



## Design Guidelines for the White Oak Science Gateway Master Plan

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Completed: 10/30/14

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### Staff Recommendation

- Approve the Design Guidelines for the *White Oak Science Gateway Master Plan*

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The *White Oak Science Gateway Master Plan* was approved by the County Council on July 29, 2014 and adopted by the M-NCPPC on July 31, 2014. The Master Plan's Design Guidelines, which illustrate how key recommendations in the Plan might be met, are now ready for the Planning Board's approval. The guidelines also serve to clarify general design expectations and provide applicants and staff with a framework for project review and as a tool for obtaining enhanced design and related amenities.

Staff initiated the Master Plan's design discussion with the Planning Board on September 20, 2012 as part of the presentation of the Plan's preliminary recommendations. Subsequently, the draft Design Guidelines were presented to the Planning Board on July 25, 2013 during worksessions on the Master Plan. On April 10, 2014, the draft Design Guidelines were presented to the Board for review and approval to transmit to the County Council. The Design Guidelines were transmitted to the County Council on June 18, 2014 prior to the Council worksessions on the Master Plan in July 2014.

Staff has refined the draft Guidelines by incorporating relevant feedback from the Board, the public, and the County Council as part of the review and approval of the *White Oak Science Gateway Master Plan*. Staff recommends the Planning Board approve the final Design Guidelines, which are attached.

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### Attachment:

1. White Oak Science Gateway Master Plan Design Guidelines

NOVEMBER 2014

# White Oak Science Gateway Master Plan

DESIGN GUIDELINES

**DRAFT**



## Abstract

This document contains design guidelines that property owners, community members, and planners should use to implement the vision and recommendations of the 2014 approved and adopted *White Oak Science Gateway Master Plan*.

### Source of Copies

The Maryland-National Capital Park and Planning Commission  
8787 Georgia Avenue  
Silver Spring, MD 20910

Online at [MontgomeryPlanning.org/community/wosg/](http://MontgomeryPlanning.org/community/wosg/)

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## Introduction

The White Oak Science Gateway Design Guidelines illustrate design aspirations for the future of this East County community. The design guidelines are approved by the Planning Board for use by property owners and Planning staff. The guidelines should be used as a resource by all stakeholders while exploring ways to enhance the quality of urban design in the master plan area.

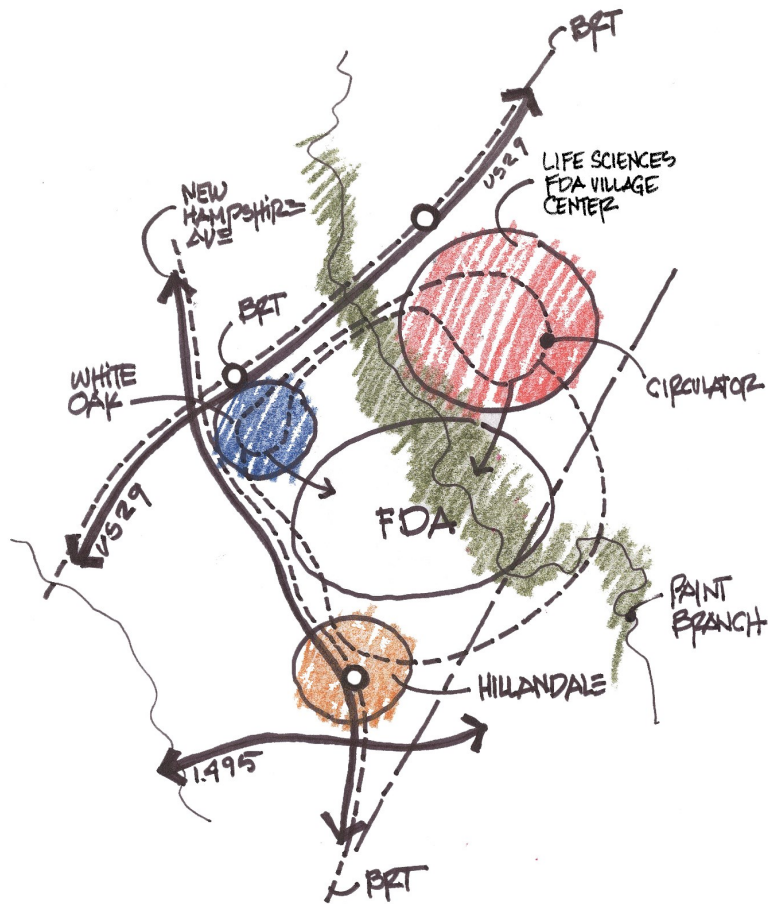
Urban design is concerned with transforming the physical characteristics of an area. Urban design strategies should serve to coordinate how various development proposals will affect the area physically, with a principal focus on the public realm: the public faces of buildings, spaces for public use, and the streets, sidewalks, parks and plazas that provide the outdoor public venue for everyday activities.

Design guidelines assist in the implementation of recommendations in approved and adopted master plans or sector plans by illustrating potential design implications of planning decisions on the public realm. Their intent is to illustrate how plan recommendations might be met, to inform applicants of design expectations and possible resources to accomplish them, and to provide staff with a framework for project review and a tool for obtaining enhanced design and related amenities. Guidelines do not set architectural styles, are only applicable during discretionary reviews, and will be revised and updated as necessary.



*Master Plan Areas (clockwise from top left) – Burnt Mills Shops; Paint Branch Stream Valley; White Oak Shopping Center; Westech Village Corner; Food and Drug Administration (FDA); Hillandale Shopping Center and office building at 10001 New Hampshire Avenue.*

### Master Plan Area Centers



White Oak Science Gateway Concept Diagram

## Context

The master plan area consists of several clusters of residential neighborhoods, including both single-family detached and multi-family communities that are organized around centralized commercial areas that provide neighborhood shopping and services. These communities are connected by major through roads (US 29, New Hampshire Avenue) that act as receptors for their separate networks of internal streets.

The area's commercial centers are fragmented, suburban districts with a substantial amount of land dedicated to low intensity uses. Each presents opportunities for applying sustainable and low impact development principles to improve local connectivity, create new community open space and, by promoting distinctive architecture, define a stronger identity for each area. The urban design framework proposed by the White Oak Science Gateway Master Plan combines the bus rapid transit (BRT) system with the locations of the existing commercial centers, to promote development centered on nodes that could be served by future transit.

The urban design guidelines emphasize the placement and quality of building mass, and illustrate how some of this available density could be distributed to define and structure the public realm. The guidelines seek to integrate development, future transit, and other mobility options to reduce dependence on vehicular traffic and to encourage pedestrian activity.

Given the potential for development at each center, the large size of the tracts that could redevelop, and their close proximity to existing single-family neighborhoods, the White Oak Science Gateway design guidelines are organized around two overarching design goals:

- Develop large sites into complete districts that connect with existing neighborhoods
- Transform existing commercial centers

## Design Guidelines

Design Guidelines are organized in three sections:

- General Guidelines applicable to most properties with redevelopment potential are grouped under two design goals, which organize the design elements that should be taken into consideration during the regulatory review process.
- Guidelines for specific centers, including priorities for properties at each center, and diagrams that illustrate how the various elements could be applied to shape these areas.
- Expanded definitions to clarify the various design elements.



Design Goal 1

### Design Goal 1

#### **Develop large sites into complete districts that connect with surrounding neighborhoods**

*Purpose:*

To promote sustainable redevelopment that is compatible with existing communities.

The master plan area includes several large properties and groups of properties with redevelopment potential that are adjacent to existing residential neighborhoods and/or important environmental resources. New development should seek to integrate these sites with existing neighborhoods, and to protect, enhance, expand, and integrate the natural environment.

***Left: Town Center, Reston, VA***

*Coordinated redevelopment of large properties can create successful centers of community activity.*



**Dockside Green, Victoria, BC**  
Sustainability and integration of significant existing natural resources can play an important role in the development of large sites.

## Goal 1 | Guidelines:

1. Incorporate sustainable neighborhood planning and design principles into the design of new districts. New development should use land efficiently, and promote walkability and transportation alternatives.
  - a. Promote compact, mixed-use development with high levels of internal connectivity.
  - b. Concentrate higher densities at locations where multimodal transportation choices exist or might be available, to reduce dependency on automobile use.
  - c. Create networks of internal streets that are walkable and well connected, with links to surrounding communities where feasible.
  - d. Encourage development patterns with short blocks (sides of less than 600 feet, and perimeters of less than 1,800 linear feet, depending on terrain conditions) and buildings and streets that are scaled to create an inviting and safe public realm.
  - e. Create recognizable centers for the community, with identifiable edges to reinforce the form and identity of the node.
  - f. Provide a network of open spaces for community use where the public feels welcome and encouraged to congregate.
2. Use existing natural resources as community assets
  - a. Encourage design approaches that enliven natural sites, with site design that encourages pedestrian activity, creates visual interest, and draws people to nature.
3. Consider the scale of surrounding neighborhoods when developing large properties
  - a. Establish and /or enhance connections to surrounding neighborhoods, where feasible.
  - b. Locate higher density concentrations of new development away from lower-scaled existing neighborhoods.

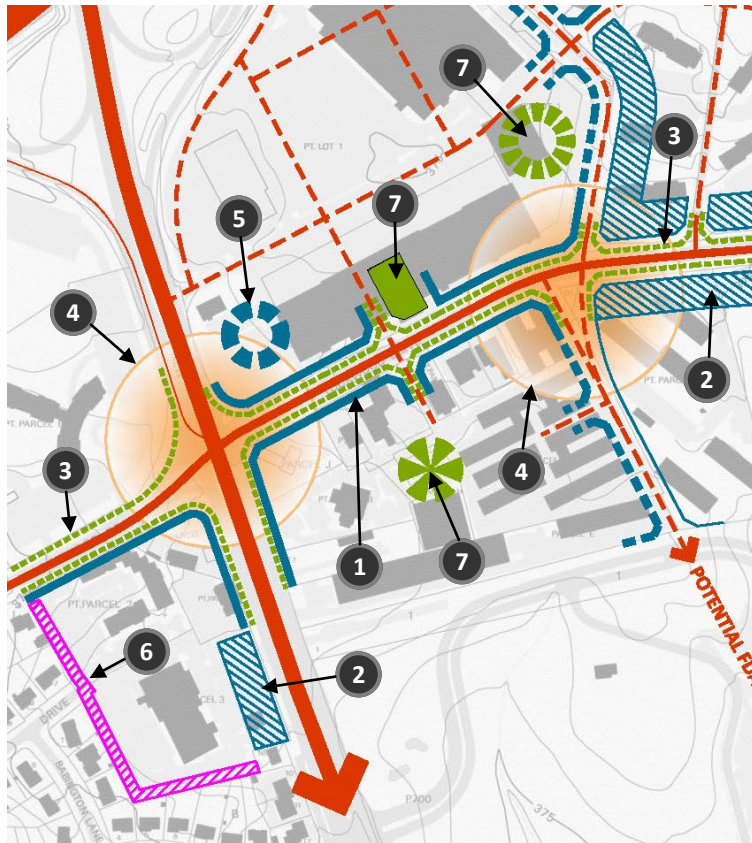
## Design Goal 2

### Transform Existing Commercial Centers

#### *Purpose:*

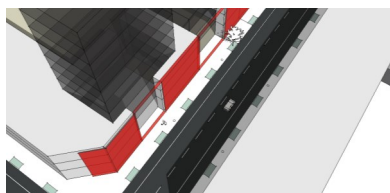
To focus on the elements of the redevelopment that will reshape the public domain

The guidelines use several elements to describe this transformation; the diagrams included for each center illustrate where and how each element could be considered. Each of the following design elements is defined and discussed in the chapters that follow.

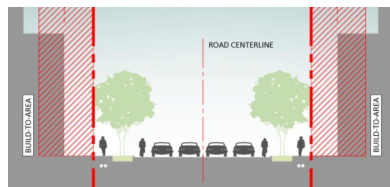


Design Goal 2 | Urban Design Elements

1. **Build-to-lines** indicate where the street façade of the building should be located to create continuous street walls to define the public realm in areas where pedestrian activity is most desirable, preferably including street activating uses.
2. **Build-to-areas** serve a purpose similar to build-to-lines, but allow greater flexibility in building façade placement along the public domain.
3. **Streetscape improvements** should include wide sidewalks, adequate illumination, landscaping, and street furnishings.
4. **Enhanced intersections** refer primarily to how buildings can shape and highlight street crossings linking significant areas.
5. **Landmark or gateway** structures provide points of orientation for pedestrians and motorists by standing out singularly from their surrounding context.
6. **Transitions** should appropriately protect existing single-family neighborhoods from possible negative impact from new development.
7. **Open Space** networks consisting of a variety of open space types should be incorporated into all large developing areas.



*Build-to-lines*



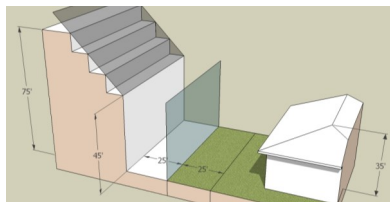
*Build-to-areas*



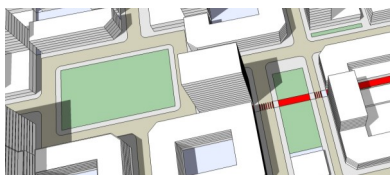
*Streetscape*



*Enhanced Intersections*



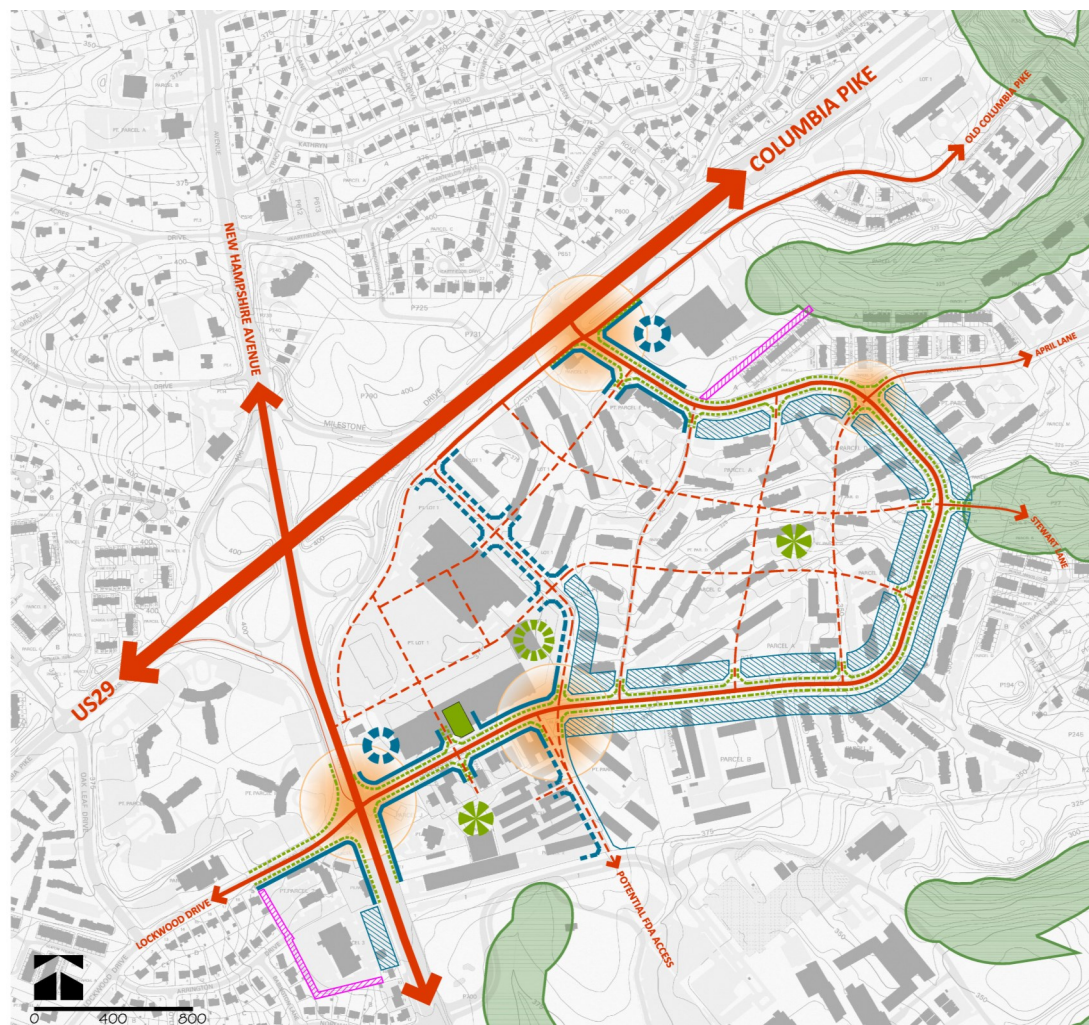
*Transitions*



*Spaces for Public Use*

## Goal 2 | Guidelines:

1. Provide services and amenities along local roads within each center to enhance existing communities.
  - a. Focus enhancements from future development along existing local corridors within each center to enhance pedestrian activity and support future transit.
  - b. Establish **build-to-lines** to place densities along segments of the public right-of-way where increased pedestrian activity is desirable (see area diagrams).
  - c. Establish **build-to-areas** along segments of the public right-of way where increased pedestrian activity is desirable, but where additional flexibility in building placement might be appropriate (see area diagrams).
  - d. Provide **streetscape improvements** along local corridors to create a continuous pedestrian experience between new and developing communities; incorporate existing tree canopy if feasible.
  - e. Establish connections with surrounding neighborhoods where feasible.
2. Establish **landmarks** at prominent locations to serve as points of reference in the area.
  - a. Incorporate existing structures of local significance as focal points of redevelopment.
  - b. Provide **landmark features** in new structures at prominent locations.
  - c. Locate neighborhood landmark elements at important intersections or fronting major roads.
3. Create networks of spaces for public use.
  - a. Create an **urban plaza** within each redeveloped commercial center, in a location convenient to a transit stop, to serve as focal point for redevelopment.
  - b. Create a larger **urban park** within walking distance from proposed transit, at each center.
  - c. Larger redevelopment sites should provide a variety of spaces for public use.
4. Create appropriate transitions to existing neighborhoods.
  - a. Concentrate taller components of new development along major roads or important intersections.
  - b. Retain existing wooded areas as buffers between single family residential neighborhoods and new development, where feasible.
  - c. Provide adequate transitions through appropriate building heights and setbacks on properties abutting or confronting single family structures.



## Legend

- Existing Road
- - - Potential Road
- Build-to-line
- - - Potential Build-to-line
- ▨ Build-to-area
- - - Streetscape
- ▨ Transition Area
- ☁ Environmental Buffer
- Urban Plaza
- ⊙ Proposed Park
- ⊗ Potential Open Space
- ⊗ Landmark | Gateway Structure
- Enhanced Intersection

## Guidelines for Specific Centers

### White Oak Center

The existing commercial area of White Oak is prominent and easy to see from several vantage points. It also has strong potential for a direct connection with the core of the Food and Drug Administration (FDA) campus. The commercial center includes the White Oak Shopping Center, several office buildings, and ancillary retail. This center's high visibility, at the intersection of two major roads (US 29 and New Hampshire Avenue) with existing high rise apartments, suggests that higher density and taller building heights could be located here. Redevelopment should establish a new vertical scale with high intensity uses, to improve the area for pedestrians and create support for the proposed BRT system, which may have two lines converging around the center. Redevelopment could also encourage reinvestment for the enhancement of immediately adjacent residential communities.

### Blocks 1, 2, 3

### Lockwood Drive and New Hampshire Avenue

- Create active fronts along Lockwood Drive and provide streetscape improvements (pavements, landscape, lighting and furnishings); integrate existing transit center.
- Create a north-south connection between Lockwood Drive and Old Columbia Pike to link with a possible connection with the FDA campus to the south. Include streetscape improvements and active fronts where feasible.
- Focus development and streetscape improvements at the intersection between Lockwood Drive and New Hampshire Avenue.
- Development should be compact and mixed-use, with walkable internal streets (see design goals 1 and 2).
- Building street wall should be between two and five stories.
- Open Space
  - ◇ Provide an urban plaza, integrated with existing transit center functions.
  - ◇ Create a neighborhood green near the eastern edge of the block.
  - ◇ Consider providing additional spaces for public use throughout as properties develop.

### Blocks 4, 5

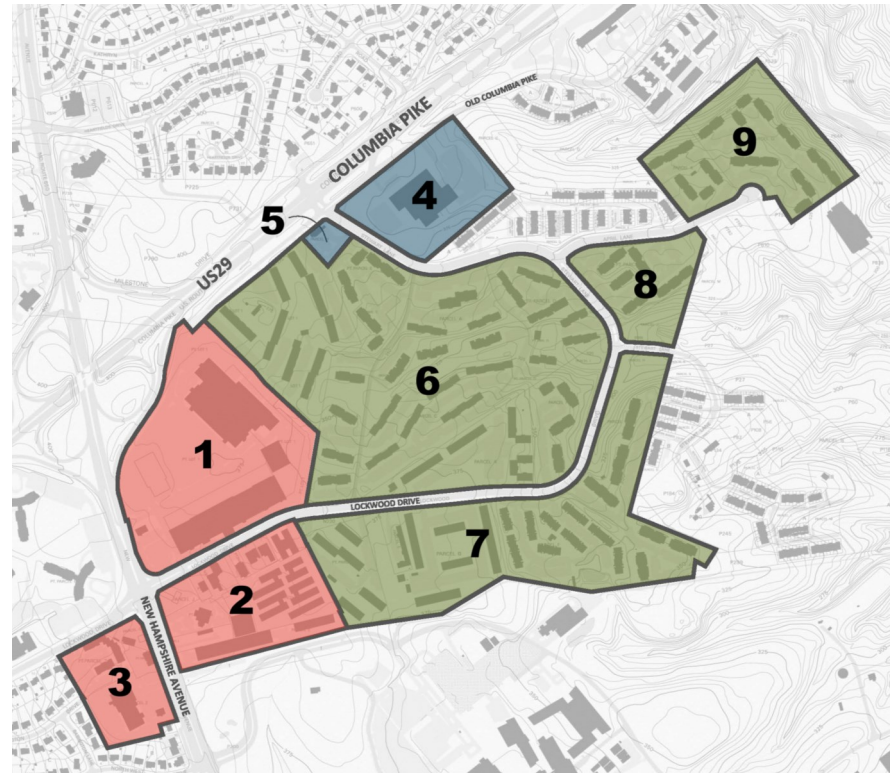
### Old Columbia Pike at Stewart Lane

- Redevelopment should create a northern architectural gateway for the area, and enhance pedestrian areas along Stewart Lane.
- Retain existing tree canopy along Old Columbia Pike, if feasible.
- Consider ways to integrate the stream valley to the east.
- Provide adequate transition to residential properties to the south.

### Blocks 6, 7, 8, 9

### Lockwood Drive/Stewart Lane and April Lane

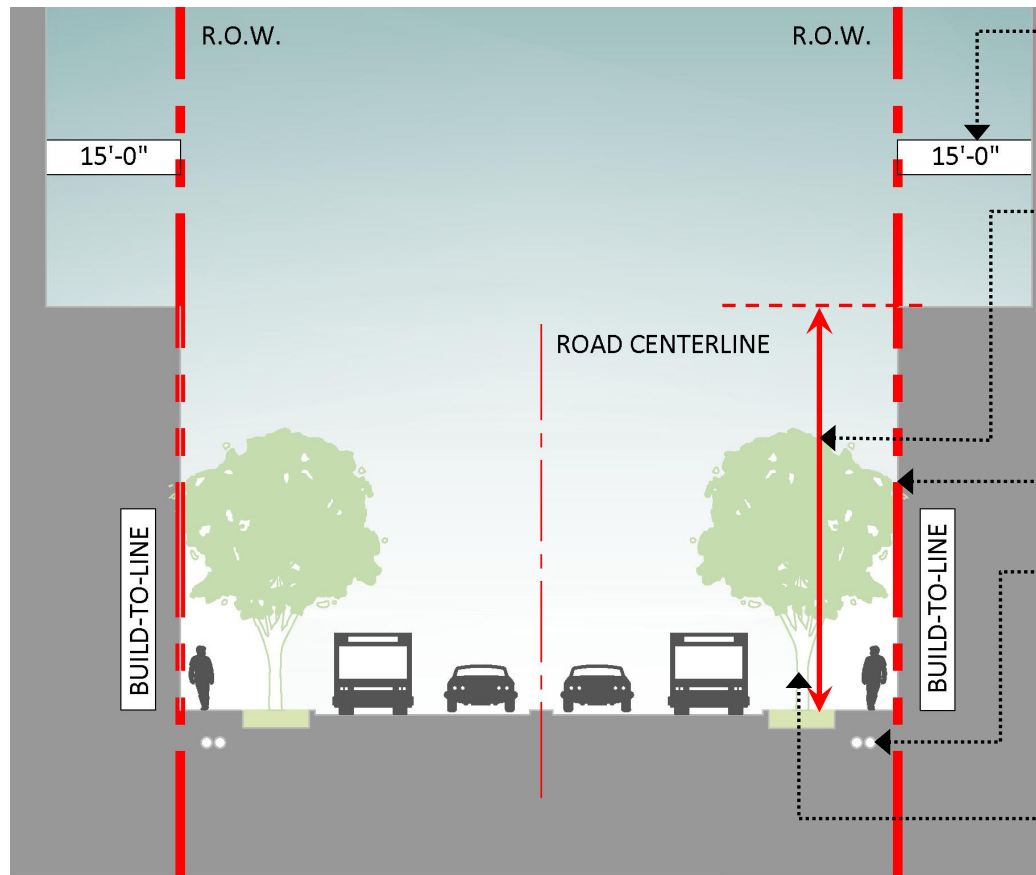
- Enhance pedestrian environment along Lockwood Drive.
- Create a shared use path recreational loop.
- Create a system of short blocks, internal streets, and networked open spaces, should parcels redevelop as a group.



**Carlyle, Alexandria, VA**

*Example of the type of public realm envisioned by the guidelines for higher density areas such as the White Oak Shopping Center.*

## Lockwood Drive at White Oak Transit Center



### Tower Setback

Minimum suggested is 15'-0"; will vary depending on development specifics. To be reviewed on a case by case basis.

### Street Wall

Preferably between 2 and 5 stories, but can vary depending on project specifics. To be reviewed on a case by case basis.

### Build-to Line

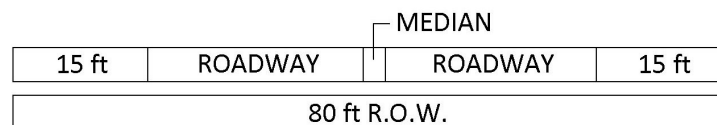
Establishes the location of the street wall. Should align with public right-of-way, unless project particulars require otherwise.

### Utilities

Locate underground, if feasible.

### Streetscape

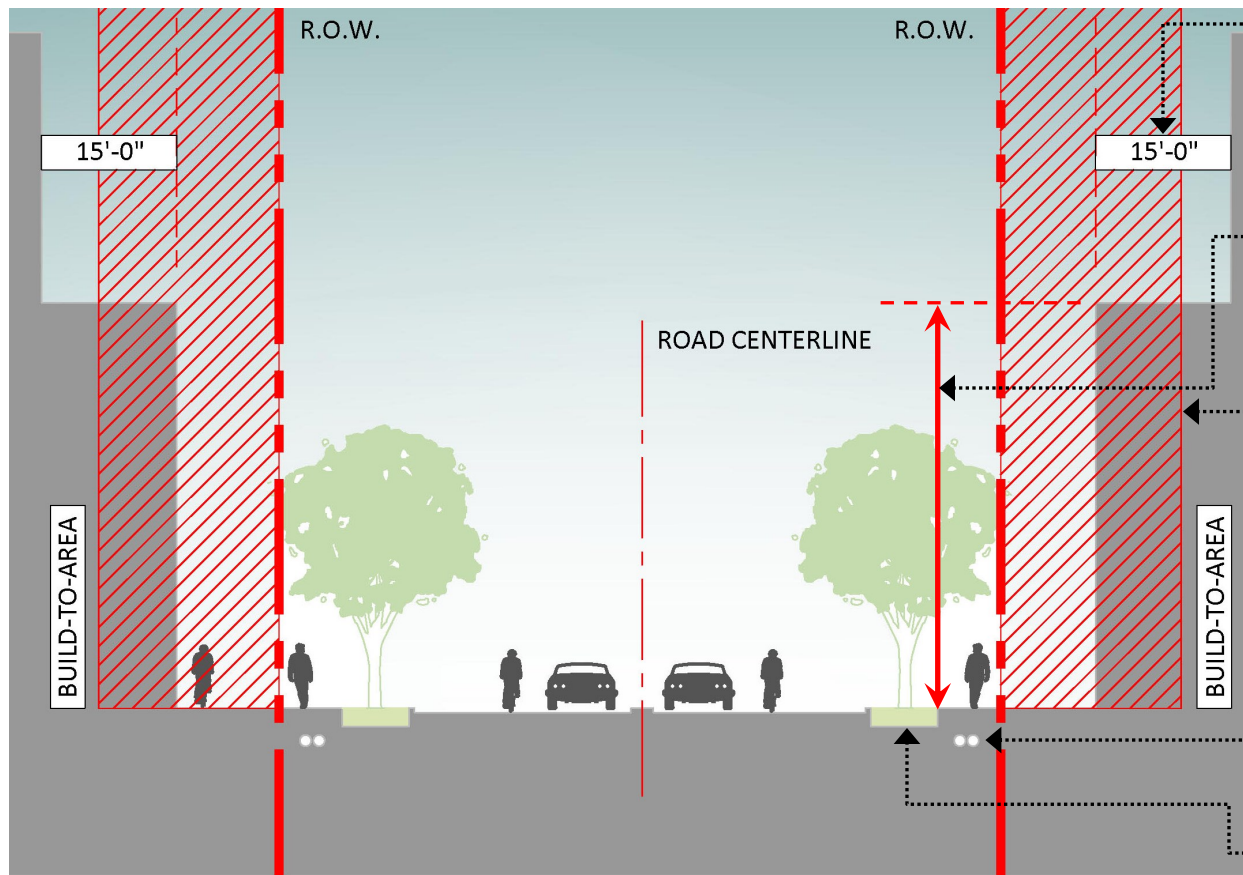
Provide closely spaced trees (40—45' on center).  
Provide sidewalk width per DOT requirements.



*Attractive building frontages along this segment of Lockwood Drive should bring active uses as close as feasible to the sidewalk, to enhance and promote pedestrian activity.*

White Oak Center | Street Profiles | Lockwood Drive at Transit Center

## Lockwood Drive at Residential Areas



### Tower Setback

Minimum suggested is 15'-0"; will vary depending on development specifics. To be reviewed on a case by case basis.

### Street Wall

Preferably between 2 and 5 stories, but can vary depending on project specifics. To be reviewed on a case by case basis.

### Build-to Line | Build-to area

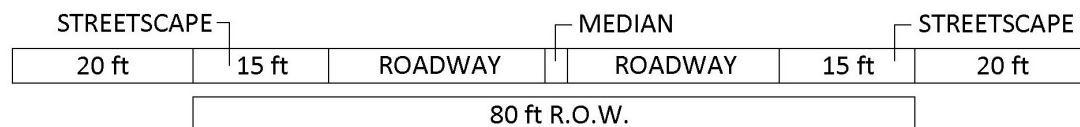
Establishes the location of the street wall. Should align with public right-of-way, unless project particulars require otherwise. Build-to-areas allow for greater flexibility in positioning the street wall.

### Utilities

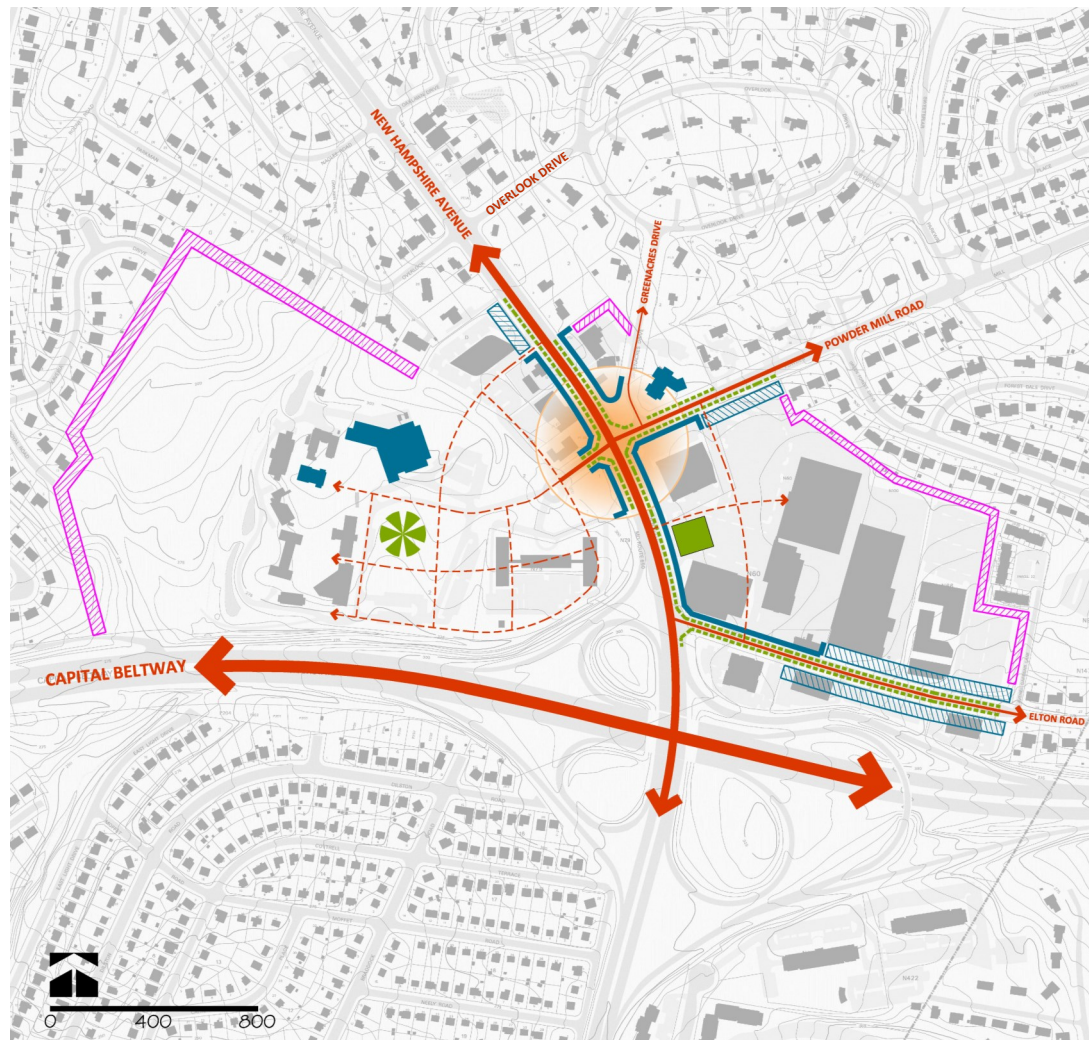
Locate underground, if feasible.

### Streetscape

Provide closely spaced trees (40—45' on center). Provide sidewalk width per DOT requirements.



*This tree-lined segment of Lockwood Drive is appropriate for a primarily residential area. New development should bring building fronts closer to the street to enhance pedestrian activity and promote safety, but the leafy character of the street should be maintained.*



## Hillandale Center

The introduction of a mass transit alternative, with a likely stop within the area, should promote redevelopment that consolidates existing commercial frontages (south of Overlook Drive, north of I-495). The existing Our Savior Episcopal Church should remain a local landmark, given its prominent location. If redeveloped, adjacent larger properties (Hillandale Shopping Center, National Labor College) should include a mix of uses, and should create public open spaces to focus community life.

### Blocks 1, 2, 3

### New Hampshire Avenue West

- Create an active pedestrian environment along New Hampshire Avenue.
- Concentrate development intensity away from existing residential areas – consider incorporating existing tree stands into buffer zones between existing residential and new development.
- Develop larger properties to create pedestrian environments that include short blocks, internal streets, and networked open spaces for public use.
- Incorporate neighborhood landmark structures (Kirkland Conference Center, Xaverian Chapel) with new development.

### Blocks 4, 5

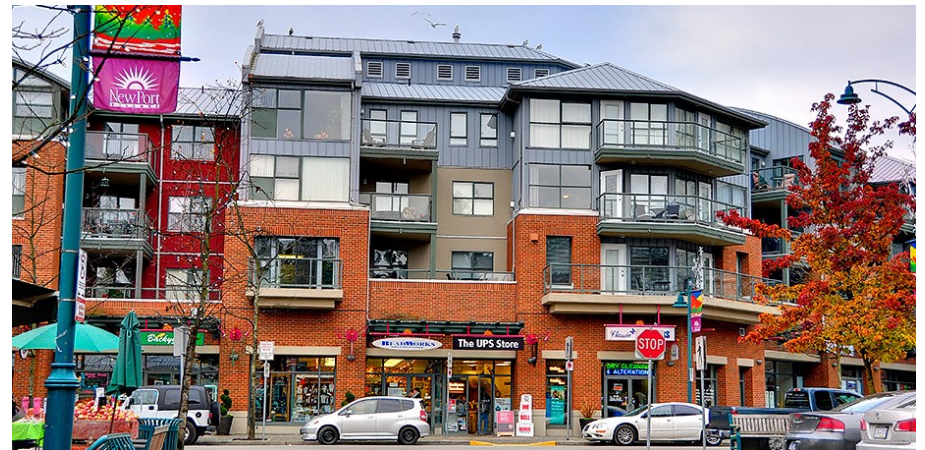
### New Hampshire Avenue North

- Encourage assembly of smaller commercial properties to create an active pedestrian environment along New Hampshire Avenue.

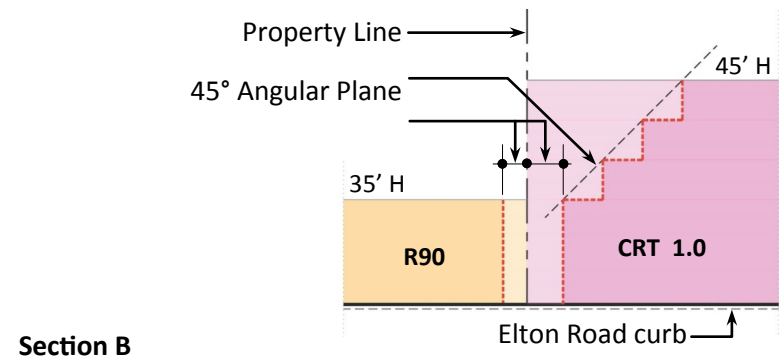
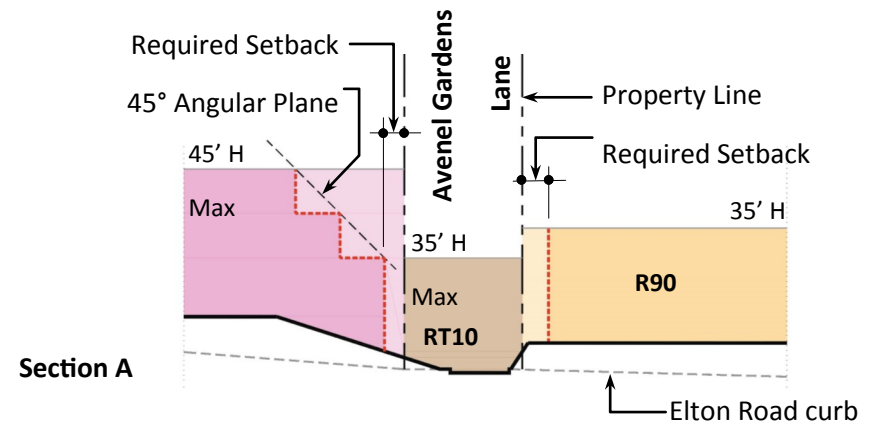
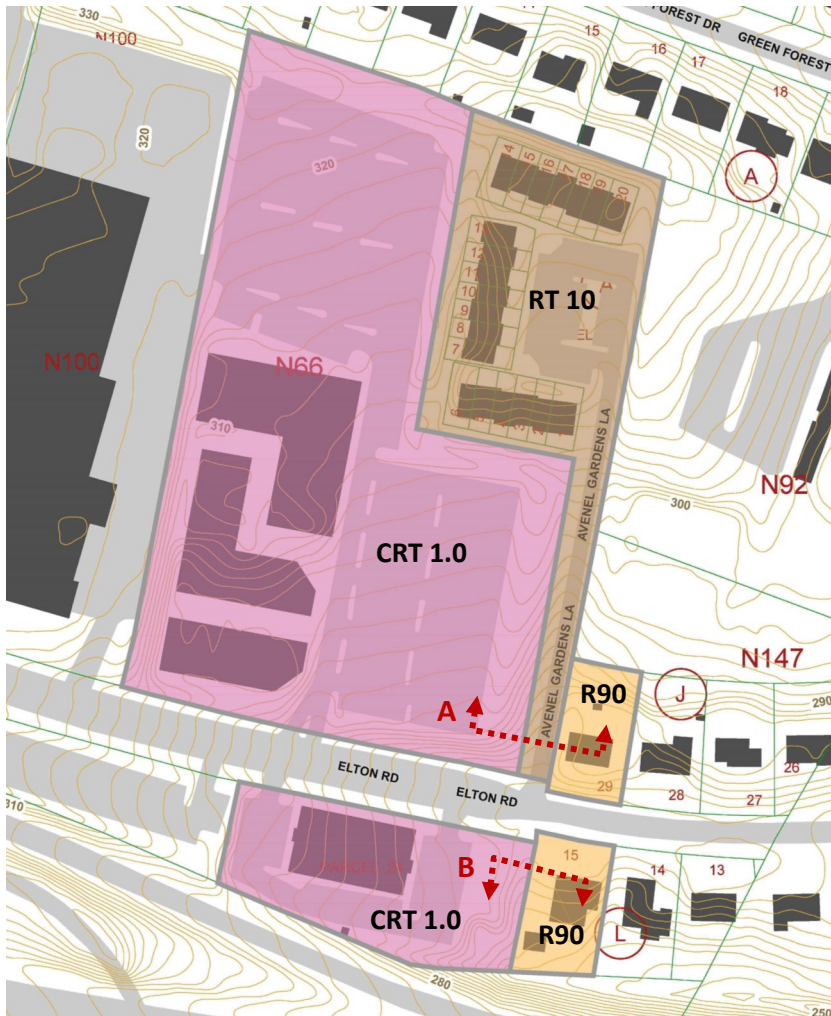
### Blocks 6, 7, 8

### New Hampshire Avenue East

- Create an active pedestrian environment along New Hampshire Avenue.
- Concentrate development intensity away from existing residential areas.
- Development should be compact and mixed-use, with walkable internal streets (see design goals 1 and 2).
- Should redevelopment occur along Elton Road, overall scale and streetscape improvements should transition to existing residential scale to the east.
- Building fronts along edges should be between two and five stories.
- Shopping Center redevelopment should include a space for public gatherings, and should contribute to the enhancement of the intersection of New Hampshire Avenue and Powder Mill Road.



**Port Moody, Vancouver, BC**  
*Mixed-use development that uses different materials and building articulation to reduce visual scale.*

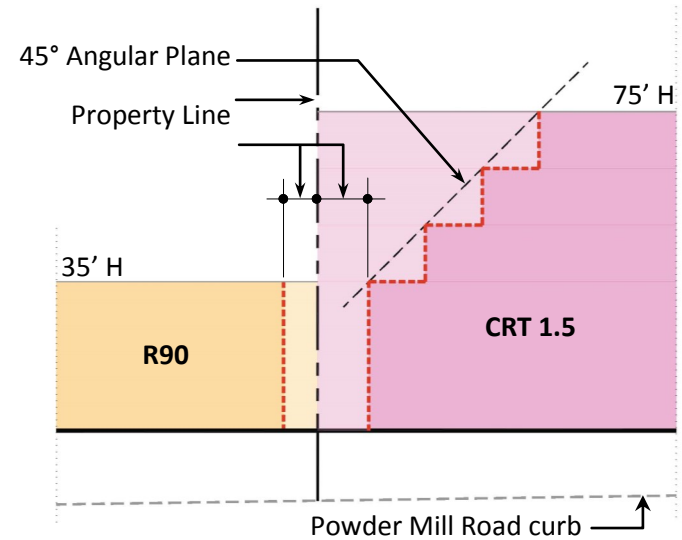
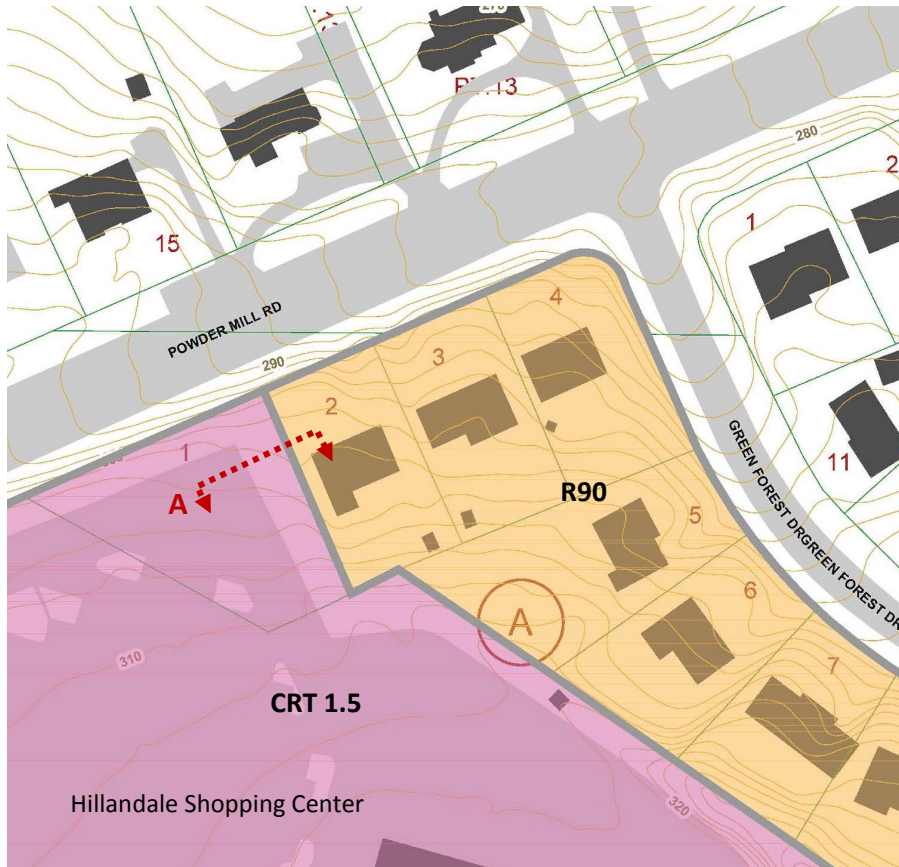


## Transitions

The CR zones include features such as yard setbacks and building height planes, to limit the extent of commercial building mass near single-family homes. The diagrams provided are illustrative for various conditions where single-family and commercial properties meet. The illustratives represent the requirements as described in the Zoning Ordinance.



Transitions | Hillandale Center | Elton Road



**Section A**

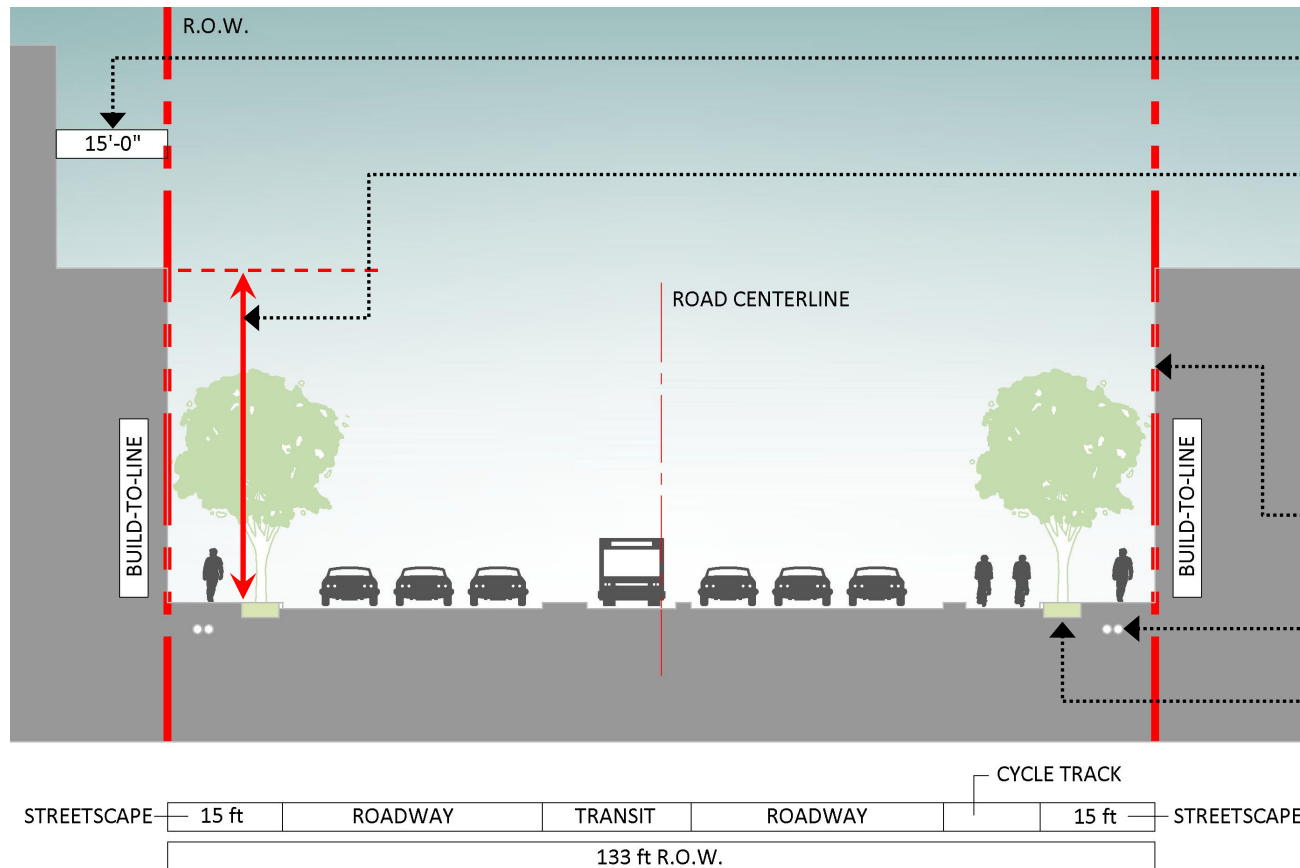
**Planning Board Draft Master Plan, p.37**

*Redevelopment of the Shopping Center site should concentrate density toward New Hampshire Avenue and ensure adequate transitions through buffering or reduced building heights for the commercially zoned properties adjoining the single-family residential lots on Green Forest Drive.*



**Transitions | Hillandale Center | Powder Mill Road**

## New Hampshire Avenue



### Tower Setback

Minimum suggested is 15'-0"; will vary depending on development specifics. To be reviewed on a case by case basis.

### Street Wall

Preferably between 2 and 5 stories, but can vary depending on project specifics. To be reviewed on a case by case basis.

### Build-to Line

Establishes the location of the street wall. Should align with public right-of-way, unless project particulars require otherwise.

### Utilities

Locate underground, if feasible.

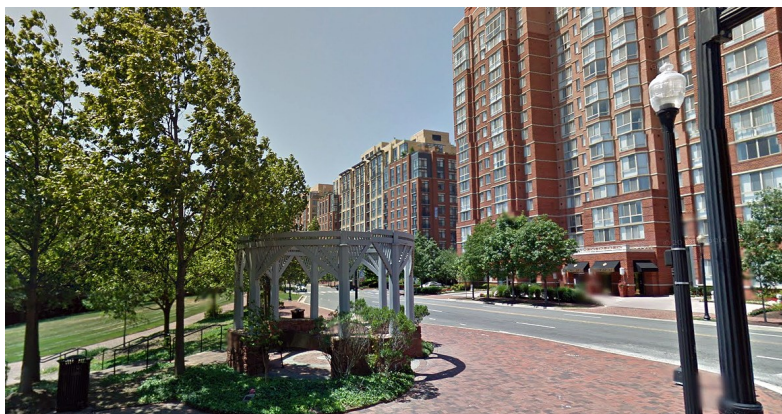
### Streetscape

Provide closely spaced trees (40—45' on center). Provide sidewalk width per DOT requirements.

*Redevelopment of the Hillandale Shopping Center could provide a gathering space connected to mass transit currently under study. Consolidated frontages along New Hampshire Avenue can offer opportunities to improve the area for pedestrians.*



Hillandale Center | Street Profiles | New Hampshire Avenue



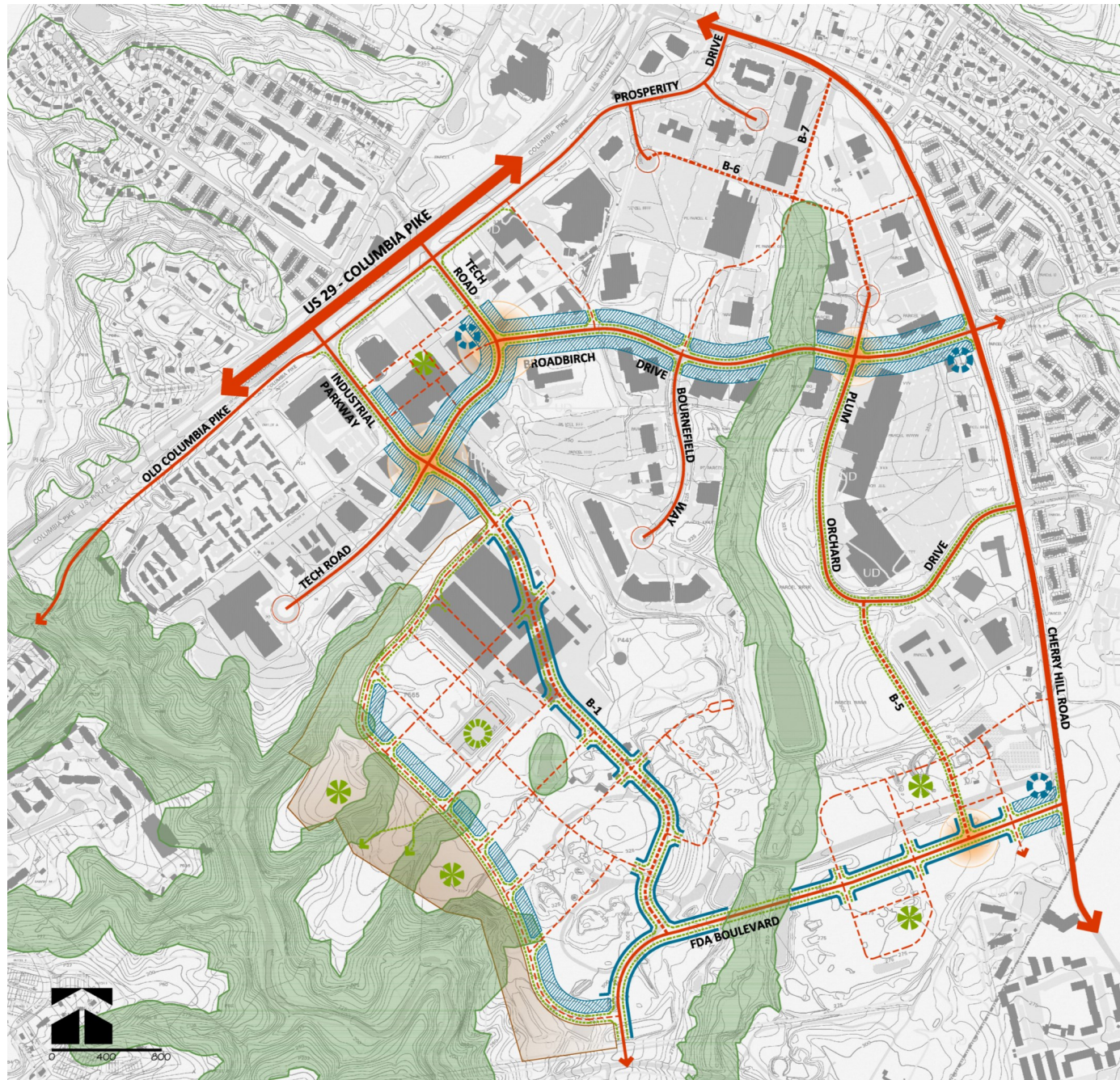
*Top:  
Existing Conditions,  
County Site 2*

*Bottom from Left:  
Holland Lane, Alexandria VA  
Town Center, Reston VA  
Tree-lined Street,  
Omotesando, Japan*

## Life Sciences | FDA Village Center

This is a large area that is currently home to light industrial /office park type uses. Mixing of existing light industrial uses and other commercial uses that could benefit surrounding residential neighborhoods is encouraged, as well as sensitive integration of new development with significant existing environmental resources.

The redevelopment of County-owned Site 2 and the adjacent Percontee property will introduce a mix of institutional/commercial/residential uses, representing a shift from the node's predominantly light industrial character. Besides including a number of interior streets, amenities, and a network of open spaces, this development could enhance east-west mobility by creating a main street connecting Industrial Parkway with FDA Boulevard. It should also enhance public access to the Paint Branch stream valley, and provide opportunities for outdoor recreation along its edge. Industrial properties to the north could, over the long term, redevelop to introduce complementary mixed uses. Improvements to key properties could create gateways to the area and better connections to adjacent communities.



### Legend

- Existing Road
- - - Proposed Road
- - - Potential Road
- Build-to-line
- - - Build-to-area
- - - Streetscape
- Environmental Buffer
- Civic Green
- ⊗ Proposed Park
- ⊗ Potential Open Space
- ⊗ Landmark | Gateway Structure
- ⊗ Enhanced Intersection

Life Sciences — FDA Village Center | Design Elements Diagram

### Blocks 1, 2

#### Tech Road and Industrial Parkway at US29

- Redevelopment of key properties should create a gateway to the area at US29 that integrates a possible BRT station.
- Development should improve pedestrian areas along Tech Road and Industrial Parkway.
- Development at Block 1 should create a visual terminus for westbound Broadbirch Drive.
- Create an accessible central open space within Block 1.

### Blocks 3, 4, 5, 6

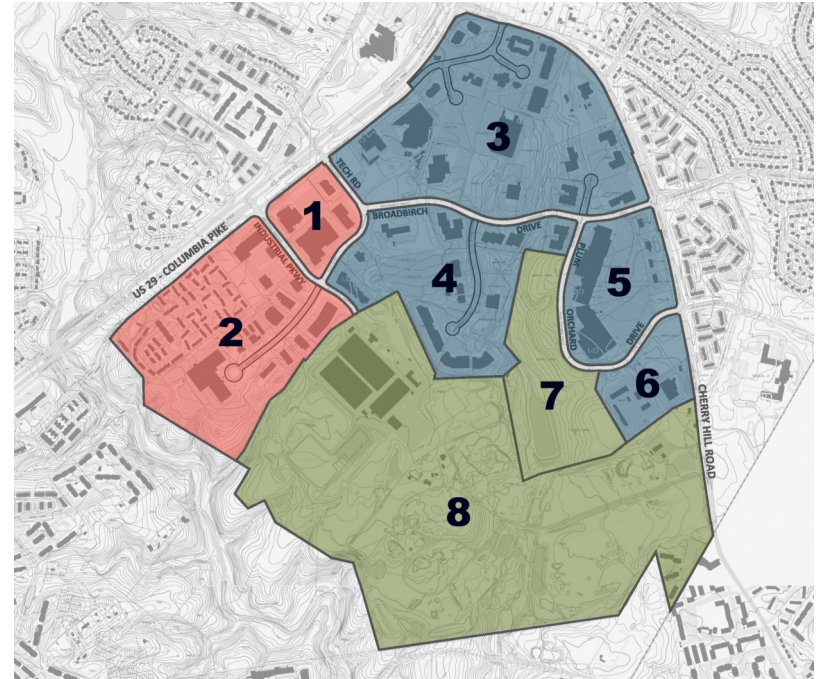
#### Tech Road and Broadbirch Drive

- Redevelopment of properties along Broadbirch Drive should create destinations to encourage pedestrian activity.
- Existing tree-lined character of Broadbirch Drive should be maintained.

### Blocks 7, 8

#### Industrial Parkway Extended and FDA Boulevard

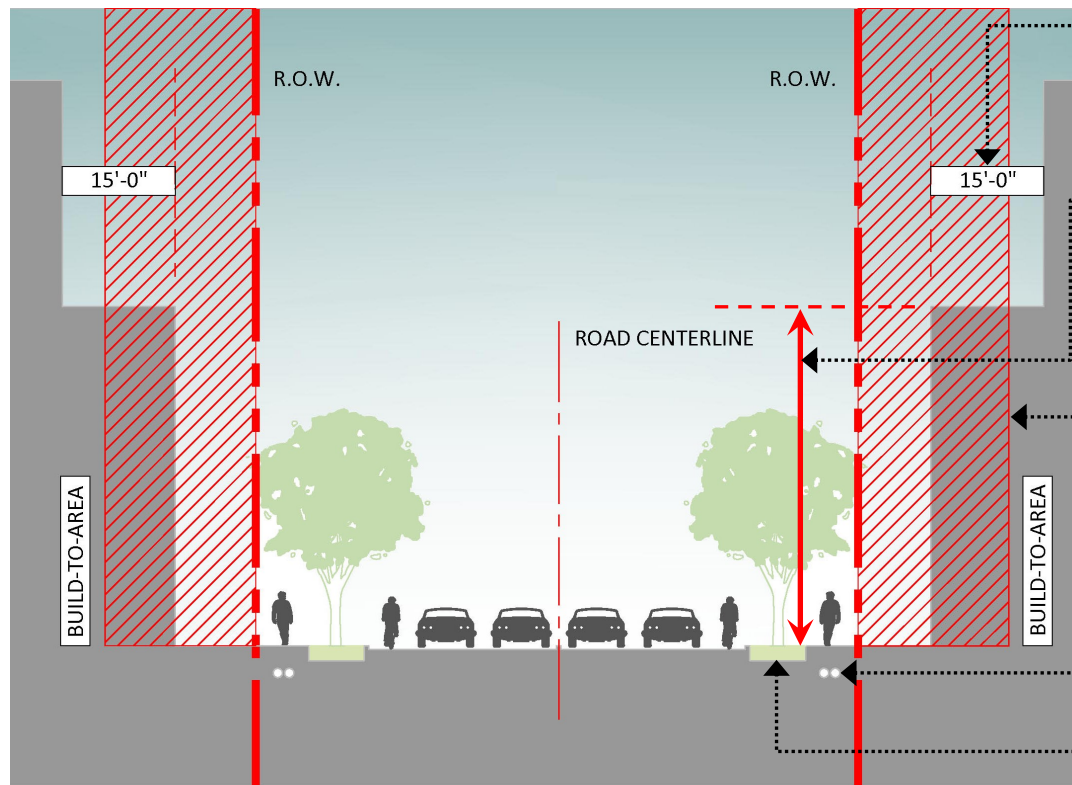
- Industrial Parkway Extended should develop as a pedestrian-oriented central spine. Tallest structures in this area should be concentrated along this road segment.
- Development along FDA Boulevard should be compatible with development along Industrial Parkway Extended, but should transition to a lower scale along Cherry Hill Road, to be compatible with existing residential communities to the east.
- Development should enhance the edge along the Paint Branch stream valley to the south with conservation and/or restoration efforts, to include the creation of accessible recreational areas for public use.



**Dockside Green, Victoria, BC**

*Example of development with a strong sustainable agenda. Proximity to the Paint Branch Stream Valley, and important environmental resource, should present opportunities to use similar development strategies.*

## Broadbirch Drive



### Tower Setback

Minimum suggested is 15'-0"; will vary depending on development specifics. To be reviewed on a project-by-project basis.

### Street Wall

Height can vary depending on project specifics. To be reviewed on a project-by-project basis.

### Build-to Line | Build-to area

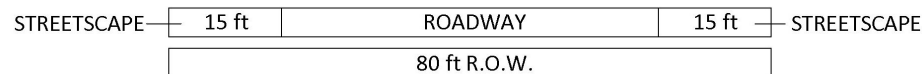
Greater flexibility in positioning the street wall may be necessary along this area if character is to be maintained. Continuity should be maintained, but greater setbacks should be allowed here.

### Utilities

Locate underground, if feasible.

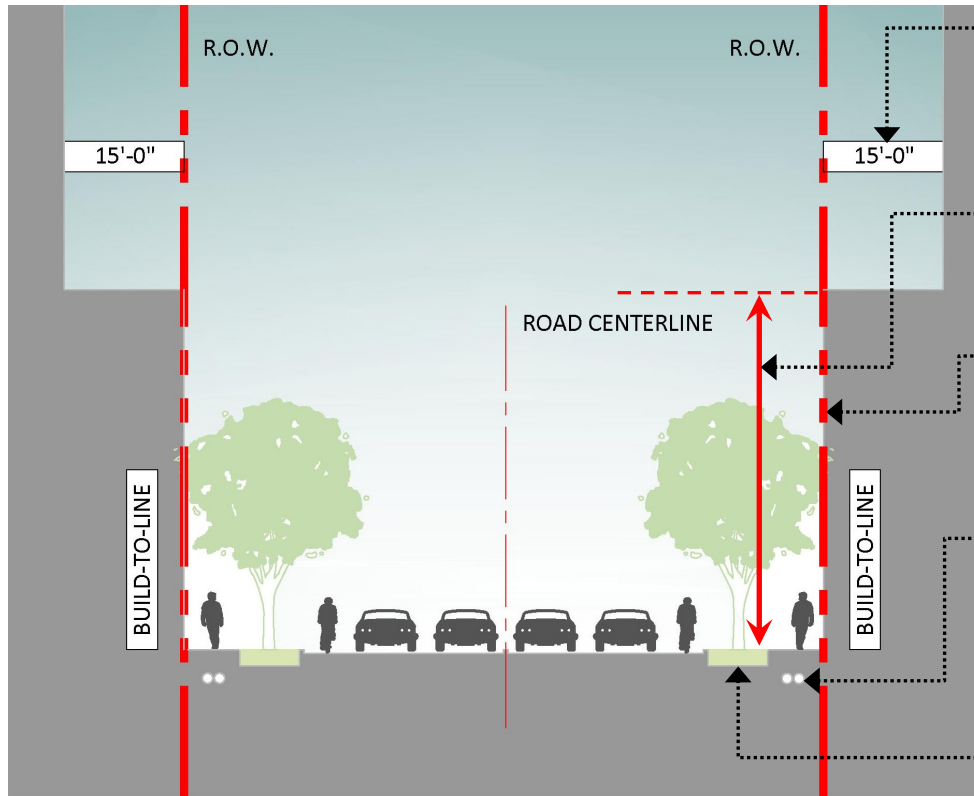
### Streetscape

Maintain the existing tree-lined character. If required, provide closely spaced trees (40—45' on center). Provide sidewalk width per MCDOT requirements.



Redevelopment could enhance the pedestrian experience along Broadbirch Drive by adding destinations to an existing tree-lined setting.

## Industrial Parkway Extended



### Tower Setback

Minimum suggested is 15'-0"; will vary depending on development specifics. To be reviewed on a project-by-project basis.

### Street Wall

Preferably between 2 and 5 stories, but can vary depending on project specifics. To be reviewed on a case by case basis.

### Build-to Line

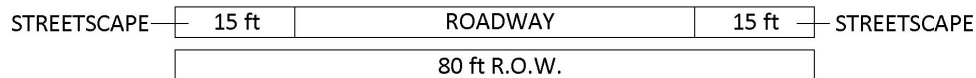
Establishes the location of the street wall. Should align with public right-of-way, unless project particulars require otherwise.

### Utilities

Locate underground, if feasible.

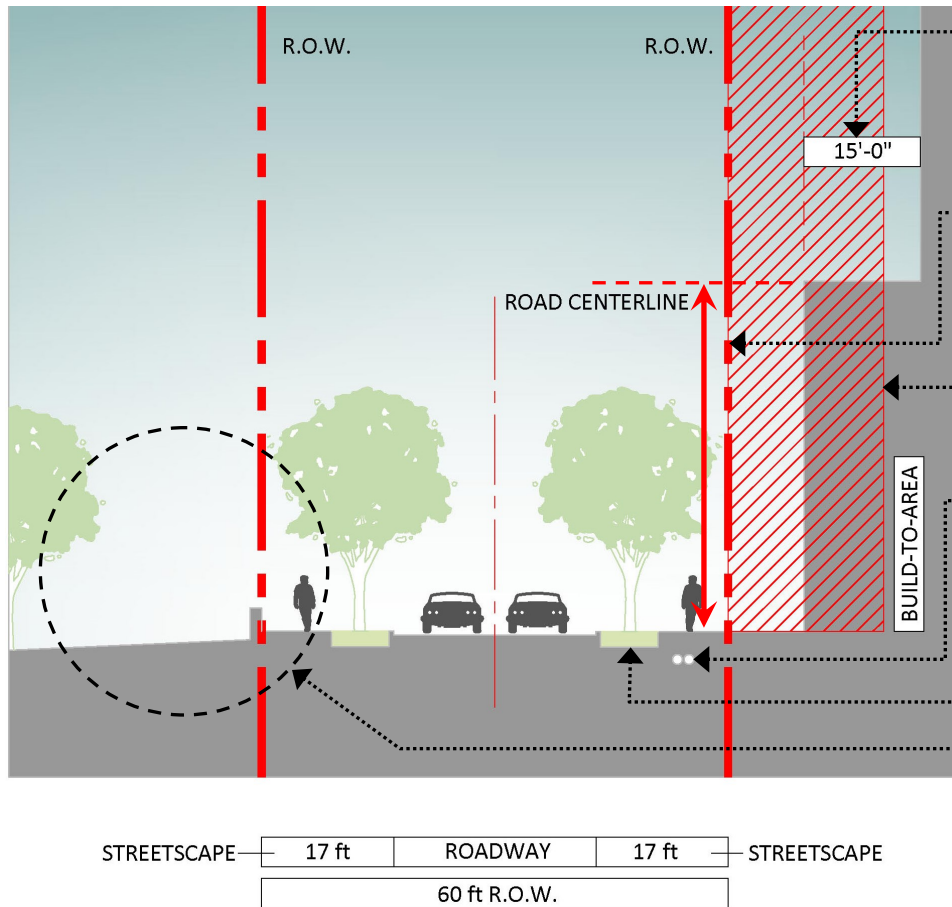
### Streetscape

Provide closely spaced trees (40—45' on center). Provide sidewalk width per MCDOT requirements.



Substantial redevelopment will transform underused land into a new business district for the region.

## Paint Branch Overlook



### Tower Setback

Minimum suggested is 15'-0"; will vary depending on development specifics. To be reviewed on a project-by-project basis.

### Street Wall

Height can vary depending on project specifics. To be reviewed on a project-by-project basis.

### Build-to Line | Build-to area

Continuity from block to block should be maintained, but greater setbacks should be allowed here.

### Utilities

Locate underground, if feasible.

### Streetscape

Provide closely spaced trees (40—45' on center). Provide sidewalk width per DOT requirements.

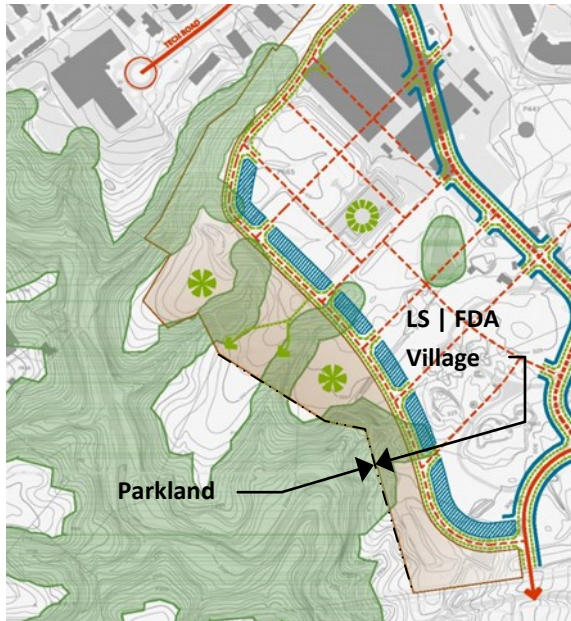
### Open Space

Development facing the Paint Branch Stream Valley should consider enhancements that promote conservation and/or restoration efforts, and that create accessible recreational areas for public use.

## White Oak Science Gateway Planning Board Draft Master Plan, p. 89

*New development on the 300-acre Percontee/Site2 properties should be sensitive to the adjacent Paint Branch Stream Valley Park and should provide extensive open space opportunities. Parks, trails, and recreational opportunities are needed for the future population of residents, workers, and visitors, including places for formal and informal gatherings, active recreation, spontaneous play, contact with nature, as well as connections within this center and beyond to other destinations.*

## Paint Branch Overlook



Paint Branch Overlook Diagram



Holland Lane, Alexandria VA

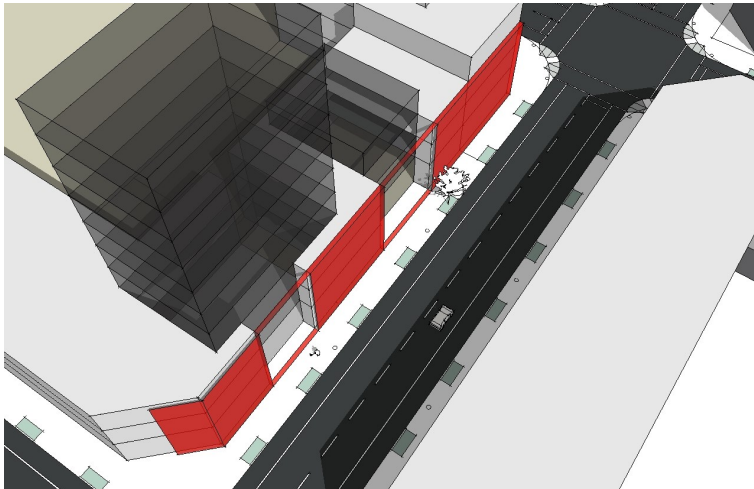


Holland Lane, Alexandria VA

Right: Example illustrates the implementation of development—enhanced environmental resource, including recreational areas.

## Implementation Resources

These guidelines utilize various design elements to illustrate the integrated environment envisioned by the Master Plan. Their primary focus is on the role played by buildings in defining the public domain. Redevelopment should incorporate these elements to achieve well connected pedestrian environments within each center.



### Design Elements: Buildings

#### Build-to-Zones

Build-to-lines indicate where a building's street façade should be located to create continuous street walls that define and contain the public realm, and that may include retail or other street activating uses, primarily in areas where density is the highest. Build-to-areas allow for greater flexibility in locating the street wall within pre-established distances away from the public right-of-way. The Master Plan contains several areas where such flexibility might be appropriate or necessary; the guidelines use both strategies to build the pedestrian environments envisioned by the Plan.



#### Streetscape

Improving the streetscape along public corridors would promote safe pedestrian activity and enhance the character of the public realm through each center. Improvements should build on existing conditions where possible, to enhance local character. Incorporating sustainability measures is strongly encouraged.



### Enhanced Intersections

Development should enhance existing intersections to improve connectivity, and to concentrate density in areas where it can become a focus for the neighborhood.

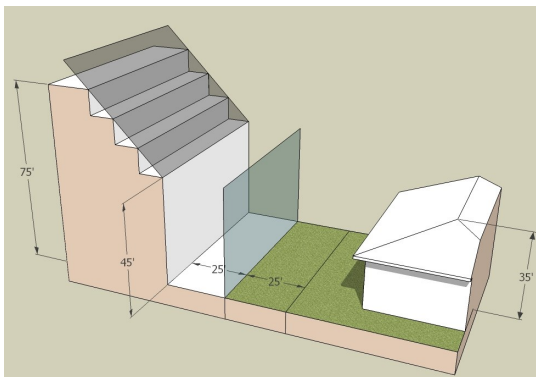
Enhanced intersections should include:

- Street defining buildings at all corners, with entrances and/or activating uses oriented toward the corner, when feasible.
- Sidewalk streetscape elements (including trees) that pull away from the corner to improve visibility across the intersection for pedestrians, cyclists, and motorists.
- Building corner articulation that allows adequate space for pedestrians to congregate safely, away from vehicular traffic.
- Consider speed-reducing measures at the road surface such as alternative materials at crosswalks. This would require MCDOT approval and coordination.



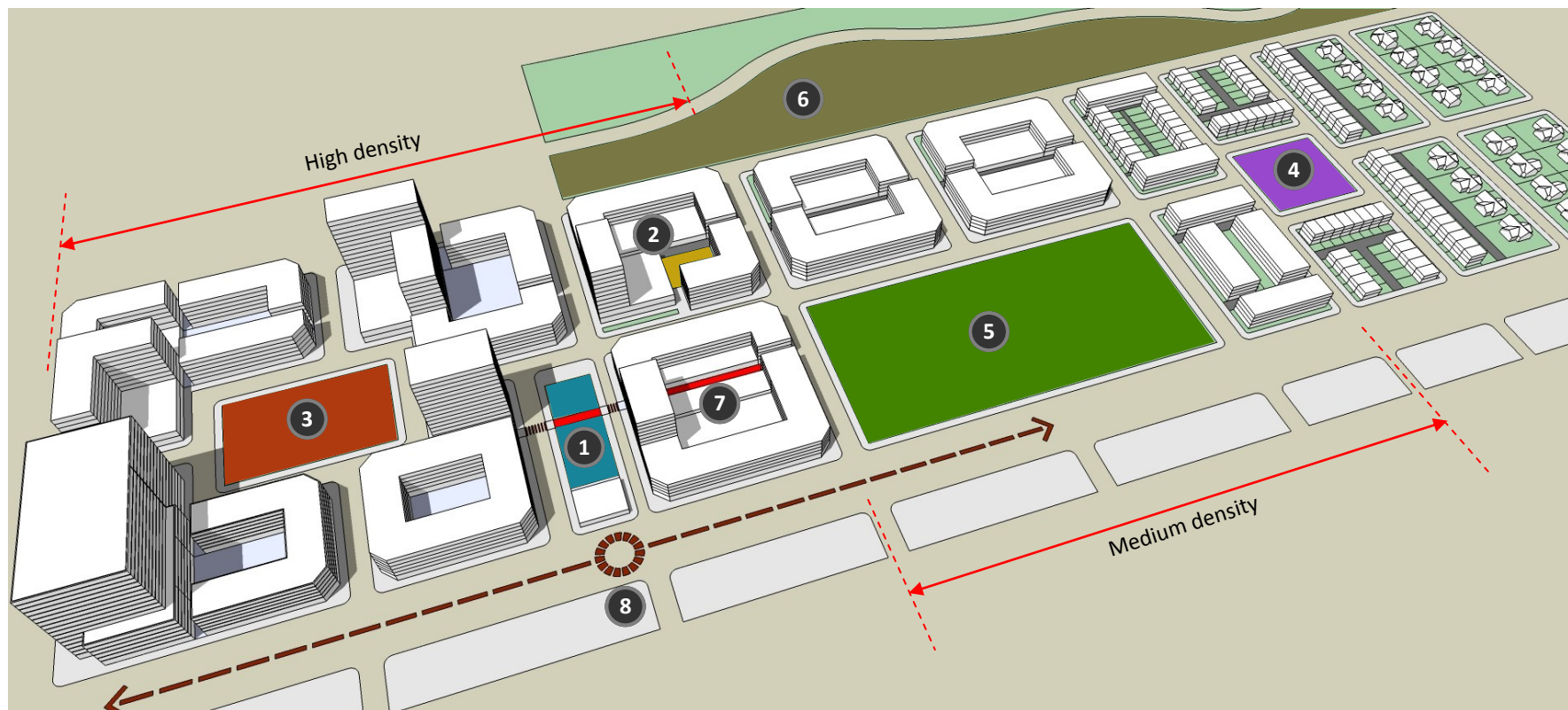
### Landmarks and Gateways

Landmark structures can provide points of orientation for both pedestrians and motorists. A key element of a landmark is its singularity; the quality that makes it stand out from its context. Landmarks should be easily identifiable, whether by form, contrast with their background, or because of prominence or special location. Landmark elements can also signal transitions to neighboring communities, or highlight access to mass transit or to prominent public spaces.



### Transitions

The illustrative diagrams for each of the centers outline areas where appropriate transitions should be considered between existing residential neighborhoods and areas with development potential. The Master Plan and Design Guidelines rely on tools in the Commercial –Residential (CR) zones as approved by the County Council in the Zoning Ordinance Rewrite scheduled to take effect October 30, 2014, such as rear yard setbacks and building height planes, to limit the extent of new building mass near single-family zones and uses.



- 1 Urban Plaza (\*)
- 2 Neighborhood Green
- 3 Civic Green
- 4 Neighborhood Park
- 5 Active Local Park
- 6 Greenway | Linear Park
- 7 Through-block Pedestrian Connection (\*)
- 8 Transit (\*\*)

### Design Elements: Spaces for Public Use

The Master Plan recognizes that a successful system of parks and open spaces must be provided through a combination of public and private efforts. The Guidelines provide descriptions for a variety of open space types that could be provided by developing properties within the master plan area. The list is limited to the opportunities identified by the Plan, so it is not exhaustive.

*Note:*

*Open space types listed are from 2012 Park, Recreation and Open Space (PROS) Plan.*

*(\*) Space Type not included in PROS Plan*

*(\*\*) Not a space type*



## Urban Plaza

Public use space integrated into commercial or mixed-use development, to serve as focal point for community activity. Depending on size and location, may support organized activities and special events.

**Location:** Integrated with development; convenient to mass transit

**Size:** Less than 1 acre; actual size could be dependent on programmatic requirements

### Design:

- Defined by building walls containing ground floor activating uses on at least two sides
- Visibility and access from adjacent sidewalks, streets, and buildings

### Elements:

- Primarily hardscape – considerations for pervious surfacing are encouraged
- May include trees for shading
- Should include variety of seating options
- May include limited landscaped areas



### ***Urban Plaza, World Wide Plaza, New York, NY***

*Example of an urban plaza integrated with commercial and residential development, with access to mass transit, and including a variety of seating alternatives, amenities, and landscaped areas.*



## Neighborhood Green

Privately developed small scale urban open space tucked into and scattered throughout urban fabric. These are intended to serve the immediately local population as a refuge from the bustle of surrounding urban life, and to offer opportunities for rest and relaxation.

**Location:** Integrated with development

**Size:** Approximately 1/4 acre or less

**Design:**

- Design as a single “room”, but may include spaces for small gatherings
- Defined by building walls on at least three sides; these may or may not contain activating uses
- Direct access to a local street
- Visibility and access from adjacent sidewalks, streets, and buildings

**Elements:**

- Primarily hardscape – considerations for pervious surfacing are encouraged. May include lawn areas if feasible
- May include trees for shading, planting areas, water features, art
- Should include variety of seating options

***John F Collins Park (Chestnut Park), Philadelphia, PA***

*Example of a small park in the city’s central core, constructed of local building and plant materials, and that also includes seating options, art, and water features.*



## Civic Green

Formally planned, flexible, programmable public use space that can provide places for informal gathering, quiet contemplation, or large gatherings and special events.

**Location:** Centrally located within higher-density development area

**Size:** Approximately 1/2 acre minimum; preferable 1 to 2 acre area

### Design:

- Designed to incorporate several activity zones
- Flexible space to accommodate a variety of public gatherings
- Adjacent to major roads and/or business streets
- May be surrounded by local streets lined with high to medium density development, with continuous street walls and activating uses
- Visibility and access from adjacent sidewalks, streets, and buildings

### Elements:

- Substantial central lawn area as a focal point
- Include trees for shading
- Plantings, lawn area, shaded sitting and pathways
- Might include play areas, community gardens, or similar neighborhood facilities
- Multiple options for seating
- Public Art
- Identity Features

### **Rockville Town Center, Rockville, MD**

*Example of a successful central square that includes a variety of activity zones and landscaped areas, and that is surrounded by medium to high density development that provides a periphery of ground floor active uses.*





## Neighborhood Park

Small park providing informal recreation in primarily residential areas.

**Location:** Integrated with development with a primarily residential component

**Size:** 1 acre minimum

**Design:**

- Surrounded by local streets and medium to low density development
- Visibility and access from adjacent sidewalks, streets, and buildings

**Elements:**

- Include trees for shading
- Plantings, lawn area, shaded sitting and pathways
- Active recreation areas might include play equipment or multi-use courts
- May include community gardens, or similar neighborhood facilities



***Neighborhood Park, White Horse Beach, Plymouth, MA***

*Example of a small neighborhood park serving as an oasis for a primarily residential area, that includes extensive lawn areas, and tree covered trails and seating areas.*



## Active Local Park

Large Park to provide athletic fields as well as space for programmed and un-programmed recreation facilities.

**Location:** Equally accessible from redeveloping properties and existing surrounding communities

**Size:** 4 acres minimum

### Design:

- Designed to incorporate several intense activity zones
- Flexible space to accommodate a variety of public gatherings
- Adjacent to major roads and/or business streets
- Equally accessible from high to low density development areas

### Elements:

- Consider amenities such as a community garden, a dog park, urban wooded areas, and play space.
- Include trees for shading
- Plantings, lawn area, shaded sitting and pathways
- Include at least one large adult-sized rectangular athletic field
- Provide field illumination to increase hours of use
- On-street parking to the extent possible
- Consider co-location with elementary school, should a school be required



### ***Railroad Park, Birmingham, AL***

*Example of a large active park that highlights the city's industrial past, and that includes substantial landscaped areas and water features, as well as trails and areas for family activities, concerts, and large cultural events.*



## Greenway | Linear Park

Linear park that provide trails or wide landscaped walkways and bikeways and may include other recreational and natural amenities

**Location:** Integrated into mixed-use development with a primarily residential component

**Size:** Varies

### Design:

- Surrounded by local streets and medium to low density development
- Visibility and access from adjacent sidewalks, streets, and buildings
- Should link to other green spaces, trails, and natural systems

### Elements:

- Include trees for shading
- Plantings, lawn areas, and shaded sitting areas
- Trails, walkways and bikeways, with extra space for vegetative ground cover and trees
- Incorporate public art
- May include community gardens, or similar neighborhood facilities
- May include rest areas with facilities for passive recreation

### ***African American Heritage Memorial Park, Alexandria, VA***

*Example of a linear park that creates a public amenity along the residential edge of major development, including trails, landscaped areas, art, and that integrates historic elements and environmental features.*



## Pedestrian Through-Block Connection

Through-block pedestrian connections can shorten walking distances, create connections between open spaces, and add frontages to promote retail activity.

**Location:** Higher-density development areas

**Size:** As suitable for development area

### Design:

- Maintain continuity with street walls along adjacent streets
- Flexible pedestrian-priority space to accommodate a variety of public activities
- Adjacent to public roads and/or business streets
- Use Crime Prevention Through Environmental Design (CPTED) principles to design pedestrian links as effective public spaces

### Elements:

- Create safe spaces that are well monitored, well illuminated, and adequately furnished to promote pedestrian activity
- Include limited planted areas, if feasible.
- Seating alternatives to serve pedestrians and surrounding active uses.
- Incorporate public art



### ***Bethesda Lane, Bethesda, MD***

*Successful cobblestoned pedestrian alley lined with retail and defined by street walls including residential uses and good surface articulation.*

## Design Elements: Streets and Streetscape

Transforming the Master Plan's centers into great pedestrian friendly places will require enhancing the area's mobility system. In addition to the network of master planned streets, local or private streets will also contribute the implementation of a robust system that promote safe interaction between transportation modes.

Design objectives should include:

### Hierarchical Street Grids

To establish grids of streets that improve local access for vehicles, pedestrians, and bicyclists.

### Underground Utilities

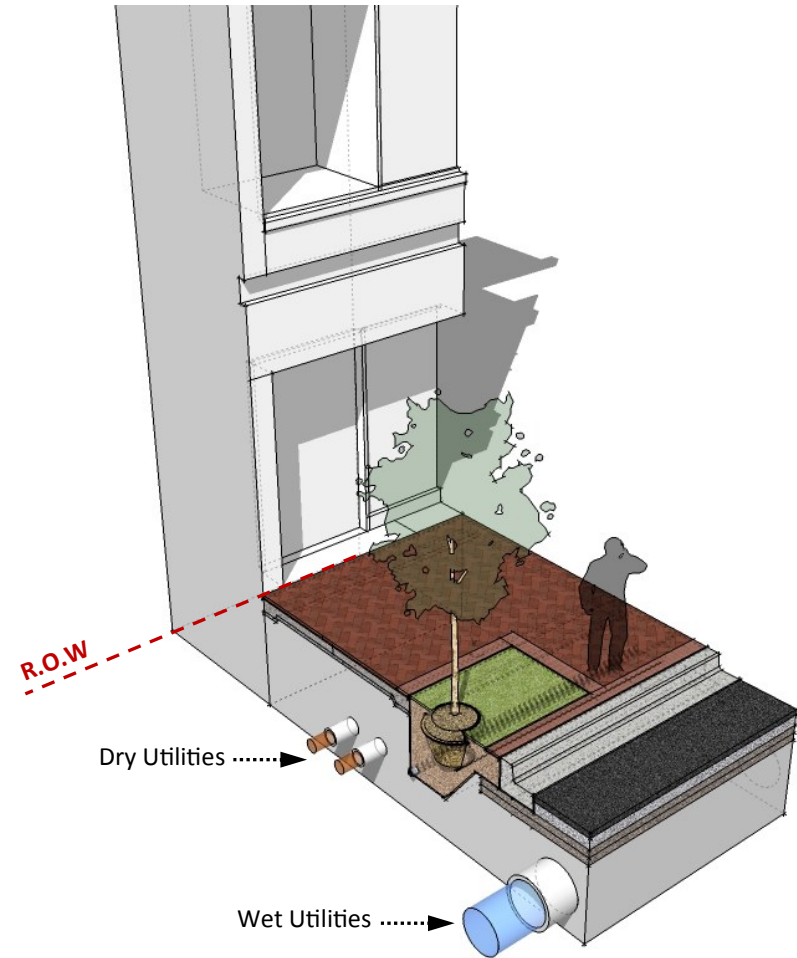
To accommodate all utilities underneath sidewalk paving within right-of-way limits, in coordination with MCDOT and utility companies.

### Walkable Blocks

To create short blocks that expand pedestrian access, maximize building frontage, and increase sidewalk activity.

### Safe Intersections

To recommend crosswalks at all intersections to improve pedestrian access and safety.



### Typical streetscape section

Example of a typical streetscape application including building front at the sidewalk, wider pedestrian zone, underground utilities, and individual tree pits. Implementation will vary depending on site constraints and road requirements.

## Local Streets

Local streets can expand the street network to provide a more finely grained street grid that will improve connectivity throughout the area. While establishing continuity in the public realm is a priority for the guidelines, local streets offer opportunities to introduce variety and character within redeveloping areas. Features for local streets might include:

- Utilizing road standards that allow for narrower travel lane widths and provide wider sidewalks;
- Streetscape components (e.g., sidewalk paving, tree spacing, lighting) compatible with adjoining public streets, and in conformance with MCDOT standards;
- Alternative roadway pavement materials (in conformance with MCDOT);
- Ground floor active uses;
- Character elements to distinguish between neighborhoods;
- Limited on-street parking;
- May be implemented as private streets.

***Clockwise from top:***

*Curbless Street, Director's Park, Portland, OR*

*North End Way Pedestrian Alley, New York, NY*

*Ellsworth Street, Silver Spring MD*

*Indianapolis Cultural Trail Street Crossing, Indianapolis, IN*

*Hillcrest Neighborhood Street Trees, San Diego, CA*



## Other Resources

### National

Americans with Disabilities Act  
[http://www.ada.gov/2010ADAstandards\\_index.htm](http://www.ada.gov/2010ADAstandards_index.htm)

### State of Maryland

Maryland State Highway Administration  
<http://sha.md.gov/Home.aspx>

Maryland's Stormwater Management Act of 2007  
<http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/Pages/programs/waterprograms/sedimentandstormwater/swm2007.aspx>

### Montgomery County

Department of Permitting Services / Building Construction – Building Codes & Standards  
<http://permittingervices.montgomerycountymd.gov/dpstmpl.asp?url=/permitting/bc/nfbldc.asp>

Zoning Code Directory  
[http://www.montgomeryplanning.org/development/about/zoning\\_legend.shtm](http://www.montgomeryplanning.org/development/about/zoning_legend.shtm)

Montgomery County Zoning Ordinance - Chapter 59  
[http://www.amlegal.com/montgomery\\_county\\_md](http://www.amlegal.com/montgomery_county_md)

Montgomery County Zoning Ordinance Rewrite  
<http://montgomeryplanning.org/development/zoning/>

Montgomery County Code  
[http://www.amlegal.com/montgomery\\_county\\_md](http://www.amlegal.com/montgomery_county_md)

Montgomery County Road Code  
[http://www.montgomerycountymd.gov/content/council/pdf/SCANNED\\_DOCS/20070715\\_48-06.pdf](http://www.montgomerycountymd.gov/content/council/pdf/SCANNED_DOCS/20070715_48-06.pdf)

Department of Transportation, Pedestrian Safety  
<http://www.montgomerycountymd.gov/dottmpl.asp?url=/Content/dot/dir/pedsafety/index.asp>

### Maryland-National Capital Park and Planning Commission

M-NCPPC Development Manual  
[http://www.montgomeryplanning.org/development/development\\_manual/index.shtm](http://www.montgomeryplanning.org/development/development_manual/index.shtm)

White Oak Science Gateway Master Plan  
<http://montgomeryplanning.org/community/wosg/>

Countywide Transit Corridors Functional Master Plan  
<http://www.montgomeryplanning.org/transportation/highways/brt.shtm>

County Bikeways Functional Master Plan  
[http://www.montgomeryplanning.org/transportation/bikeways/A\\_A/contents.shtm](http://www.montgomeryplanning.org/transportation/bikeways/A_A/contents.shtm)

### Other

Crime Prevention Through Environmental Design (CPTED)  
<http://www.cpted.net/>

International Dark Sky Association  
<http://www.darksky.org/>

National Association of City Transportation Officials  
Urban Street Design Guide  
<http://nacto.org/usdg/streets/>



NOVEMBER 2014

# White Oak Science Gateway Master Plan

DESIGN GUIDELINES

**DRAFT**



90814000001



Montgomery County Planning Department  
[montgomeryplanning.org](http://montgomeryplanning.org)