uses within a compact, vibrant pedestrian oriented center while encouraging community interaction and transportation options. To incorporate high-quality urban design, vertical mixed-use buildings are encouraged.

Except for Appalachian State University, Appalachian Regional Healthcare System, and other medical facilities, developments containing more than 20,000 square feet or building foot-prints greater than half an acre shall provide for a mix of two or more permitted uses. Retail uses are encouraged on the street frontages of mixed use buildings, promoting pedestrian activity along public sidewalks. Residential uses are not permitted on the ground floor.



*Mixed-Use Developments*

# Land Uses

## Permitted Land Uses

The permitted uses allowed within the Wellness District (see Figure 2: Wellness District Permitted Uses) are those permitted under the Town of Boone, Unified Development Ordinance, Article 15, District Use Requirements as of the date of the approved Wellness District and further limited herein.

Figure 2: Wellness District Permitted Uses

<b>1.0 Household Living:</b>	<b>11.0 General Sales and Service Continued</b>
1.14 Multi-Family Dwelling in Mixed Use (up to 30 bedrooms)	11.20 Medical Office, Category 1
1.15 Multi-Family Dwelling in Mixed Use (31-100 bedrooms)	11.21 Medical Office, Category 2
1.16 Multi-Family Dwelling in Mixed Use (>100 bedrooms)	11.22 Medical Office, Category 3
<b>2.0 Group Living</b>	11.23 Medical Office, Category 4
2.05 Nursing Care Home	11.24 Hospital
2.06 Nursing Care Institution	11.25 Medical Emergency Response
2.07 Skilled Nursing Facility	11.35 Therapy Farm
2.09 Retirement Community, Category 2	<b>12.0 Recreation</b>
<b>3.0 Transient Living:</b>	12.10 Recreation Facility, Category 1
3.07 Hotel	<b>15.0 Parking</b>
<b>4.0 Institutional Uses:</b>	15.01 Parking Structure
4.05 Post Office	<b>Accessory Uses</b>
<b>5.0 Government Uses:</b>	A-2 Home Occupation
5.12 Police Substation	A-4 Limited Non-Restaurant Drive-Through
<b>7.0 Telecommunication:</b>	A-7 Outdoor Dining
7.11 Emergency Response Communications	A-8 Automated Teller Machine (ATM)
<b>8.0 Assembly</b>	A-9 Automated Teller Machine (ATM), Freestanding
8.01 Religious Assembly, Category 1	A-19 Helistop
<b>9.0 Education</b>	A-20 Swimming pools, spas and hot tubs
9.01 Appalachian State University	<b>Temporary Uses</b>
9.02 Caldwell Community College & Technical Institute	T-3 Temporary Construction Trailer
9.03 Other Public Colleges & Universities	T-4 Temporary Mobile Medical Unit
9.04 Other Private Colleges & Universities	T-5 Temporary Classroom
<b>10.0 Daycare</b>	T-8 Temporary Non-Fixed Site Event Venue
10.01 Child Daycare, Large	T-9 Temporary Carrier on Wheels (COW)
10.02 Child Daycare Center	T-11 Temporary Itinerant Merchant/Peddler
10.04 Adult Daycare Center	<b>Additional Uses Allowed on Properties Located Within the Corridor Overlay District And Which Border Blowing Rock Road:</b>
<b>11.0 General Sales and Service:</b>	11.16 Retail Store 25,000 ft <sup>2</sup> and greater
11.04 Financial Institution ≤ 5,000 ft <sup>2</sup>	
11.05 Financial Institution > 5,000 ft <sup>2</sup>	
11.06 Restaurant ≤ 2,500 ft <sup>2</sup> open to the public during 10 pm – 6 am	
11.07 Other Restaurants ≤ 2,500 ft <sup>2</sup>	
11.08 Restaurant > 2,500 ft <sup>2</sup> open to the public during 10 pm – 6 am	
11.09 Other Restaurants > 2,500 ft <sup>2</sup>	
11.13 Other Personal Service Establishments	
11.14 Retail Store up to 5,000 ft <sup>2</sup>	
11.15 Retail Store more than 5,000 but less than 25,000 ft <sup>2</sup>	
11.18 Business/Professional Office open to the public during 10 pm–6 am	
11.19 Other Business or Professional Office	

\* Note: Residential uses are not permitted on the first floor of any structure.

### Streets and the Public Realm

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Making the Plan Area roadways and pedestrian pathways more efficient is a vital part of the Wellness District Small Area Plan. Transit ways, neighborhood infrastructure, pedestrian spaces, and open space will be physically connected to provide efficient and attractive linkages.

The street network for the Wellness District provides a hierarchal level of connectivity so motorists, bicyclists, pedestrians and transit users can choose the most direct, safe route to their destination. The multimodal street classification system has been organized by function and community context and is used to define the function of streets and provide guidance for making appropriate decisions regarding land development, site access management, transportation improvements and appropriate transit system accommodations.

The District's Complete Streets design standards and guidelines provide for vehicular capacity and mobility, while also promoting a safer and more comfortable environment for pedestrians and cyclists. All streets in the district shall have curb and gutter.

#### **Street Hierarchy and Gateways**

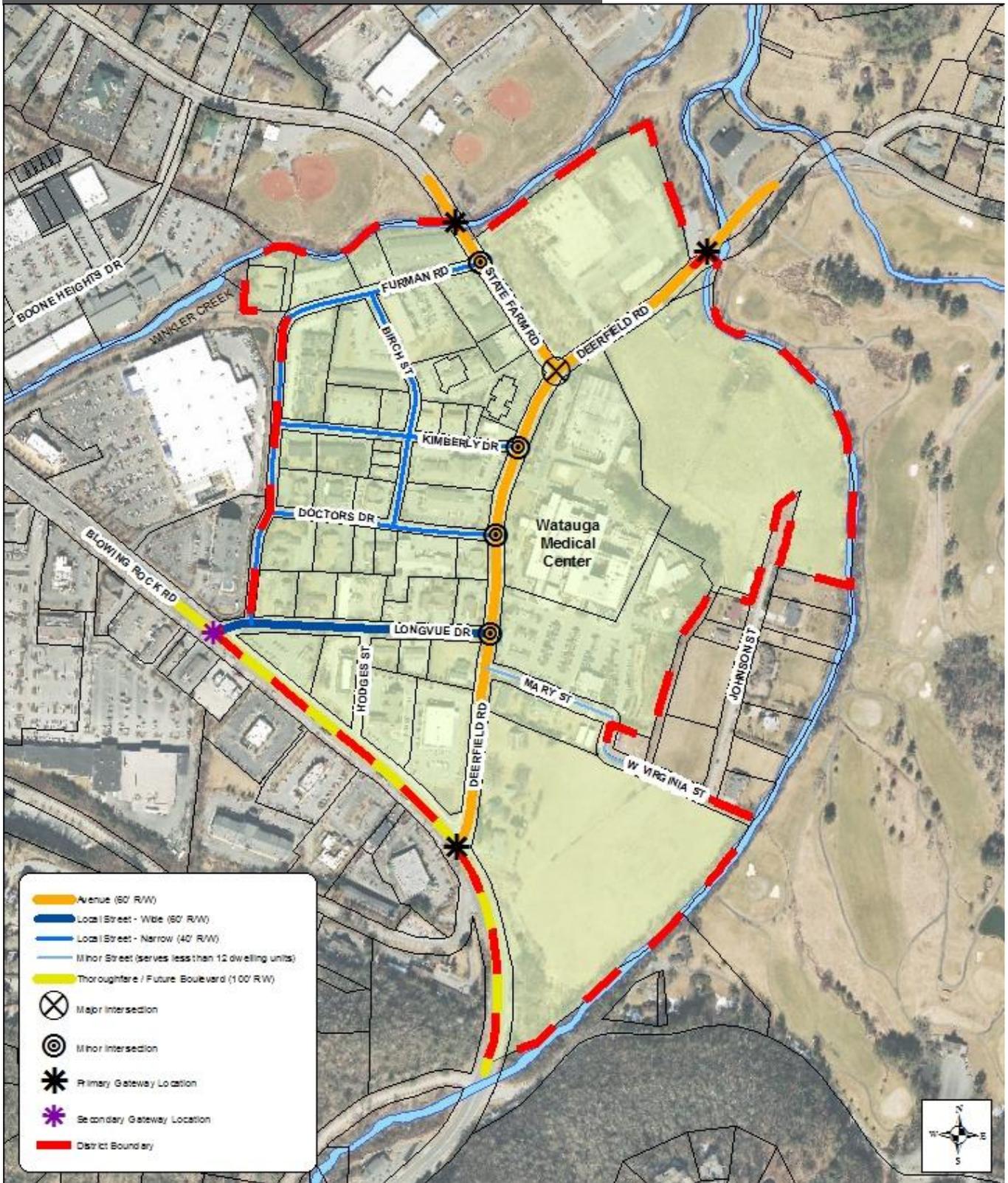
*(See Figure 3: Street Hierarchy and Gateways)*

The Wellness District's existing urban street grid shall be preserved to maximize street connectivity for vehicles, pedestrians, bicycles and public transportation. The grid promotes efficient circulation with a wide range of mobility options. The following section describes the district's context-sensitive street classifications:

# Design Standards

## Streets and the Public Realm

Figure 3: Street Hierarchy and Gateways





Avenues

### Avenue (See Figure 4 - Avenue Cross-Section)

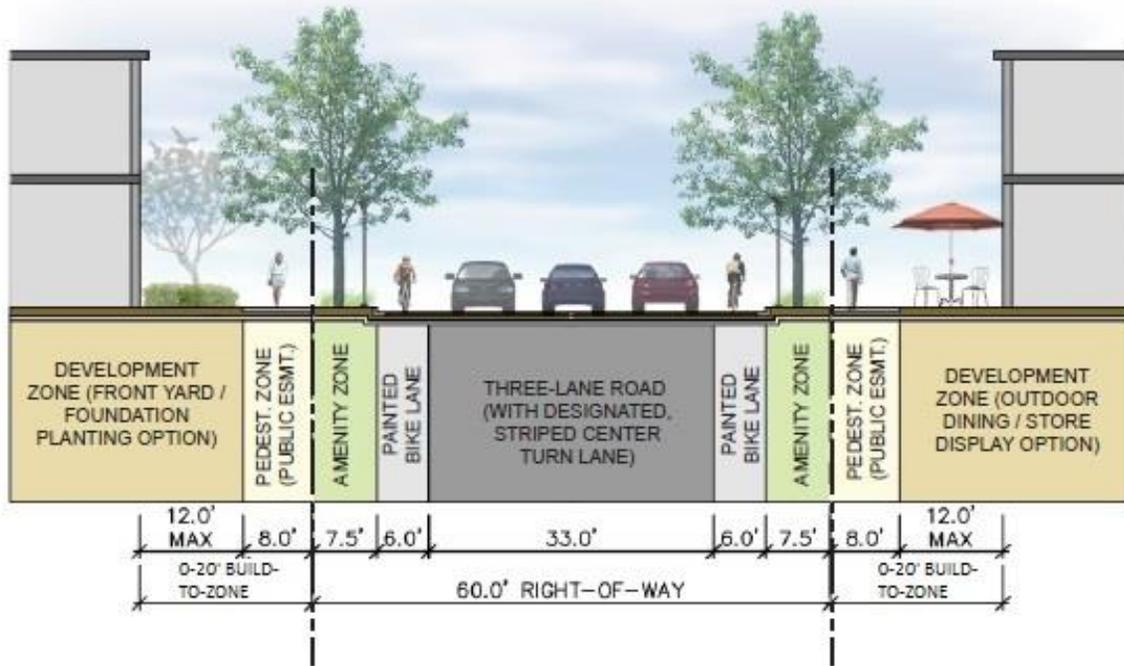
Within the Plan Area, State Farm Road and Deerfield Road are the primary streets and classified as “Avenues”. They are planned to create a sense of “place” for the district. Avenues accommodate high-quality pedestrian access, transit accessibility and bicycle facilities, such as bike lanes, as well as high volumes of traffic. Development along avenues may include a wide range of land uses, from commercial (retail or office), multifamily (apartments or condos), institutional (hospital or academic) to mixed use. Design standards for avenues include:

1. Posted speed limits up to 30 miles per hour allowing for safe and comfortable pedestrian travel along and across streets. Signalized intersections are to be specially designed for pedestrian crossings.
2. The existing right-of-ways of the district’s avenues are sixty (60) feet.
3. Avenue cross-sections include three (3) eleven (11) foot travel lanes, six (6) foot wide striped bike lanes (including 2’ gutter), seven and one-half (7.5) foot wide amenity zones - planting strips/street trees, pedestrian lighting, furnishings, etc., and eight (8) foot wide unobstructed sidewalks located outside the public right-of-way in a public sidewalk access easement.
4. Additional development pedestrian zones may be established outside the public sidewalk access easement and the building setback/ façade to function as extensions of the sidewalk for outside dining, store displays, etc.
5. Buildings shall be oriented toward the street.
6. Windows and doors shall front onto the street, with direct pedestrian access to the street front sidewalk.
7. Blank walls and non-transparent windows shall be avoided along pedestrian areas to help provide for pedestrian comfort, security and points of interest.
8. Parking shall be located to the rear or sides of buildings.
9. Transit routes/stops shall be located along Avenues. A dedicated street pull-off lane or transit loading space shall be planned for the safety of passengers boarding/alighting and minimizing vehicular congestion. Amenities such as shelters, seating, trash receptacles, lighting and signage shall be provided along the avenues.

# Design Standards

## Streets and the Public Realm Continued

Figure 4: Avenue Cross-Section (60' Right-of-Way)



Note: Alternative designs for Deerfield Road can include two travel lanes and a multi-use trail along the east side of the road.



Local Streets

### Local Streets – Wide and Narrow:

(See Figure 5 and 6: Local Street Cross-sections-Wide and Narrow)

Local streets comprise the largest number of streets within the area and are arranged in a grid network for optimum interconnectivity and circulation. District local streets include Longvue Road, Doctors Drive, Kimberly Drive, Birch Street and Furman Road. Local streets provide for direct access to specific land uses or sites such as office, commercial,

and mixed use developments, through a variety of travel modes. Design standards for Local Streets include:

1. Posted speed limits of 25 miles per hour allowing for safe and comfortable pedestrian travel along and across streets.
2. District local street right-of-ways typographies are “wide” (60 feet) and “narrow” (40 feet).
3. Local Street – Wide (60’ right-of-way) cross-section includes two (2) twelve and one-half (12.5) foot shared vehicular/ bike travel lanes, an eight (8) foot wide on-street parking lane (one side), seven and one-half (7.5) foot amenity zones (planting strip, street trees and pedestrian lighting) and six (6) foot pedestrian walks.
4. Local Street – Narrow (40’ right-of-way) cross-section includes two (2) twelve and a half (12.5) foot shared vehicular/ bike travel lanes, seven and a half (7.5) foot wide grass/groundcover planting strip with pedestrian lights, six (6) foot wide sidewalks (shade trees should be planted outside of the public right-of-way and six (6) foot wide outside public right-of-way on public sidewalk access easements).
5. Buildings shall have entrances facing the street and sidewalks connecting the buildings to the street front sidewalks.
6. Cyclists are expected to operate in mixed traffic since the traffic volumes and speeds are low.
7. Blank walls and non-transparent windows shall be avoided along pedestrian areas to help provide for pedestrian comfort, security and points of interest.
8. Parking shall be located to the rear or sides of buildings. If parking is located between the street and the building, no more than one bay of parking is to be permitted to avoid large expanses of parking separating the building from the sidewalk.
9. On-street parking along a property’s frontage may count towards required parking.

# Design Standards

## Streets and the Public Realm Continued

Figure 5: Local Street Cross-Sections – Wide (60' Right-of-Way)

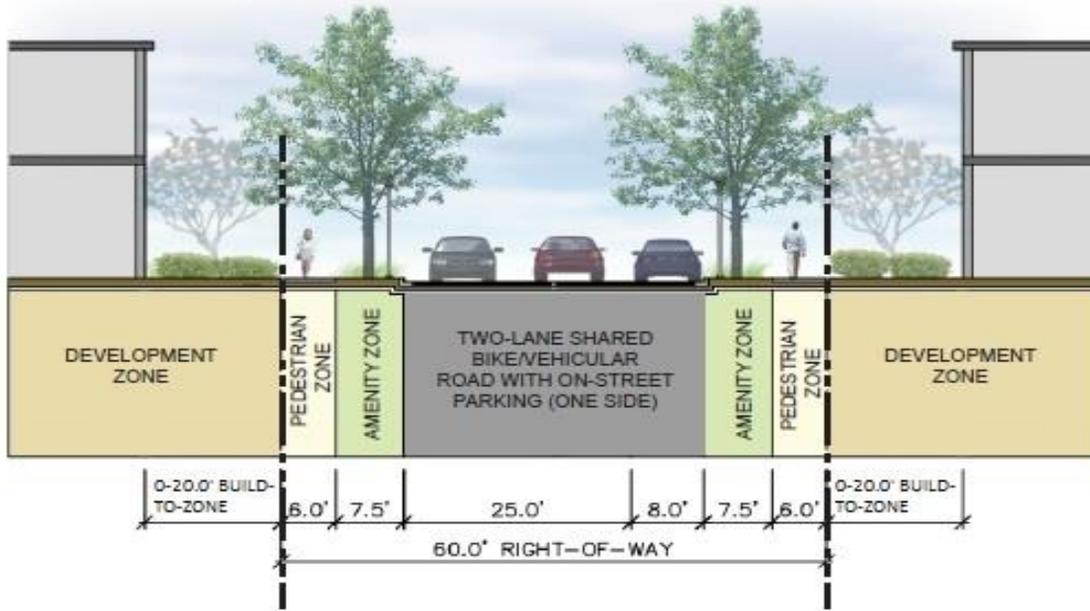


Figure 6: Local Street Cross-Sections- Narrow (40' Right-of-Way)





Thoroughfares

### Thoroughfare/ Future Boulevard\*

(See Figure 7: Thoroughfare/ Future Boulevard Cross Section)

US Highway 321/ Blowing Rock Road borders the Wellness District to the south. It is a busy, five-lane commercial thoroughfare connecting downtown Boone and Appalachian State University to the district and multiple destinations. This congested roadway is primarily vehicular oriented accommodating higher volumes and speeds of motorists with multiple driveway access points and commercial uses. Although the existing thoroughfare cross section includes pedestrian walks along both sides, it does not include a planting strip, street trees or bike lanes. Buildings are primarily sited away from the street with large expanses of parking between the building and the street.

Future design considerations will need to include the entire corridor, not just the section of US Highway 321/ Blowing Rock Road bordering the Wellness District, and be coordinated with North Carolina Department of Transportation.

To create a complete street boulevard reflecting the Town's character and safe multi-modal alternatives, the following design guidelines are recommended:

1. Posted speed limits of 35 miles per hour.
2. Maintain US Highway 321/ Blowing Rock Road existing right-of-way of one hundred (100) feet.
3. Install a landscaped median with controlled access points and turn lanes at strategic locations.
4. Create shared driveways and cross-access easements between parcels to minimize curb cuts and congestion.
5. Roadway cross-section to include sidewalks, street trees, bike lanes and transit stops along both sides of the street.

*\*Note: This section is shown only to demonstrate the Town's desire to work with NCDOT to improve the relationship between this major thoroughfare and the Wellness District.*

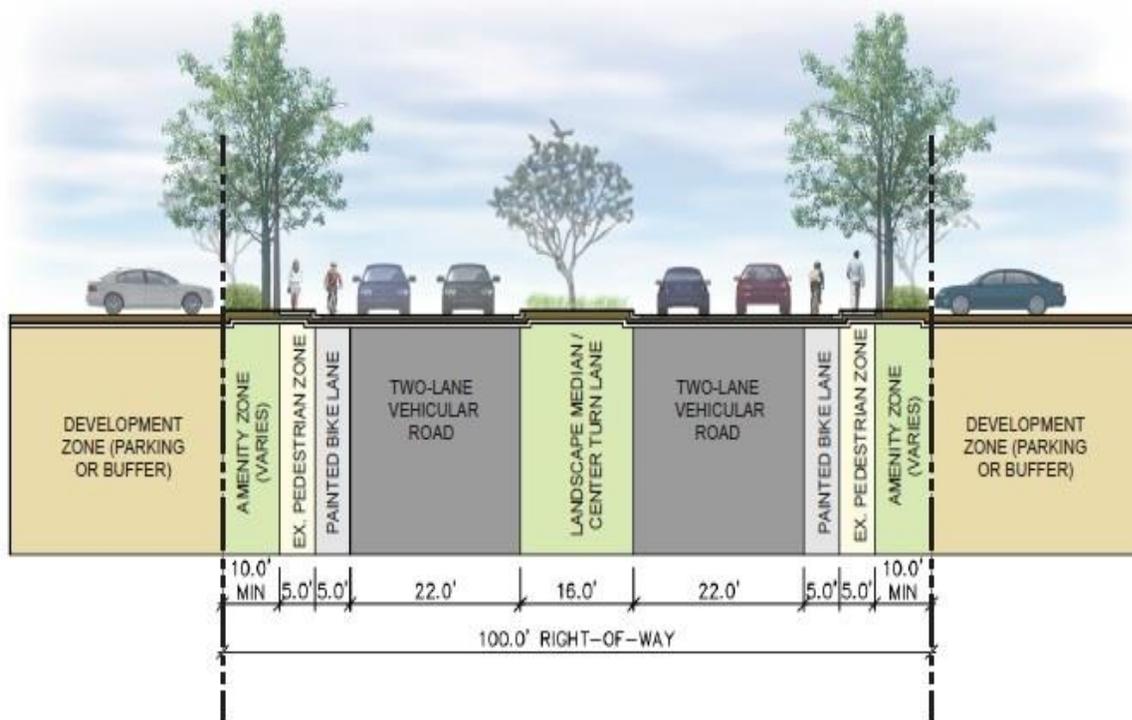
### Minor Street:

Mary Street and Virginia Street are minor two lane roads whose sole purpose is to provide access to abutting single-family properties. Although access begins within the district, the streets serve three dwelling units with access to an additional eight residences along Johnson Street outside of the district. It is anticipated Watauga Medical Center and/or other future development may change the use of the properties and/or the alignment, interconnectedness and character of these streets, therefore no street recommendations are proposed at this time. Future developments should follow the design standards for district local streets.

# Design Standards

## Streets and the Public Realm Continued

Figure 7: Thoroughfare/ Future Boulevard Cross-Section





**District Gateways** (See Gateway Images)

Gateway locations provide opportunities to highlight transitions and entrance features into the district. The transition can be accentuated with elements in the public right-of-way, adjacent buildings or structures, or a combination of both. Other components such as entry signage, columns, lighting, banners, public art, sidewalk markers or landscaping can be used to further emphasize gateway locations. Distinctive logos and colors may be used to identify the district and create a sense of place.

Potential locations for the Wellness District gateways are the intersection of Deerfield Road and US Highway 321, Deerfield Road and the bridge crossing of the Middle South Fork New River, and State Farm Road bridge crossing at Winklers Creek.



Gateways

# Design Standards

## Streets and the Public Realm Continued

### Intersections and Crosswalks

(See Figure 1, pg 15: Street Hierarchy)

#### **Intersections** (See Intersection Images)

Intersection design shall accommodate all modes of transportation with the appropriate levels of service for pedestrians, bicyclist, transit and motorist given the recommended speed, volume and expected mix of traffic while minimizing conflicts between user modes through various methods.

Signalized intersections shall be specially designed for pedestrian crossings. Intersections shall provide for ten (10) foot by seventy (70) foot sight distance triangles free from obstructions that may impede user visibility. Intersections of importance are to be distinguished and promote traffic calming with differing pavement materials and/or colors. These focal intersections are located along Deerfield and State Farm Roads at intersections with adjoining streets.

\*To promote safe and efficient multi-modal transportation system, it is recommended Watauga Medical Center align their site access drives with the existing street network intersections and signals.

#### **Crosswalks** (See Crosswalk Images)

Crosswalks shall be a minimum of six (6) feet to a maximum of eight (8) feet wide (dependent on the designated street hierarchy) on all approaches at each intersection. All pedestrian crosswalks shall be distinguished from driving surfaces through the use of alternative material/ color differing from that used on the roadways such as concrete/ brick pavers or scored broom finished integral color concrete pavement.

Appropriate mid-block crossings should be planned along Deerfield and State Farm Roads to assist in pedestrian movements.



Intersections



Crosswalks



*Streetscape / Street Planting*

**Streetscape Standards**

To accommodate the required amenity zone (pedestrian lights, street furnishings, street trees, etc.) and pedestrian walks, the following minimum streetscape widths are required. These standards apply regardless of the available public right-of-way. Where insufficient right-of-way exists, the pedestrian way shall extend onto private property, with a public sidewalk easement. The streetscape shall be measured from the back of curb to the outside edge of the pedestrian walks (closest to the building façade).

**Planting Strip/ Street Trees (See Streetscape/Street Planting Images)**

Public and private development shall provide a seven and one-half (7.5) foot wide amenity zone - planting strip/ street light and furnishings on both sides of the street (except Local Streets) to safely separate pedestrians from vehicles and include street trees, turf/groundcover and/or low growing shrubs. Street trees shall be large deciduous species planted forty (40) to sixty (60) feet on center, coordinated with the street lighting plan and measure three (3) inches or greater in caliper at the time of planting. Lower branches of the street trees shall be limbed up to eight (8) feet to allow clearance for pedestrians.

All new development shall locate utilities underground to prevent interference with street trees. In instances where existing overhead utilities are present along the street frontage and utilities cannot be relocated underground, alternate compliance ornamental trees (2" minimum caliper) may be installed twenty (20) to thirty (30) feet on center with approval of the Administrator. Street tree species shall be consistent along each street and conform to the applicable streetscape planting schedule on following page.

The Town should work with utility providers to relocate utilities underground throughout the Plan Area. Moving utilities underground will provide better aesthetics more in keeping with the Plan objectives

# Design Standards

## Streets and the Public Realm Continued

### Streetscape Standards (cont.)

#### Street Tree Planting Schedule *(See Tree Images)*

<u>Street Tree</u>	<u>Species</u>	<u>District Street</u>
'Allee' Lacebark Elm	<i>Ulmus parvifolia</i> 'Allee'	Deerfield Road
'Hightower' Willow Oak	<i>Quercus phellos</i> 'QPSTA'	State Farm Road/ Longvue Road
Bald Cypress	<i>Taxodium distichum</i>	Furman Road
'October Glory' Red Maple	<i>Acer rubrum</i> 'October Glory'	Doctors Drive/ Kimberly Drive
'Panache' Shumard Oak	<i>Quercus shumardii</i> 'QSFTC'	Birch Street

#### \*Alternate Compliance Ornamental Trees

(for use only with existing overhead utilities with approval from Town Staff)

<u>Tree</u>	<u>Species</u>
'Forest Pansy' Redbud	<i>Ceris Canadensis</i> 'Forest Pansy'
'Kwanzan' Cherry	<i>Prunus serrulata</i> 'Kwanzan'
Kousa Dogwood	<i>Cornus kousa</i>

The remainder of the planting strip shall be planted with low growing shrubs, ornamental grasses, ground cover, turf or combination thereof as listed in the Town of Boone's approved plant list. Turf grass must be installed as sod and not seeded.



'Allee' Lacebark Elm



'Hightower' Willow Oak



'Panache' Shumard Oak



'October Glory' Red Maple



*Street Lights*

**Streetscape Standards (cont.)**

Street Lights (See *Street Light Images*)

Street lighting shall provide adequate illumination to ensure the safety of pedestrians and visibility for motorists. The primary source of street lights should be pedestrian scaled fixtures (15-18' ht.) with roadway lighting (25' ht. max.) for additional illumination at intersections and specified intervals, as needed. All street lights shall be LED full cut-off (FCO) fixtures (Dark Sky Compliant) to reduce energy usage and light pollution. Wood poles are prohibited. To establish the character of the district, light fixtures should be a consistent style throughout the Plan area and utilize a black finish.

New public and private development shall provide pedestrian lights within the street side amenity zone - planting strip/ street light/ furniture on both sides of the street.

Pedestrian lights shall be located approximately at the midpoint between trees and spaced forty (40) to sixty (60) feet apart per the photometrics of the specified light fixture. Light locations may be adjusted to accommodate existing mature trees, curb cuts, fire hydrants and other infrastructure elements.

### Streetscape Standards (cont.)

#### Street Furnishings (See *Street Furnishings Images*)

Along Avenues, bike racks, trash receptacles and seating should be incorporated into the streetscape design on streets within the amenity zone - planting strip/ street light/ furnishings. Style of the street furnishings is to be consistent throughout the district and have a black finish. Furnishings should be durable, attractive and sustainable materials that are easy to maintain.

Transit stops/areas are to be located in areas of high level pedestrian activity along avenues. Shelters are to reflect design excellence and should be designed as more than utilitarian fixtures. Creative and timeless designs that complement other streetscape furnishings are encouraged.

#### Pedestrian Walks (See *Pedestrian Walk Images*)

Walks are to be parallel to public streets and the building frontages along both sides of the public street. Walks are to be six (6) to eight (8) feet wide (dependent on the designated street hierarchy) behind a seven and one-half (7.5) foot wide amenity zone/planting strip. Paving materials such as concrete/ brick pavers or scored broom-finished integral-color concrete shall be attractive, easy to maintain and meet the Town's sidewalk requirements and ADA Standards.



*Street Furnishings*



*Pedestrian Walk*



*Greenway Trail*

**Greenway Trails**

*(See Figure 8 - Greenway Trail Map & Images)*

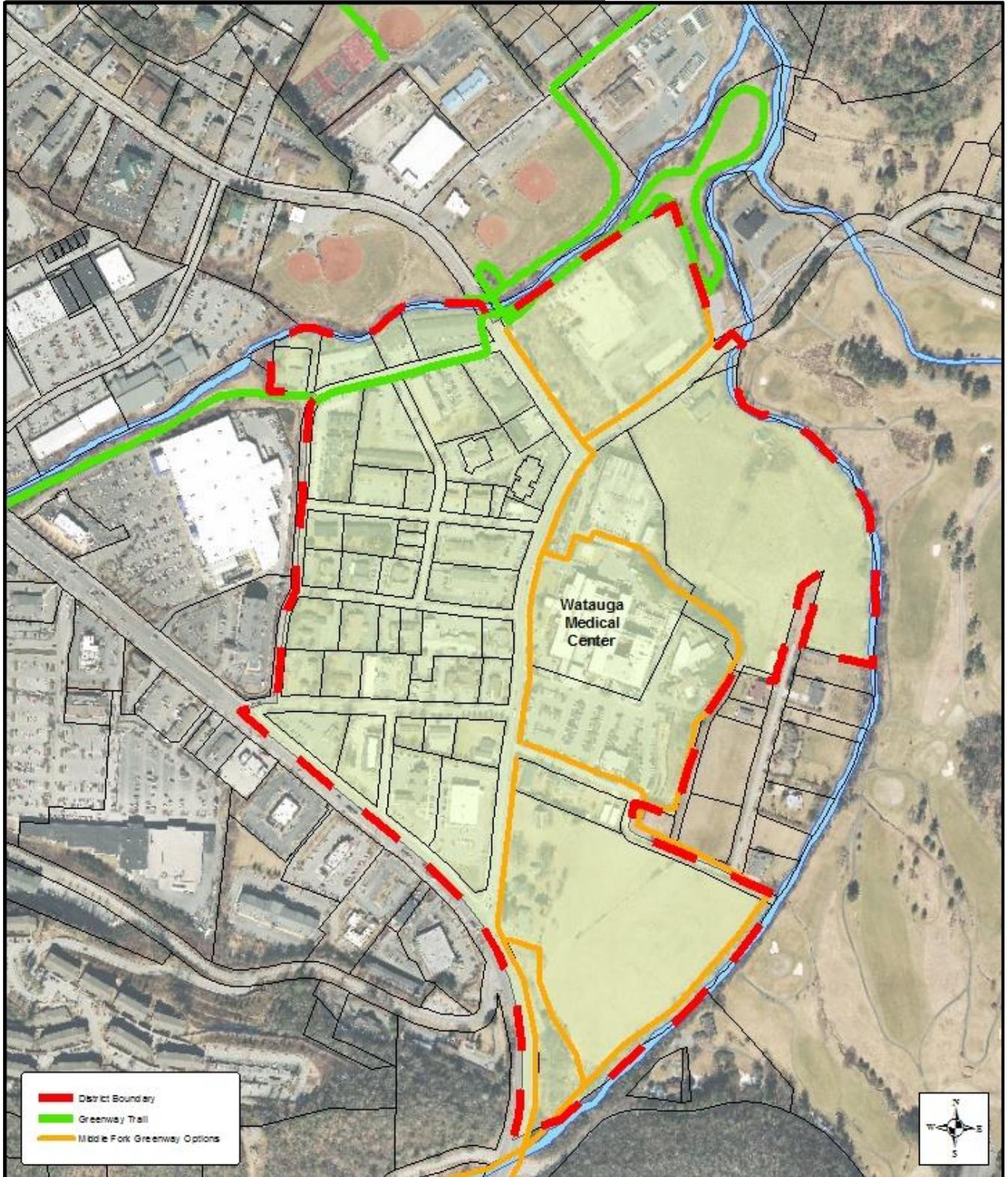
Boone has an extensive network of greenway trails providing multi-modal means of access throughout the Town and connection to the district.

Currently the Greenway trails follow the South Fork of the New River and Winklers Creek. Access to the trails can be made through an existing park/ trail head with parking located off Deerfield Road in the northern part of the district. Additional access to the greenway can be made along Winklers Creek at State Farm Road and Furman Road.

The proposed Middle Fork Greenway will connect to the Town’s greenway trail following possible routes through the district beginning at the Town’s corporate limits to the south of the district.

Proposed pedestrian walks are to connect to the trails providing additional means of multi-modal transportation to the district. Greenways are encouraged to expand and to link the district with Appalachian State University and downtown Boone.

Figure 8: Town of Boone Greenway Trail Map





Open / Public Space

### Open/ Public Spaces

*(See Open/Public Spaces Images)*

Open/ public spaces should be incorporated into the overall design of the development. A variety of public spaces ranging from urban plazas and courtyards to more passive open spaces are to be incorporated per the following guidelines:

1. Public space design should be human-scale and visually interesting.
2. Public spaces are to be clearly visible and easily accessible. Maximize sight lines into and out of the space.
3. Public spaces are to incorporate space-defining and active edges, such as multi-story facades with ground floor restaurants and shops.
4. Public spaces are to plan for prevailing sun angles and climatic conditions.
5. Public spaces are to provide seating in the forms of benches, tables and chairs and/or low seat walls.
6. Public spaces are to incorporate features that attract users, such as fountains, public display areas or interactive sculpture.
7. Public spaces are to incorporate landscaping to provide natural shade and/or soften hardscape areas.
8. The open/public spaces may include:
  - Plazas, courtyards, parks, gardens.
  - Gazebos, pavilions, pergolas, amphitheaters and other open air shelters.
  - Park open space and passive recreation features.
  - Bicycle and pedestrian greenway trails and bridges.
  - Healing gardens, memorial gardens, and sensory gardens

### **Public Art**

*(See Public Art Images)*

Public art has the ability to identify a district, contribute to a design theme and enhance a development's appeal and value. It can encourage pedestrian travel by adding interest to the route and create community identity. Where feasible, the Town, ASU Watauga Medical Center and developers are encouraged to integrate art into the design process for buildings and public spaces.



*Public Art*

## Building Orientation and Setbacks



*Building Orientation Images*

### **Building Orientation**

*(See Building Orientation Images)*

Buildings and their principal entry points, should be oriented toward the public street with the primary façade, architectural elements and entrances clearly identifiable and directly accessible. Corner buildings with ground floor retail are encouraged to locate entrances facing the corner.

### **Building Siting**

Build-to-lines in the Wellness District are 0-foot minimum/ 20-foot maximum from the edge of the public space. Additional development pedestrian zones may be established outside of the public right-of-way/ sidewalk and the building façade to function as extensions of the sidewalk for outside dining, store displays, etc. There are no transitional setbacks within the Wellness District.

### **Contextual Setback**

1. Parking between the public right-of-way and the building is strongly discouraged. In cases where parking is permitted between the street and the building (Local Streets only), no more than one bay of parking is to be permitted to avoid large expanses of parking separating the building from the sidewalk.
2. Buildings or portions of building facades fronting public spaces, plazas, courtyards, etc. may exceed the maximum build-to-line.
3. If the required public walkway encroaches onto private property, the build-to-zone may be measured from the walkway edge.
4. Buildings along the public rights-of-way shall be a minimum of 60% of the primary property frontage.
5. Side and rear setbacks shall be based on minimum fire separation required between buildings.

## Design Standards

### Building Height and Scale

#### **Building Height**

The form of the streetscape and public realm is defined by the building edges. Multi-storied buildings are consistent with the urban character of mixed uses and are essential in achieving economic, social and cultural sustainability.

The building height should be measured by the number of stories from the first floor (defined as the street level floor), not including raised basements/ finished floors, equipment penthouses or building parapets. Corner buildings may exceed the maximum building height by 15% for 20% of the building frontage along each corresponding street. Minimum building height shall be 2-stories; maximum building height 6 stories.

#### **Building Scale**

Building scale is one of the most important considerations when developing a pedestrian oriented neighborhood.

To promote the human-scale of the public realm and pedestrian environment of the streetscape, buildings greater than four (4) stories must adhere to at least one of the following design standards:

1. Building planes extending above four (4) stories shall be less than 50% of the total building facade along the street (See Figure 9, *Building Scale Above 4 Stories*), **and/or**
2. Buildings greater than four (4) stories shall step back the building plane at a 1:1 ratio along the street façade. For every foot above the maximum permitted building height, the building plane may extend upward one foot for every additional foot setback (See Figure 10, *Building Setback Above 4 Stories*).

Figure 9: Building Scale Above 4 Stories

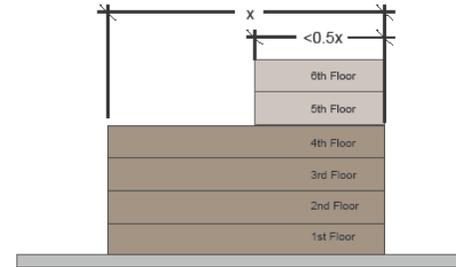
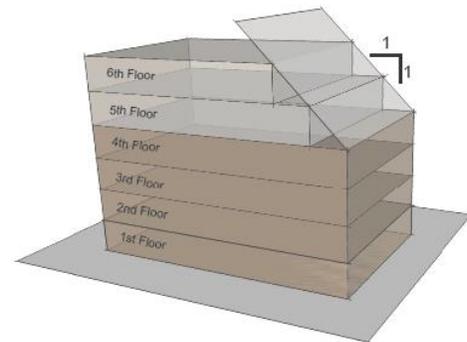


Figure 10: Building Setback Above 4 Stories





*Building Facades*

The Architectural Standards are intended to be flexible, allowing for creativity while maintaining design compatibility and continuity within the entire development. The standards describe the desired quality of the development to promote compatibility and unity in the development's visual appearance. The Appearance Commission shall review architectural plans for conformity to the Wellness District Design Standards.

### **Facades**

*(See Building Facade images)*

Building facades facing a publically accessible street or other public space shall incorporate the following design standards:

#### Facade Variation

1. Buildings should have architectural features and patterns that provide visual interest while supporting a clear and unified image throughout the development and include:
2. Front building facades that are constructed parallel to the street frontage.
3. All sides of the buildings visible from public right-of-way shall be treated with the same design and materials as the front façade.
4. Purposeful variation or accents in materials, textures and colors are strongly encouraged.
5. Horizontal and vertical divisions such as banding and repetitive window patterns are strongly encouraged.
6. Facades shall include clear delineation between the first or second level and the upper levels with a cornice, canopy, awning, balcony, arcade or other architectural feature.
7. The mass of the building shall be reduced by changing building planes through offsets and recesses, changing the building heights and varying the parapet or roof heights.
8. The building façade shall have perceivable, repetitive features and patterns such as windows, columns or other vertical features.
9. The building shall avoid long and monotonous wall and roof planes. Windows and doors are to front onto the street, with direct pedestrian access to the street front sidewalk.
10. Blank walls and non-transparent windows are prohibited along pedestrian areas to help provide for pedestrian comfort, security and points of interest.
11. For large projects, each sequential block of new construction shall contain unique building facades so as to encourage architectural variety within large projects. While the use of similar architectural elements on multiple buildings is acceptable, large visually monotonous projects with repeating exterior building design(s) does not contribute to visual diversity and human-scale character and therefore is inappropriate.

## Architectural Design Standards Continued

### **Building Materials**

Building materials and colors shall be in harmony with the rest of the development to create a sense of place and attraction with the surrounding community. The following design standards apply to all structures, including parking decks, in the district.

1. Exterior building materials for new construction shall be similar and compatible in size, scale, color and finish to surrounding developments.
2. Permitted primary exterior building materials include brick, natural stone, cast stone, tile, glazed curtain wall and window wall systems, architectural precast concrete and architectural-grade metal panels (galvanized, painted or ornamental).
3. All other materials shall be a compliment or an accent application not to exceed 10% of building facade.
4. Predominant exterior building materials should not include EIFS (Exterior Insulation and Finish System), plaster, or CMU (Concrete Masonry Units).
5. Vinyl or aluminum siding and colored or mirrored/ reflective glass is prohibited.
6. Colors of subtle, native, neutral or earth tone materials are encouraged and meet the Town of Boone Color Palette.
7. Building accent colors should complement the primary materials used on the building.
8. Corporate branding colors are permitted on logos and signage.
9. The use of clear or lightly tinted colored glass (30% maximum tint) is required.
10. Large uninterrupted expanses of a single material are prohibited.

### **Fenestration**

Fenestrations (windows and doors) should maximize the views and allowable daylight into spaces.

1. For all ground floor uses located along publically accessible streets and other public spaces, 60-90% of all wall area between two (2) and twelve (12) feet shall consist of transparent glazing (clear windows and doors). Upper floors fronting public rights-of-way shall consist of 30-70% windows.
2. Fenestrations shall be spaced thirty (30) linear feet maximum between features.
3. Ground floor restaurants, cafes and bars are encouraged to provide windows and doors that can be opened to provide direct access to the sidewalk when weather permits.



*Building Materials*



*Pedestrian Entrances*



*Roof Design*

### **Pedestrian Entrances**

*(See Pedestrian Entrance images)*

Except for medical clinic facilities, entrances shall be oriented towards the street, clearly defined and highly visible with sidewalks connecting to the street pedestrian walkways.

1. For buildings fronting public spaces, a pedestrian entrance shall be oriented to and accessible from the public space.
2. Retail uses with exterior ground level visibility along a street or public space shall have individual public entries from the street or public space in addition to internal entries.
3. Ground floor retail uses located on building corners shall locate entrances at the corner.
4. Buildings adjacent to existing or planned trails, open spaces or parks shall provide public entries along the façade fronting these amenities.
5. Entrances shall provide shelter from inclement weather.

### **Roofs**

*(See Roof images)*

Roof lines should have visual interest and features complementing the overall character of the building and the development.

1. Rooftop penthouse enclosures should be architecturally compatible or predominantly of the same material as the building.
2. Single-sloped shed roofs, mansard or vaulted roofs are prohibited. Flat roofs shall be concealed from pedestrian view.
3. Publically visible roof materials shall be standing seam metal, asphalt shingles, shakes or tile.
4. Publically visible plumbing vent stacks shall be colored to match the roofing material.
5. "Green" roofs utilizing plants to absorb rainwater and reduce ambient air temperatures are strongly encouraged.
6. Rooftop amenities such as sun decks are encouraged.

### Utilities, Mechanical/ Service Equipment & Dumpster Screening

#### **Utilities**

All pipes, conduit, cable lines or equipment for the transmission of electricity, telephone, water, gas, sewage, drainage, steam or any other utility, energy or communication service shall be installed underground in accordance with the Town of Boone requirements. Above ground connections to buildings shall not be allowed.

#### **Mechanical/ Service Equipment & Dumpster Screening**

*(See Dumpster Screening Images)*

All properties shall minimize the visual impact of mechanical/ service equipment and solid waste facilities from the public right-of-way.

1. Service areas, storage areas, restaurant grease receptacles and refuse enclosures should be oriented away from public view and screened from public areas.
2. Service and refuse areas are encouraged to be clustered together where feasible at the rear of the building.
3. Dumpsters, recycling bins and all other waste storage or containers, other than streetscape and site furnishing trash receptacles, shall be designed into a structure or building, or shall be screened by an opaque enclosed structure (8' minimum height with self-closing access doors) compatible with the building architecture from adjacent streets. Additional landscape plantings compatible with the overall landscape plan shall be required outside of the enclosures to soften the appearance from public view.
4. Utility cabinets and pedestals should not be located within parking lot landscape islands or the public right-of-way where they cannot be screened, are exposed to damage from vehicles and/or present a hazardous visual obstruction to drivers or pedestrians.
5. Meter boxes shall not be located along the front of buildings and screened if located on the side of a building.
6. Ground level mechanical equipment shall be screened by a structure that complements the design of the building through the use of similar materials, colors, finishes and architectural details. Additional landscape plantings compatible with the overall landscape plan shall be required outside of the structure to soften the appearance from public view.
7. All rooftop mechanical equipment should be screened from view from adjacent properties and adjacent right-of-way by use of parapet walls or screens designed to be compatible with the building architecture.
8. Elevator penthouses shall be screened by a structure that complements the design of the building through the use of similar materials, colors, finishes and architectural details.



*Dumpster Screening*

## Design Standards

### Site Design Standards

Site design shall respond to the existing natural and constructed environment of the site and surrounding area. Individual site design should complement the overall development, adjacent properties and Wellness District Design Standards.

#### Driveways and Access

1. Site access drives shall be consolidated and located across from intersections, where feasible, for safety of motorists and pedestrians.
2. The distance between driveways shall be designed for adequate turning movements and storage to reduce unsafe conflicts and congestions.
3. To ensure safe movement of vehicles and pedestrians, a ten (10) foot by seventy (70) foot sight distance triangle shall be provided at all intersections of driveways with adjacent streets.
4. Sites are to provide cross access easements between properties for circulation.
5. Driveways along Avenues are to be limited with access to properties along side streets and/or combined with adjacent properties.
6. Driveway crossings should maintain the same elevation of the sidewalk. The appearance of the sidewalk (scoring pattern or special paving) should be maintained across the driveway to indicate that although a vehicle may cross, the area traversed by a vehicle remains part of the pedestrian travel way.

*\*To promote a safe and efficient multi-modal transportation system, it is recommended that Watauga Medical Center align their site access drives with the existing street network intersections and signals.*

#### Vehicular Requirements

Adequate vehicular and bicycle parking requirements for the district, except for educational uses, are listed in Article 24 of the Town of Boone, Unified Development Ordinance. Parking requirements for education buildings are listed on the below. All parking serving the site and counted toward minimum parking requirements shall be located on the site or within 1,200 feet of the building entrance if located off-site. Parking for the disabled shall be provided in accordance with the North Carolina State Accessibility Code.

#### **Wellness District Education Use Parking Requirements:**

- Instructional Labs / Classrooms: 4 spaces/classroom
- Lecture Halls: 1 space/3 seats

### Vehicular Requirements Continued

#### Parking Reductions

*(See Allowances for Parking Reduction Images)* To promote a pedestrian-oriented, human-scale, urban form and multi-modal access, parking reductions are encouraged. Car sharing, car pooling, and van pools are encouraged to reduce the demand for parking spaces. The permit issuing authority may adjust the minimum/maximum number of parking spaces required when one or more of the following is applicable:

1. The Planning Administrator may approve parking reductions for live-work developments or residential units specifically designated for Wellness District business.
2. A 10% reduction in the number of required parking spaces for businesses oriented to pedestrian traffic.
3. A 10% reduction in the number of required parking spaces for developments located adjacent to a public greenway system with pedestrian/ bike linkages and designated bicycle parking areas. The number of required short-term and long-term bicycle parking spaces shall be determined by the Town of Boone, UDO, Article 24.09.
4. A 20% reduction in the number of required parking spaces is permitted for developments located along a public transit line with designated transit stops located within a walking distance of 1,320 feet and operating service from 6:00 AM to 6:00 PM where service intervals are no longer than 15 minutes during peak commute hours.
5. To limit the amount of impervious surfaces dedicated to parking on each lot, shared parking is encouraged. A shared parking analysis prepared by a registered licensed professional transportation engineer in North Carolina using the Urban Land Institute (ULI) Shared Parking Model (latest edition) or a study showing excessive, unused parking by one owner to be shared with another owner must be submitted. A written agreement between property owners acknowledging the number of shared parking spaces must be submitted and agreed to by the permit issuing authority.
6. A parking study, prepared by a licensed professional engineer, illustrating the required parking ratios do not accurately apply to a specific development.
7. If the number of required off-street parking spaces cannot be reasonably provided on the property associated with the principal use, then spaces may be provided on adjacent or nearby lots, satellite parking lots may be located up to a half-mile (0.5 mi) from the principal use building if served by a transit line, shuttle, or located along a dedicated pedestrian sidewalk or greenway trail. Written permission from the owner/person responsible for the satellite parking spaces must be provided. The applicant shall provide written acknowledgement that continuing the validity of his permit depends on his continuing ability to provide the requisite number of parking spaces.





Surface Parking



Parking Structures

### Vehicular Requirements Continued

#### Surface Parking Lots

*(See Surface Parking Images)*

1. Surface parking shall be located primarily to the rear or sides of the building.
2. If parking is located between the streets and the building, no more than one bay of parking is to be permitted to avoid large expanses of parking separating the building from the sidewalk / street.
3. Parking bays fronting a local street shall be separated from the sidewalk/ right-of-way with a ten (10) foot minimum streetyard consisting of a minimum three (3) foot height screen, except where vehicular sight lines may be impaired. Screening should consist of one or more of the following:
  - a. A masonry wall (3' minimum/ 4' maximum height) compatible with the proposed building.
  - b. An undulating earthen berm and landscaping not to exceed a slope of 3:1.
  - c. A hedge row of evergreen shrubs (3' minimum/ 4' maximum height), shade trees and groundcover.
4. To break up large expanses of parking and provide shading, landscape islands are required so that no parking space is more than fifty (50) feet away from the trunk of a large shade tree.

#### Parking Structures

*(See Parking Structure Images)*

Parking structures are strongly encouraged to consolidate parking, encourage walking and better utilization of the land.

1. Parking structures are encouraged to be located at the interior of a block or under buildings, not visible from the public right-of-way. Ground floor commercial uses, or space adaptable for future commercial use, are encouraged to be integrated into the structure located along the public street.
2. Parking structures shall not have exposed structured parking at the ground floor level along street frontages.
3. If parking structures are located along the public right-of-way, building setbacks, scale, height requirements and architectural design standards are applicable with trees and foundation plantings installed to soften the parking structure façade.
4. Parking structures should be designed so ramps are hidden from view of the street or public right-of-way.

Structures should be constructed of the same building materials as the district buildings.

## Site Design Standards Continued

### Vehicular Requirements Continued

#### Drive-Through Facilities/ Stacking Spaces

*(See Drive-through Screening Images)*

Conventional drive-through uses do not support a pedestrian-oriented environment and are inconsistent with the urban redevelopment goals for the Wellness District. Although drive-through facilities are discouraged, the following design standards shall apply to non-restaurant drive-through uses approved by the Planning Commission:

1. Drive-through and stacking lanes shall not be located within the front setback or along facades facing a public street. Drive-through and pick up windows shall be placed to the side or rear of buildings and screened.
2. Architectural elements, landscaping and/or other screening elements shall be used to minimize the visual impacts of the drive-through facility.
3. Screening shall be a minimum four (4) foot height wall compatible with the building architecture, material, color and details or a continuous compact evergreen hedge (36" minimum height at the time of planting reaching 48" minimum height within three years).
4. The design and location of the facility shall not impede vehicular flow or pedestrian movement and safety.
5. Canopy materials, design and color shall be the same as the primary building.

#### Loading/ Unloading Areas

*(See Loading Area Screening Images)*

With the exception of areas specifically designated by the Town, loading and unloading activities are not permitted in the public right-of-way and shall meet the following design standards:

1. All loading/unloading areas shall be located to the side or rear of buildings and shall be screened from public view.
2. Screening shall be provided with a wall (8' height) matching the building architecture, materials and color. Additional landscape plantings compatible with the overall landscape plan shall be required outside of the enclosures to soften the appearance from public view.

Loading and unloading activities may not encroach on or interfere with the use of sidewalks, drive aisles, stacking spaces or parking areas.



*Drive-through Screening*



*Loading Area Screening*



Accessible Ramp



Site Furnishings

### **Pedestrian Walks & Accessibility**

*(See Accessible Ramp Images)*

Pedestrian walks shall be provided along the length of any façade internal to the site where parking or a driveway is provided.

1. Pedestrian walks shall be parallel to and a minimum of five (5) feet from the building in order to provide an area for foundation plantings and entranceway landscaping.
2. Pedestrian circulation should be provided between abutting properties through the use of walkways or identifiable pathways.
3. Pedestrian walks should be clearly distinguished from vehicular paths by landscaping, paving materials or architectural elements.
4. An accessible route leading to the main entry of a building, curb cuts and ramps must be provided throughout the site and meet the 2009 NCBC Chapter 11 - Accessibility and 2003 Edition of ICC/ANSI A117.1 requirements.

### **Site Furnishings**

*(See Site Furnishings images)*

To promote the pedestrian environment and sense of place, site furnishings such as benches, tables and chairs, trash receptacles, planters, bicycle racks and ornamental fencing should be incorporated into the development.

#### **Seating, Trash Receptacles and Planters**

To promote the pedestrian environment and enhance human scale the use of site furnishings is strongly encouraged.

1. Furnishings should be the same style, material, and color and complement the architecture of the site.
2. Furnishings should be durable, attractive and sustainable materials easy to maintain.
3. Furnishings are typically located near building entrances, outdoor dining areas, plazas, courtyards, shelters and gardens

### Site Furnishings (cont.)

#### Bicycle Facilities

Bicycle parking is required to encourage the use of bicycles for personal transportation and access to employment, retail and other destinations.

1. Short-term bicycle parking should be located less than one hundred (100) feet of the building entrance(s). Long-term bicycle parking shall be located in a covered, weather protected areas no more than three hundred (300) feet from the building entrance or within an on-site parking structure.
2. Bicycle racks shall be securely anchored, easy to fasten to and support a bicycle at two (2) points of contact to prevent damage to the bicycle wheels and frame.
3. Designated bicycle parking shall provide clear and maneuverable access and visibility with appropriate signage.
4. The number of required short-term and long-term bicycle parking spaces shall be determined by the Town of Boone, UDO, Article 24.09.

#### Fencing

1. Ornamental fencing may be used to enhance the pedestrian environment with the following guidelines:
2. Conventional gated complexes with perimeter security fencing along public streets are prohibited.
3. Fencing may not extend beyond the building facade along public streets, walks, easements or publically accessible open space.
4. Where permitted, maximum fence height shall not exceed six (6) feet.
5. A front yard ornamental fence and/or railing, not exceeding forty-two (42) inches in height, may exceed beyond the building façade if the fence encloses a private patio or outdoor dining area. The fence is not permitted to encroach on a required pedestrian walkway.
6. Ornamental fencing shall be constructed of high quality materials including wrought iron, aluminum, metal, PVC vinyl or other material approved by the Planning Director.
7. Chain link fencing with and without wood slats is prohibited.



*Bike Racks*



*Ornamental Fencing*



Site Lighting

### Site Lighting

(See Site Lighting images)

Parking areas, sidewalks and building entrances shall be lighted in order to contribute to the security of the property and facilitate safe passage of pedestrians and vehicles after dark.

1. All light fixtures, including wall packs, shall be Dark-Sky Compliant LED full cut-off (FCO) fixtures to reduce energy usage, light pollution and prevent glare for pedestrians, motorists, tenants and adjacent properties. Flood lights shall be aimed down at least
2. 45 degrees or the front of the light shielded so that no portion of the light source extends below the bottom of the shield.
3. Lighting shall be designed and located so the maximum illumination measured shall not exceed one half (.5) foot-candle at the property line and two (2.0) foot-candles measured at the right-of-way line of a street.
4. A lighting photometric plan with point-by-point foot-candle array measured horizontally at grade and a description/cut sheet of proposed fixtures, lamps, reflectors and poles shall be submitted for all site lighting permits. The plan shall provide for uniform site lighting to avoid hot spots and/ or unsafe low light levels.
5. Light fixtures within parking areas shall be twenty-five (25) feet maximum height. Pedestrian light fixtures shall be located along pedestrian walks and within thirty (30) feet of a building with a maximum height of eighteen (18) feet.
6. Lighting under vehicular canopies shall be less than ten (10) foot-candles and designed to prevent off-site glare.
7. Service connections for all site lighting fixtures shall be installed underground.
8. Cobra-head type fixtures, flickering, rotating, flashing, strobing or search lights and wood poles are prohibited.
9. Exemptions: Lighting of the United States of America or State of North Carolina flags, public monuments, architectural accent features, landscaping, art and holiday lightings may be directed upward, provided the fixture is located, aimed or shielded to prevent glare and minimize light spill into the night sky

# Design Standards

## Site Design Standards Continued

### Landscaping

(See Site Landscaping images)

Landscaping promotes sustainable development, minimizing negative impacts on natural resources and is vital to softening the harshness of paved areas and buildings while enhancing a sense of place. Landscape standards listed in Article 31 of the Town of Boone, Unified Development Ordinance shall apply.

1. All plant material shall be nursery grown stock, free of disease or growth problems and shall comply with the latest edition of the American Standards for Nursery Stock, published by the American Nurserymen's Association.
2. Plant material shall be locally adaptable species and hardy to Zone 6 in accordance with the US Department of Agriculture's Plant Hardiness Zone Map.
3. Plant material must be able to survive on natural rainfall once established with no loss of health.
4. Landscaping shall not obstruct the views of motorists using any street, driveway or parking aisle and comply with the ten (10) foot by seventy (70) foot sight distance triangle.
5. All plants fulfilling the landscape requirements shall meet the minimum installation sizes. Large deciduous shade trees shall be a minimum three (3) inch caliper; ornamental trees shall be a minimum of two (2) inch caliper, evergreen trees shall be a minimum of eight (8) feet height and shrubs shall be a minimum of twenty-four (24) inches height/spread at the time of planting.
6. All planting areas shall be covered with three (3) inches of mulch to reduce weeds and retain moisture for the plants.
7. Necessary pruning and trimming shall be in accordance with the current edition of "Tree, Shrub and Other Woody Plant Maintenance – Standard Practices" of the American National Standards Institute and shall not be interpreted to include topping of trees through the removal of crown material or the central leader that cause irreparable harm to the natural form of the tree. Any such activity shall require replacement of the damaged plant material.
8. Xeriscaping or water conservation landscaping is encouraged. The practice of xeriscaping may include limiting the size of lawn areas, use of native grasses, low-water need plants, and the addition of soil amendments, mulching and installation of efficient irrigation (drip) systems.





*Front Yard / Foundation Planting*

**Landscaping (cont.)**

Front Yard/ Foundation Plantings

*(See Front Yard/Foundation Planting Images)*

A front yard consists of a landscape area parallel to the public right-of-way, typically between the sidewalk and the development, designed to provide continuity of vegetation along the public realm and soften the impact of the development by providing a pleasing view from the street. Although no front yard setback is required (0' minimum, 20' maximum build-to-zone), where the building setback, front yard/foundation landscaping should be provided and maintained.

1. All unpaved ground areas shall be planted with small ornamental and evergreen trees (where space permits), low growing shrubs (minimum 60% evergreen), ornamental grasses, ground cover, turf or combination thereof complementary of the architectural facade.
2. Turf grass in the front yard visible from the public right-of-way shall be installed as sod and not seeded.
3. Seasonal color is encouraged in plant beds and planters at building entrances and public spaces for visual interest and highlights.

### Landscaping (cont.)

#### Parking Area Plantings

(See *Parking Area Planting Images*)

1. Vehicular Area Screening: Parking areas fronting a street or side street shall be separated from the sidewalk/ right-of-way with a ten (10) foot minimum planting yard consisting of a minimum three (3) foot height screen, except where vehicular sight lines may be impaired. Screening should consist of one or more of the following:
  - a. A decorative, opaque masonry wall (3' minimum/ 4' maximum height) compatible in composition, appearance, color and architectural detail with the proposed building and landscaping.
  - b. An undulating earthen berm (3' minimum height) and landscaping not to exceed a slope of 3:1.
  - c. A continuous hedge row of evergreen shrubs (3' minimum/ 4' maximum height), shade trees (1/30LF) and groundcover. Understory ornamental trees, small evergreen trees, flowering shrubs, ornamental grasses and/or perennials may be supplemented for visual interest.
2. Interior Parking Plantings: To break up large expanses of parking and provide shading, landscaping shall be installed in and around parking areas. Required plantings shall be located within or adjacent to parking areas, in planting islands, medians, at the end of parking bays or between rows of parking.
  - a. Required vehicular area screening plantings may also satisfy the interior parking area requirements if spacing requirements are met.
  - b. Landscape islands are required so that no parking space is more than fifty (50) feet from the trunk of a large shade tree.
  - c. Planting islands within parking areas shall be a minimum of ten (10) feet wide and two-hundred-fifty square feet (250 SF) protected by curbs, bollards, wheel stops, walls, etc.
  - d. Parking islands shall be planted with low shrubs and/or groundcover so as to facilitate safe sight distances.
  - e. Shrubs shall not be planted within six (6) feet of a trunk of a new tree, nor within the drip line of a protected existing tree.
  - f. Parking areas shall be separated from building facades by a five (5) foot minimum foundation planting area and pedestrian walks leading to building entrances.



*Vehicular Area Screening*



*Parking Area Planting*

### Environmental

#### **Special Flood Hazard Area**

The Wellness District lies adjacent to the East South Fork of the New River and Winkler's Creek. These rivers and streams though an amenity, have been a source of flooding for adjacent low-lying areas. Approximately twenty-five percent (25%) of the district lies in the Special Flood Hazard Area.

The Town of Boone regulates the type of development in the Special Flood Hazard Area identified on the Flood Insurance Rate Map (FIRM) as an area expected by undulated by a flood every one-hundred (100) years or one-percent (1%) annual chance of flooding (100 year flood). The Special Flood Hazard Area is divided into two areas, the Flood Fringe and the Floodway zones.

#### **AE Floodway**

Generally, no development is permitted in the AE Floodway. No encroachments, including fill, new construction, substantial improvements and other development shall be permitted unless:

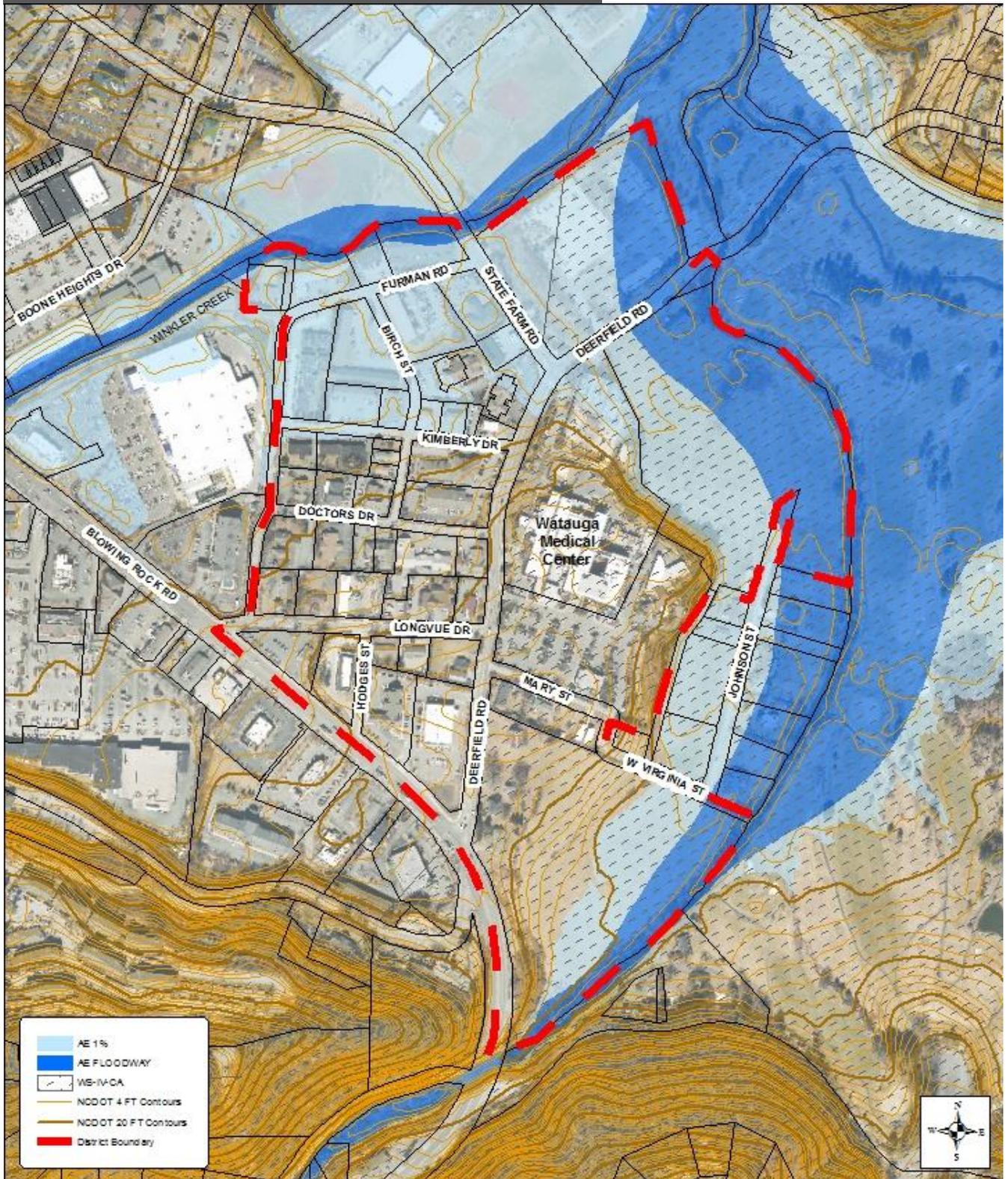
1. Proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood.
2. A Conditional Letter of Map Revision (CLOMR) has been obtained upon completion of the proposed encroachment.
3. A Flood Study is required to verify and documents the proposed development impacts to the floodway.

#### **AE 1%**

The AE 1% is the area lying outside of the Floodway, but within the Special Flood Hazard Area and is considered at a higher risk of flooding.

1. Generally, the Base Flood Elevation (BFE) in the Wellness District is 3113'. Development in the flood Fringe requires the building elevation to be two feet (2') above BFE.
2. Fill or construction is permitted within the AE 1% under specific regulations.

Figure 11: Hydrology Map





*Stormwater Management*

### **Watershed**

Approximately half the Wellness District lies within the New River Watershed Critical Area (WS-IV-CA).

1. Development in the Watershed Critical Area shall be allowed at a maximum of twenty-four percent (24%) built-upon (impervious) area.
2. Previously-developed sites prior to 1993 may calculate existing built-upon area plus an additional 24% maximum built-upon area for future development
3. A Watershed Permit is required for development in the Critical Area Watershed area.

### **Stream Buffers**

The Wellness District is bordered on the northeast and northwest by the Middle Fork of the New River and Winkler Creek respectively. Stream buffers adjacent to these streams are evidence of wise land use management and shall be maintained. Well managed vegetated buffers are important in protecting water quality by filtering stormwater runoff before entering streams. Vegetated buffers also moderate water temperature, provide wildlife habitats and flood control protecting adjacent properties.

A minimum fifty foot (50') vegetated buffer (measured from top of bank) is required along all perennial waters to protect water quality by trapping and filtering pollutants before they reach the watercourse.

No development is allowed in the 20' undisturbed stream buffer. Greenways, walking paths and pedestrian bridges are permitted in the outer thirty feet (30') of the buffer with minimum disturbance.

### **Stormwater Management**

Engineered stormwater management controls may be required for development at a pre-development discharge rate during a twenty-five (25) year, twenty-four (24) hour storm on a case by case basis.

1. If required, stormwater detention and/or retention ponds shall be integrated into the site, building and landscape design and shall be aesthetically pleasing (i.e. landscaped vegetative slopes, well maintained amenity features, etc.).
2. Stormwater management strategies shall be coordinated and applied in a comprehensive manner throughout the development.
3. Low impact design techniques for stormwater control are strongly encouraged.

## Design Standards

### Signage

Wayfinding signage benefits a community by orienting and directing visitors and residents, developing and reinforcing the neighborhood's identity and brand, and allowing for the removal of miscellaneous, inconsistent signage. To encourage a sense of place and multi-modal transportation navigation, the Wellness District shall have a uniform, comprehensive wayfinding signage system to include the following design standards:

Signage is to be compatible in scale with the proposed buildings, overall development and surrounding property. Lettering should be in proportion to the size of the sign. Signs may be internally-illuminated.

Signs shall complement the building façade and streetscape in terms of design, style, materials and color. Colors should contribute to legibility and visual appeal.

Signs should be positioned to emphasize or accent building elements such as storefront openings or entrances.

Signs should be aligned with those on neighboring buildings to promote visual order on the block, avoid visual clutter and enhance legibility.

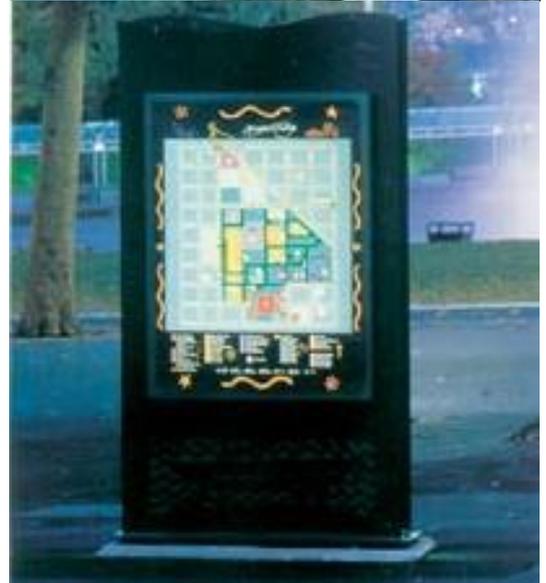
Except as provided below, signs shall meet the requirements of Article 26 of the Town of Boone Unified Development Ordinance.

#### **Signs Permitted in the Wellness District**

The Wellness District provides for a variety of mixed uses. The area is oriented to pedestrian circulation as well as vehicular traffic. Signs are to transfer an efficient means of information consistent with the hierarchy of the streets, pedestrian environment and speed of traffic from the public right-of-way.

#### **District / Gateway Signage**

Gateway signs are placed on architectural landmarks/ structures located at entranceways to the district. District signage shall establish a visually continuous theme throughout the area incorporating an identifiable logo and/or colors on gateway monuments, banners, kiosks and public signs.



*District / Gateway Signage*



*Directional / Monument / Projecting Signs*

**Business Identification Signage**

Each business is permitted two (2) signs per frontage. One (1) additional sign may be permitted for frontages greater than four hundred (400 ) linear feet. Signs may be chosen from the following categories: wall/ window, monument, canopy or projecting. In no case may signs be of the same category, except a business may have two wall/ window signs. Signs may be illuminated. Colors for signs shall be limited to two (2) colors plus the background color. This does not apply to federally registered trademarks. Applicants shall submit a complete sign package to the Town Administrator for approval.

1. Wall/ Window Signs: Attached wall or window signs are strongly encouraged.
  - a. Wall signs should project no more than twelve (12) inches from the building façade.
  - b. Wall signs shall not exceed an area equal to one (1) square foot of sign area per linear foot of building frontage. The maximum permitted square-footage of a wall sign is eighty (80) square feet regardless of building size.
2. Monument Signs: All monument signs shall meet the following criteria:
  - a. Monument signs shall be located on the same lot as the business being advertised and limited to one monument sign per property.
  - b. Maximum height of monument signs is eight (8) feet with a maximum copy area of forty (40) square feet.
  - c. Multi-tenant signs are required for separate establishments on the same property.
  - d. The base of the sign shall be landscaped with a variety of small evergreen shrubs, annuals and/or perennials not obstructing the sign face.
3. Canopy and Projecting Signs:
  - a. No more than one (1) right-angle sign should be allowed for each business.
  - b. Signage must be identical on both sides of projecting signs.
  - c. Projecting signs shall not exceed twenty-four (24) square feet in area on each side.
  - d. A nine (9) foot clear zone shall be maintained below projecting signs.
  - e. Signs may project no more than three (3) feet beyond the wall to which it is attached.
  - f. Projecting signs may not extend above a second story of a building.
  - g. Canopy signs shall not exceed twenty-five (25) percent of the awning with a maximum of forty-eight (48) square feet regardless of the size of the awning.
  - h. Canopy signs may be attached at the face of, side of or under the awning. Signs attached to the face or side of the awning may not exceed twelve (12) inches in height.