Corridor Employment

Transit Oriented Development

Corridor Activity Center

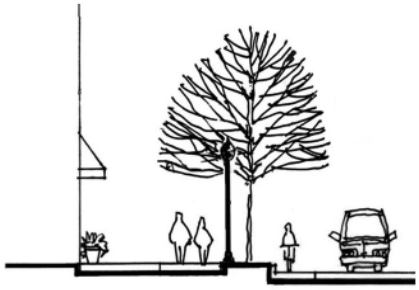
# ROUTE 1 MANUAL

***Howard County, Maryland***

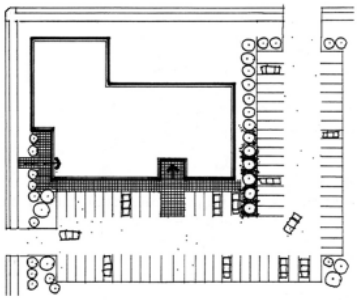
## PROPOSED

***March 2009***

Streetscape Design



Site Design



Building Design

Howard County
MARYLAND

***County Executive***

Ken Ulman

***Department of Planning & Zoning:***

Marsha S. McLaughlin, Director
Stephen Lafferty, Deputy Director
Kimberly Amprey Flowers, Deputy Director
Carl S. Balser, Chief, Division of Transportation Planning
George Beisser, Chief, Division of Public Service and Zoning Administration
Jeffrey Bronow, Chief, Division of Research
Charles Dammers, Chief, Development Engineering Division
Cynthia Hamilton, Chief, Division of Land Development
Elmina J. Hilsenrath, Chief, Resource Conservation Division
William Mackey, Chief, Division of Comprehensive and Community Planning

***Contributing Staff:***

Dace Blaumanis, Project Manager

***Funding:***

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# 1

# INTRODUCTION

***P**urpose: This chapter provides an overview of the Manual and its purpose. The Introduction also describes the context for creating three new zoning districts. The new districts set out land use patterns that have a more urban character than currently exists in the corridor. This new character should provide a more efficient use of land and, in specific portions of the corridor, create a concentration of mixed uses that promote economic development and are pedestrian-oriented. Because the intent is to establish a more urban character in the corridor, the Manual augments the Zoning Regulations by more fully describing the desired characteristics of the new districts. This chapter also includes a summary of the key land use objectives and design concepts that are the basis of the requirements and recommendations in this Manual.*

*Figure 1.1. **Before**: Current land use patterns in many corridor locations exhibit a hodgepodge of uses, underutilized properties and inconsistent streetscape design.*

*Figure 1.2. **After**: This Manual provides guidance for achieving the land use visions of the Route 1 Corridor Revitalization Study.*

## Foreward

The revisions to the Manual add clarification to certain requirements and recommendations listed in the Manual. The practical application of these requirements and recommendations and also the completion of Maryland State Highway Administration's US 1 Corridor Improvement Strategy with its recommendations spurred the update of the Manual.

## Background

Howard County's Route 1 corridor has been aging and showing signs of neglect (Figure 1.1). Revitalizing this significant commercial, industrial and residential corridor, which is defined as all property in the County located east of Interstate 95, is important not only to the corridor's residents and businesses, but also to the future growth of the entire County. Revitalization means improving opportunities for new and expanding corridor businesses and promoting redevelopment of older businesses seeking to renovate and adapt for the current market. The need to enhance and expand housing opportunities in the corridor is acknowledged by providing opportunities for added housing in specific locations in the corridor and allowing housing in mixed-use districts.

General Plan 2000 established the need for the revitalization of the County's older communities. The Plan established policies and actions for community conservation and enhancement, and for balanced and phased growth that affect the corridor. Just as

the Plan has a 20-year horizon, redevelopment of the corridor, using the requirements and recommendations in this Manual, will also need a 20-year or longer time period.

The revitalization process began with a two-part study conducted by the Department of Planning and Zoning and a citizen's advisory task force appointed by the County Executive. Two Route 1 corridor workshops, open to all interested citizens, solicited the participants' visual preferences for the physical development of the corridor and expectations on likely changes in the corridor. Using their firsthand knowledge of the corridor and the results from the workshops, the Task Force made recommendations for the corridor (Figure 1.2). These recommendations are listed in the Phase 1 and Phase 2 Reports of the Route 1 Corridor Revitalization Study. These Reports are available on the County's Web site at www.howardcountymd.gov by selecting Departments > Planning and Zoning > Community Planning > Route 1 Corridor Revitalization, and from the Department of Planning and Zoning's public service counter.

One of the significant recommendations of the Phase 2 Report seeks to change land use patterns in portions of the corridor. To implement this recommendation, in 2004 the County's Comprehensive Zoning estab-

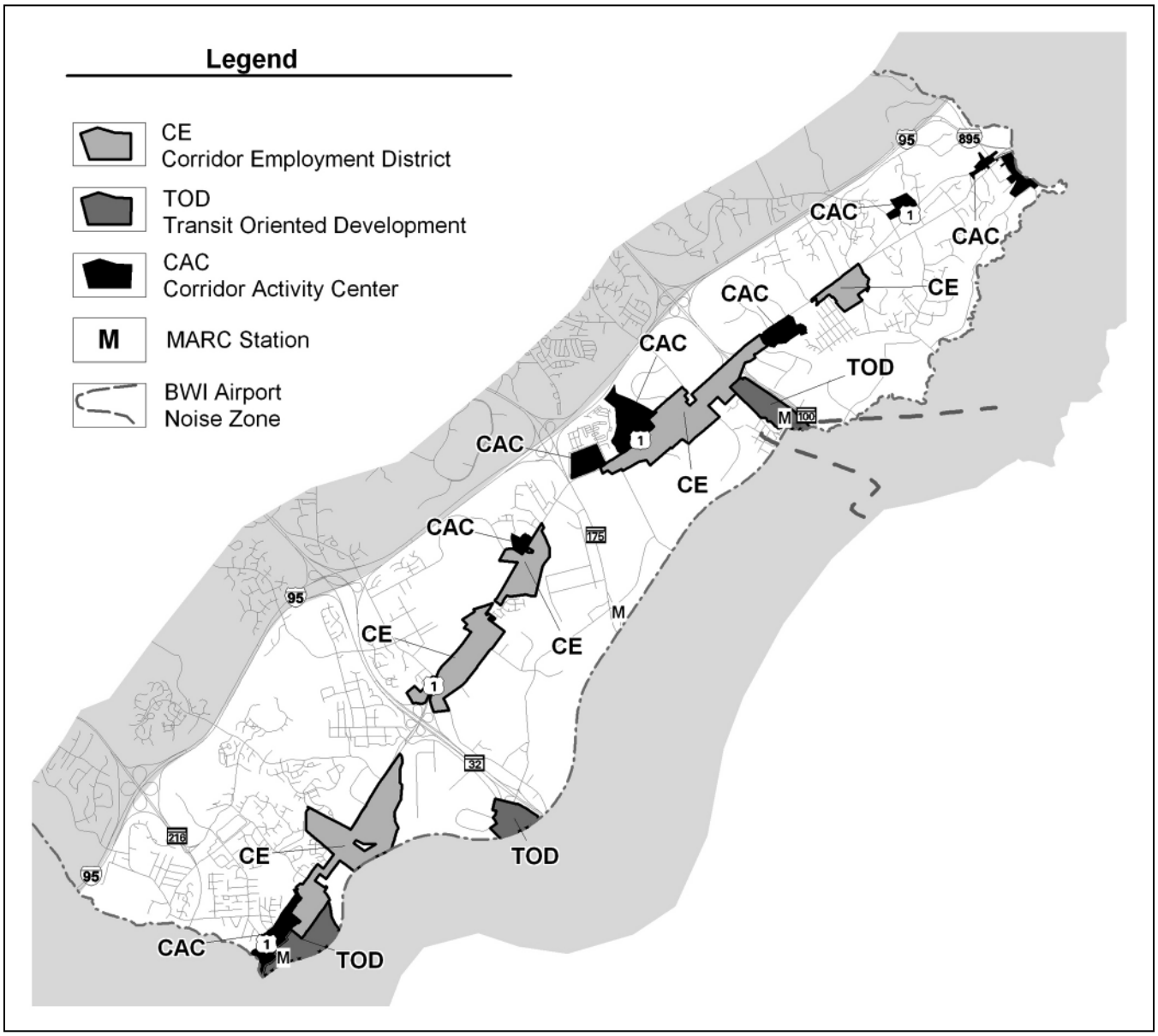



*Figure 1.3. The corridor zoning districts: the CE Districts line much of the corridor, the TOD Districts are focused around three key MARC stations and the CAC Districts are located in the northern, central and southern portions of the corridor, at Elkridge, Jessup and North Laurel.*

lished three corridor-specific zoning districts: the Corridor Employment (CE) District, the Transit Oriented Development (TOD) District and the Corridor Activity Center (CAC) District. These districts promote new land use patterns to better utilize the land and concentrate various uses (Figure 1.3). In addition, the Continuing Light Industrial (CLI) Overlay District was created as a companion to the CE and CAC Districts. The intent of this overlay district is to encourage new land use patterns while still accommodating the existing industrial developments on properties in the CE and CAC Districts.

Only a portion of the corridor has been rezoned using the corridor districts. Substantial areas of M-1 (Light Manufacturing) and M-2 (Heavy Manufacturing) zoning remain. Commercial retail uses (B-1 and B-2) are still provided in a few places in the corridor. Thus, the corridor will remain the location for a wide range of land uses. Although portions of the Route 1 corridor will be transformed using these corridor districts, many of the existing industrial and retail land uses will continue.

## Purpose

The Route 1 Manual implements the Zoning Regulations. The Manual provides direction for preparing subdivision and site development plans for properties in the CE, TOD and CAC Districts. The Manual's intent is to enhance the image and functioning of the Route 1 corridor through clearly articulated site design and building design requirements and recommendations that apply to these three corridordistricts. Beyond site design and building design, the Manual also has streetscape requirements and recommendations that apply not only to the three corridor districts, but also to properties in other zoning districts, such as B-1, B-2, M-1 and M-2, that are located adjacent to Route 1.

The purpose of this Manual is to present requirements and recommendations to:

1. Improve the visual appearance of the corridor's streetscape.
2. Enhance the appearance and value of developments in the Route 1 corridor.
3. Establish the desired design character for new developments in the CE, TOD and CAC Districts.
4. Clarify how the Route 1 design requirements and recommendations affect the renovation and expansion of existing uses.
5. Achieve better land use and function by using land more intensively and efficiently.
6. Increase the safety of pedestrians and vehicular traffic, enhance pedestrian accommodations and connectivity, and improve pedestrian and vehicular access to shopping, services, housing and employment.
7. Promote the use of transit and alternative modes of transportation, such as bicycles.

This Manual provides illustrations of the design requirements and recommendations for mixed land uses that are envisioned in the three corridor zoning districts. These graphics and illustrations are intended to help property owners, developers and residents better understand how the proposed changes differ from the existing development patterns. At the same time, they will help guide County reviewers in analyzing development proposals.

## Authority

The Howard County Zoning Regulations and Zoning Map establish the authority and basis for this Route 1 Manual. The Howard County Zoning Regulations, Subdivision and Land Development Regulations, Landscape Manual, Forest Conservation Manual and Design Manual establish site development requirements within the County. The Howard County Sign Code establishes the requirements for installing signs. These documents establish minimum requirements. This Manual establishes additional requirements and recommendations to achieve the design standards for the corridor zoning districts. Where the requirements of the Route 1 Manual exceed or are more restrictive than those of other documents, the requirements of this Manual shall apply.

State agencies also have jurisdiction and authority over development within the corridor. The State Highway Administration establishes requirements for right-of-way design and site access on State highways. The Maryland Aviation Administration establishes requirements for development within the BWI Airport height and noise zones.

In June 2008 the County Council approved the establishment of a Design Advisory Panel (DAP). The Panel's purpose is intended to encourage excellence in

architecture and site design, to improve design compatibility with surrounding development, to promote revitalization and to enhance property values. Comprised of design professionals, the Panel reviews and makes recommendations for development projects in the Route 1 Corridor.

DAP review is mandatory for all projects in areas where there is a design manual, such as the Route 1 Manual, that is adopted by the County Council. DAP review precedes the normal plan review process to allow the Panel's recommendation to influence the design of the development project at the earliest opportunity. Only a pre-submission community meeting, if required, comes before the DAP review. Subtitle 15 of the Subdivision and Land Development Regulations describes the Design Advisory Panel's functions and procedures.

## Required Submission Materials

All plan submissions, beginning with the initial subdivision or site development plan, shall show all applicable streetscape, site and building designs responding to this Manual's requirements and recommendations. To show building design, schematic architectural elevations must be included on subdivision or site development plans, as applicable.

To provide context, the initial plan submissions shall include a vicinity analysis of the area within at least one-half mile radius of the development project. This analysis should include a map showing the locations of significant activity generators (such as employment, civic and retail centers and residential neighborhoods) and transit stops. Pedestrian, bicyclist and vehicular circulation should be shown on the map to identify links between the proposed development and the activity generators.

## Corridor-Wide Objectives and Concepts

The character of the corridor is diverse and includes a rich mix of uses that have evolved over time. Although diversity is to be encouraged and celebrated, this Manual identifies land use objectives and design concepts that can establish a cohesive new vision and encourage better use of the land. Because the corridor has been showing signs of aging and neglect, many of the objectives are focused on transforming the negative characteristics. At the same time, the objectives and concepts also outline a strategy that


*Figure 1.4. Expansion of employment uses will contribute to the economic health of the corridor and the County.*

*Figure 1.5. Transit oriented development means convenient access to train and bus routes with attractive train stations and bus shelters.*


*Figure 1.6. Successful pedestrian-oriented mixed-use development needs an attractive streetscape with wide sidewalks, street trees and street furniture.*

*Figure 1.7. Multistory buildings make more efficient use of scarce land. When buildings are located close to the street, with on-street parking and with parking lots to the rear or side, pedestrian access is more convenient.*

*Figure 1.8. Pedestrian connections among buildings and outdoor amenity spaces help make new residential and commercial developments vibrant, active places.*

is intended to make the corridor a thriving and attractive place to live, work, shop and spend leisure time. Figures 1.4 through 1.8 depict many of the objectives and concepts described below.

## *Primary Land Use Objectives*

1. Create opportunities for new economic development and for more concentrated multi-use development (Figure 1.4).

2. Recognize the need for renovation and expansion of existing businesses.

3. Institute County capital projects and economic development programs that support redevelopment and renovation.

4. Encourage land assembly by allowing more commercial uses if parcels are consolidated.

5. Through the Corridor Employment District, encourage redevelopment for areas along the Route 1 roadway that will use land more efficiently and attractively for office, flex space, technology-oriented and light industrial uses. De-emphasize truck-oriented and strip commercial uses.

6. Through the Transit Oriented Development District, offer opportunities in areas next to the MARC stations for denser, more concentrated office, residential and related commercial development to capitalize on transit access (Figure 1.5).

7. Through the Corridor Activity Center District, concentrate areas of pedestrian-oriented commercial, office and residential development in certain locations that complement nearby residential communities (Figure 1.6).

## *Key Design Concepts*

1. Improve the Route 1 right-of-way by the addition of landscaped medians, bike lanes and streetscape elements such as sidewalks, crosswalks, street trees, street furniture and lighting.

2. Delineate specific areas, primarily in the TOD and CAC Districts, for pedestrian-oriented mixed-use developments (Figure 1.7).

3. Provide convenient vehicular and pedestrian access to transit, both MARC train and bus.

4. Orient buildings to the street, especially along Route 1. Locate parking to the side and rear of

buildings with loading and outdoor storage to the rear, out of view of Route 1.

5. Reduce setbacks and promote multistory buildings to make more efficient use of scarce land.

6. In the TOD and CAC Districts, institute on-street parking in appropriate areas. On State roads, such as Route 1, on-street parking may be permitted only with the approval of the State Highway Administration District 7 Office and only for off-peak hours. If permitted, SHA allows only parallel parking, not angle parking.

7. Create attractive and vibrant public places. Integrate amenity spaces, which are open to the public, into developments with new buildings (Figure 1.8).

8. Provide pedestrian and vehicular connections between adjacent commercial uses and to parking lots.

9. Design buildings, site features and streetscapes that will promote safety for residents, workers and visitors in the corridor.

10. Reduce direct, private vehicular access to Route 1 and instead encourage access from local streets, thereby improving access management and promoting use of the local road network for access to Route 1 land uses.

## Manual Organization

As described above, this Manual establishes the general objectives for the three corridor zoning districts and then proceeds to more specific aspects of the corridor, setting forth requirements and recommendations for new development and redevelopment. The requirements for the streetscape, site and building design elements generally correspond to requirements of the Zoning Regulations. They represent the most important aspects of the new land use patterns. The recommendations for the design elements represent desired elements that should be provided wherever possible. Developers must address the requirements and are strongly encouraged to address the recommendations.

This Manual is organized by each topic in the following chapters:

**Chapter 1, Introduction.** The Manual begins by presenting the context for the corridor's revitalization. This chapter introduces the overall objectives and concepts for the revitalization of the corridor and the three zoning districts.

**Chapter 2, Corridor Zoning Districts.** This chapter describes each district's land use goals and design concepts, and offers illustrations of recommended building types and conceptual site plans that could transform properties to the new patterns.

**Chapter 3, Streetscape Design.** For each element of the streetscape design, a list of requirements and recommendations is included to help public and private sector developers, designers and engineers understand and achieve the desired character for rights-of-way in the corridor. Streetscape design addresses the road right-of-way, but pays primary attention to safety and amenity improvements that affect pedestrians.

**Chapter 4, Site Design.** This chapter presents requirements and recommendations that give the desired characteristics for site design, such as building location, parking, loading, landscaping and pedestrian amenities.

**Chapter 5, Building Design.** Establishing requirements and recommendations for building design is a response to citizens' great concerns about improving the appearance of the corridor. Special emphasis is placed on buildings that front on the Route 1 right-of-way.

**Chapter 6, Application of these Standards.** Because the corridor is substantially built, many properties will not be able to fully comply with these new requirements. Therefore, this chapter sets priorities for compliance with the requirements in this Manual.

# 2

# CORRIDOR ZONING DISTRICTS

***P**urpose: This chapter describes the purpose, land use goals and design concepts for each of the three corridor zoning districts. Because these three districts intend to change the existing land use patterns, the text and illustrations in this chapter are meant to help developers and citizens envision the desired development that could occur in these districts.*

*Figure 2.1. **Before**: Existing business, manufacturing and industrial uses in the corridor will continue.*

*Figure 2.2. **After**: Over time, however, some of these uses may be expanded or redeveloped in ways that bring them into compliance with the requirements and recommendations of this Manual.*

## Nonconforming Uses and Noncomplying Design

Many parcels in the corridor were developed before the Corridor Employment (CE), Transit Oriented Development (TOD) and Corridor Activity Center (CAC) Districts were created (Figure 2.1). For the CE and CAC Districts, the Continuing Light Industrial (CLI) Overlay District was created to accommodate existing warehouse and industrial buildings. Because most properties in the CE and CAC Districts are already developed, many with industrial buildings that represent substantial investments, an accommodation needed to be made so that these uses and buildings do not all become nonconforming and noncomplying with the corridor zoning districts. The CLI Overlay District is this accommodation.

Neither the Howard County Zoning Regulations nor this Manual disallow the continued use of sites developed prior to the adoption of the corridor districts. Compliance with the requirements and recommendations for these districts will be achieved over time as existing uses are expanded or redeveloped (Figure 2.2). Refer to Chapter 6, Application of These Standards, for more discussion on nonconforming uses.

# Corridor Employment District

## *Purpose*

The Corridor Employment (CE) District intends to encourage more efficient use of vacant or underutilized land adjacent to Route 1. Development in the CE District should provide for new office, flex space, technology-oriented and light industrial uses that advance the County's economic development goals, while reducing the spread of strip commercial development and encouraging consolidation of fragmented parcels. The CE District requirements should improve the appearance of the Route 1 streetscape, enhance traffic safety and better accommodate public transit and pedestrian travel.

## *Land Use Goals*

1. Encourage redevelopment on sites adjacent to Route 1 for new office, flex space and technology oriented, light industrial employment growth.

2. Encourage renovation of older, obsolete facilities and redevelopment of underutilized land.

3. Promote multistory buildings by allowing certain retail and service commercial uses in multistory buildings.

4. Encourage land assembly by allowing some freestanding commercial uses for redevelopment projects that exceed 20 acres.

5. Reduce the spread of strip commercial development by not allowing most highway-oriented retail uses. Limit truck-oriented uses and uses that require outdoor storage.

6. Allow continuing and nonconforming uses, but define limits to the expansion of buildings and sites. Help bring existing properties into compliance with the Route 1 Manual over time.

7. Provide amenity areas for outdoor use by workers and visitors to the sites.

## *Design Concepts*

1. Place buildings close to the street. Allow greater development intensity by establishing building setbacks of 20 feet from the street right-of-way.

2. Construct buildings with multiple stories. Allow heights up to 60 feet with the 20-foot setback from the street. Allow taller buildings with a greater setback from the street or by recessing upper stories.

3. Promote parking to the side or rear of buildings and limit the amount of frontage on Route 1 that can be devoted to parking lots. Establish a maximum building setback line to further limit the potential for parking between the building and the right-of-way.

4. Emphasize streetscape improvements with required sidewalks and street trees.

5. Encourage building facades that orient to Route 1 and have well-defined entrances along Route 1.

6. Require access improvements and circulation designs that enhance traffic safety and accommodate transit and pedestrian travel.

The photographs in Figure 2.3 show several examples of desirable building types for the CE District. Variety in architecture and the presence of multistory buildings, where possible, add visual interest. Figures 2.4 and 2.5 show before and after illustrations, and give an example of how a property could be transformed to a CE District pattern. The conceptual site plan, Figure 2.6, illustrates elements of this pattern such as reducing the building's setback from the street and placing parking to the side or rear of the building. The CE building types, before and after images, and site plan were developed with consultant ERM, Inc.

## Figure 2.3 Preferred Building Types for the CE District


*Figure 2.4.* ***Before****: Existing patterns in the CE District are often typified by one-story buildings with deep setbacks from the road. Streetscape improvements and pedestrian access are often limited.*

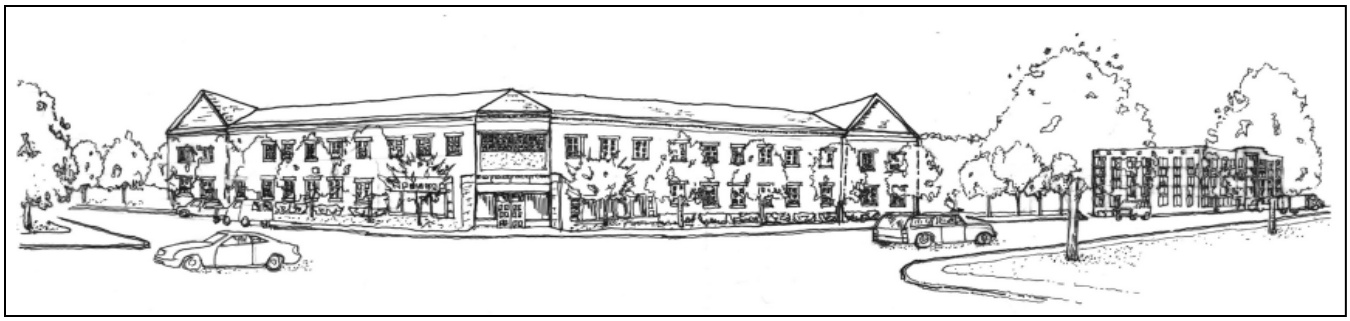
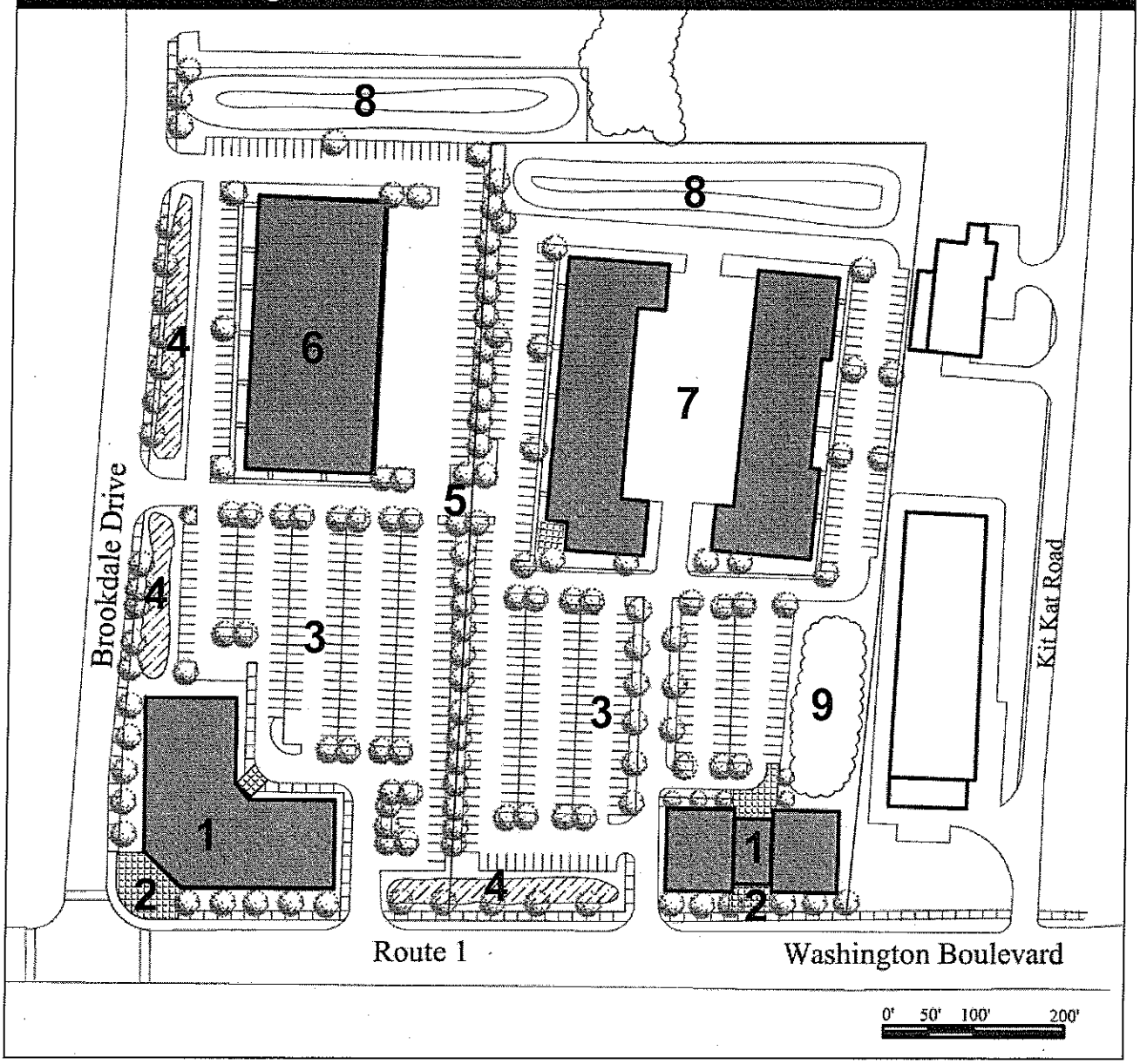


*Figure 2.5.* ***After****: The CE regulations are intended to foster new patterns that result in multistory buildings close to the right-of-way with parking to the side and rear. Sidewalks and street trees will contribute to an enhanced pedestrian environment.*

## Figure 2.6 Concept Plan for the CE District




### Legend

1. Multistory office building with ground floor retail
2. Pedestrian amenity area
3. Parking to the side and rear of building
4. Infiltration or bioretention area in parking setback to street
5. Interconnected parking lots for access between development sites
6. Flex space building with single bay of parking in front and loading in back
7. Flex space buildings with shared rear loading areas
8. Stormwater management area
9. Existing forest retained in partial fulfillment of forest conservation requirements

# Transit Oriented Development District

## *Purpose*

The Transit Oriented Development (TOD) District intends to encourage the development and redevelopment of key parcels of land within ~~3,000~~3,500 feet of a MARC station. Development in the TOD District should provide for multistory office centers that are located and designed for safe and convenient pedestrian access by commuters using the MARC trains and other public transit links. For larger sites of at least three acres, well-designed multi-use centers combining office and high density residential development with ground floor retail are encouraged.

## *Land Use Goals*

1. Encourage redevelopment on select sites that are near MARC stations so that workers and residents will use the commuting potential of the MARC line. Create attractive multi-use centers combining multistory office and residential uses.
2. Promote multistory buildings by allowing certain retail and service commercial uses in multistory buildings.
3. Preclude intensive truck-oriented uses and highway-oriented commercial uses.
4. Encourage land assembly by allowing more commercial uses for redevelopment projects that exceed 15 acres.
5. Allow residential development on up to 50% of the TOD land with a 15% moderate income housing unit requirement.

## *Design Concepts*

1. Orient buildings and sites to the major pedestrian-oriented streets, especially those that give access to the MARC station.
2. Bring buildings close to the street through 10-foot building setbacks along public and private primary circulation routes and along public and private roads that serve as major pedestrian access routes to MARC stations. Elsewhere, including along secondary circulation routes, the setback may be zero feet.
3. Require wide sidewalks on main routes. Encourage pedestrian-oriented first floor retail uses.
4. Encourage the development of attractive and comfortable public amenity areas for workers, residents and visitors.
5. Use height, setback and parking regulations to limit density rather than establishing a maximum density.
6. Encourage safe and convenient pedestrian travel between the TOD uses and the MARC station.

The photographs in Figure 2.7 show several examples of desirable building types for the TOD District. To take advantage of the location next to MARC stations, the buildings are multistory, thus allowing denser development. The buildings have articulated facades that increase their visual interest to passers-by. Figures 2.8 and 2.9 show before and after illustrations, and give an example of how a property could be transformed to a TOD District pattern. The conceptual site plan, Figure 2.10, illustrates elements of this pattern such as reducing the building's setback from the street and placing the parking in structures or away from the street. The TOD building types, before and after images, and site plan were developed with consultant ERM, Inc.

# Figure 2.7 Preferred Building Types for the TOD District

*Design Collective, Inc.*

*d w taylor associates inc*

*Figure 2.8.* ***Before****: Existing patterns in the TOD District are often typified by large surface parking lots and an assortment of auto-oriented uses and storage yards.*

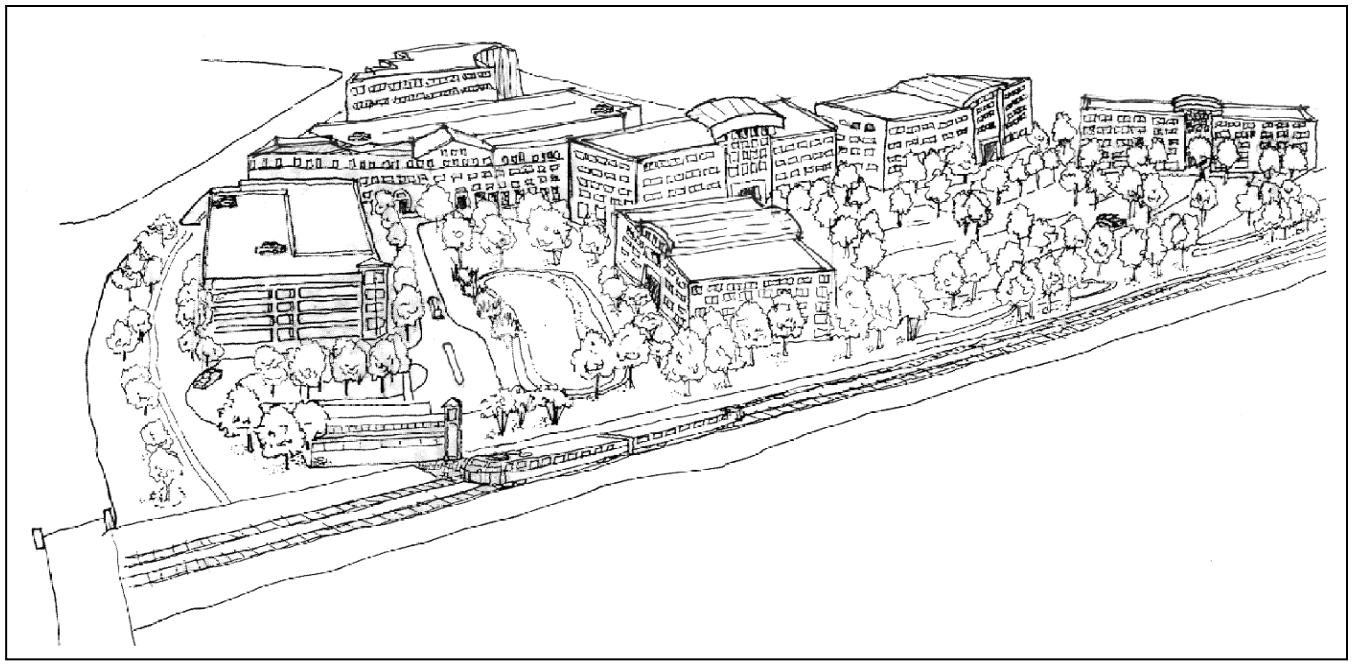
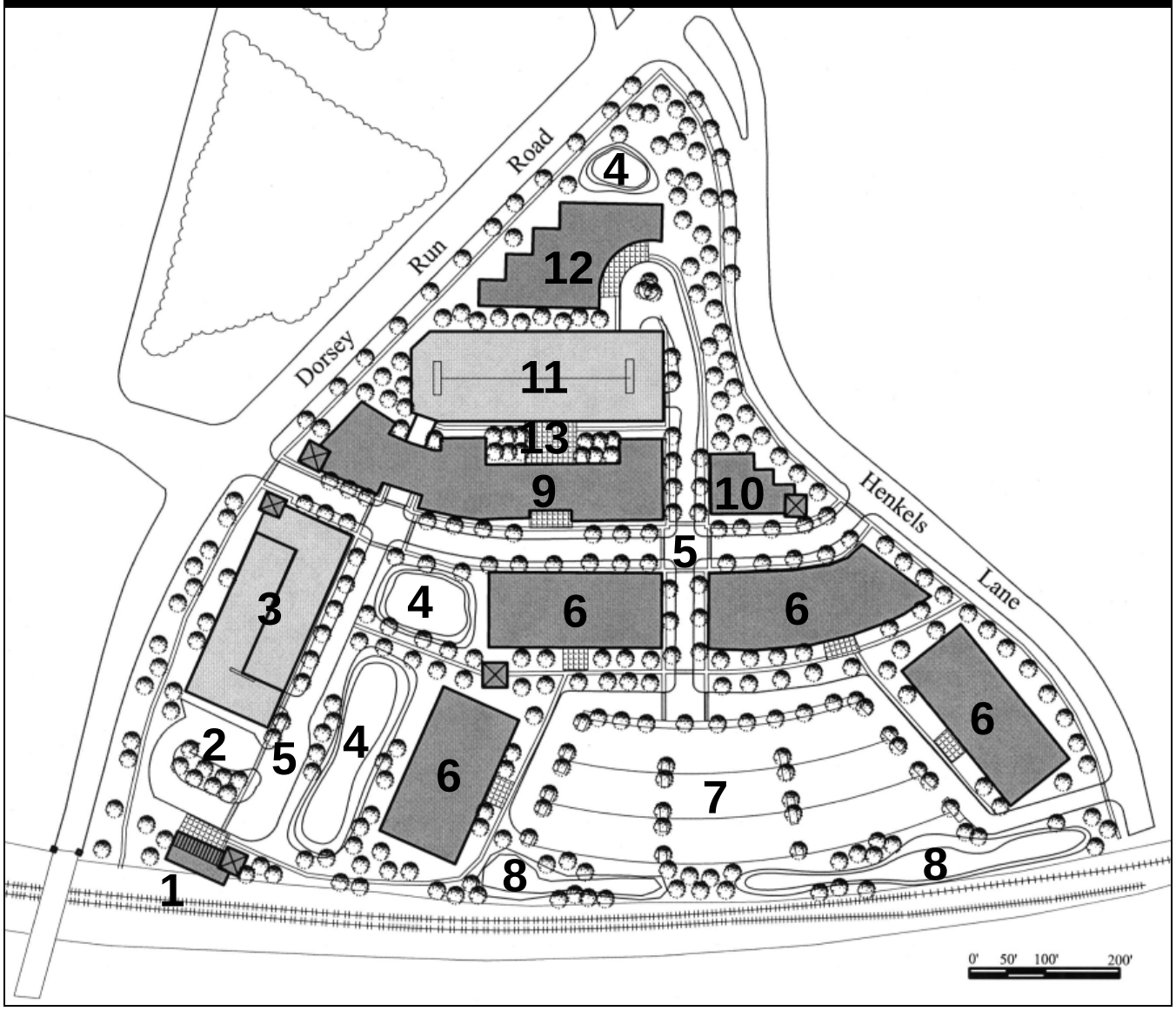


*Figure 2.9.* ***After****: The TOD regulations are intended to foster high density office and residential development. Structured parking and accessory retail uses, streetscape improvements and amenity outdoor areas will create attractive working and living environments.*

## Figure 2.10 Concept Plan for the TOD District




## Legend

1. **Train station**
2. **Bus drop-off and "kiss and ride" parking area**
3. **Parking garage with ground floor retail and office use**
4. **Stormwater management area/amenity area**
5. **Pedestrian-oriented main streets with wide sidewalks and 10-foot setbacks**
6. **Office building with ground floor retail**
7. **Surface parking or potential future garage parking**
8. **Stormwater infiltration area**
9. **Residential multistory apartment building with ground floor retail and service uses**
10. **Restaurant with offices above**
11. **Parking garage**
12. **Office building**
13. **Pedestrian amenity area**

# Corridor Activity Center

## *Purpose*

The Corridor Activity Center (CAC) District intends to provide for the development of pedestrian-oriented, urban activity centers with a mix of retail, service, office and residential uses. These centers should be located adjacent to Route 1 and close to residential communities that will benefit from a pedestrian-oriented local business area. The CAC District requirements should result in renovation and redevelopment that will strengthen nearby communities, provide for safe and convenient pedestrian travel, and improve the streetscape of Route 1 and intersecting streets.

## *Land Use Goals*

1. Encourage multistory buildings that adjoin public sidewalks.

2. Promote first floor retail and service uses on the Route 1 frontages of buildings with office and housing above. At least 50% of the first floor facing Route 1 should be retail or service uses. An individual retail business cannot exceed 20,000 square feet of floor area. For parcels 20 or more acres, one food store and one commercial use greater than 20,000 square feet each would be allowed.

3. Reduce the spread of strip commercial development by not allowing most auto-oriented retail uses.

4. Limit uses that are truck-oriented and that require outdoor storage.

5. Allow for housing at a density of up to 25 units per net acre with a 15% moderate income housing requirement (or 25% if redevelopment replaces a mobile home park) on sites of at least two acres.

## *Design Concepts*

1. Promote pedestrian-oriented streetscapes by requiring building facades that extend along at least 75% of the property's frontage along Route 1 or along other external public roads that are minor collectors or a higher classification. Provide pedestrian interest by the presence of windows, doors and architectural features. Relate the building facades to the sidewalks through a 10-foot setback from the design right-of-way. If the site includes a service road option, then the maximum setback is 65 feet.

2. Require parking to the rear and side of the buildings. Allow parking in front only if associated with the service road option. Encourage shared access and interconnected parking between adjacent properties.

3. Require pedestrian-oriented improvements that include wide sidewalks, crosswalks, street trees, street furniture and lighting.

4. In areas of distinct historic character, such as Lower Elkridge, encourage new buildings to be compatible with existing buildings in height, mass and articulation.

5. Design the exterior walls of new buildings with different building planes, colors or materials, and/or with small setbacks, indentations or other architectural means that provide visual interest at a pedestrian scale. For new buildings at prominent intersections along the Route 1 roadway, add architectural details for emphasis at the most visible corner(s).

The photographs in Figure 2.11 show several examples of desirable building types for the CAC District. The multi-use buildings and the more urban type of housing are appropriate for this district. Figures 2.12 to 2.15 show before and after illustrations, and give examples of how properties could be transformed to the CAC District pattern. The conceptual site plan, Figure 2.16, illustrates elements of the pattern such as eliminating the building's setback from the design right-of-way and placing parking away from the street.

The North Laurel Concept Plan, developed by consultant A. Nelessen Associates, is the inspiration for activity center site design and architectural massing.

# Figure 2.11 Preferred Building Types for the CAC District



*Figure 2.12. **Before**: Over time, the commercial activity along portions of the Route 1 corridor has declined, leaving vacant sites, freestanding uses and strip centers set back from the road.*

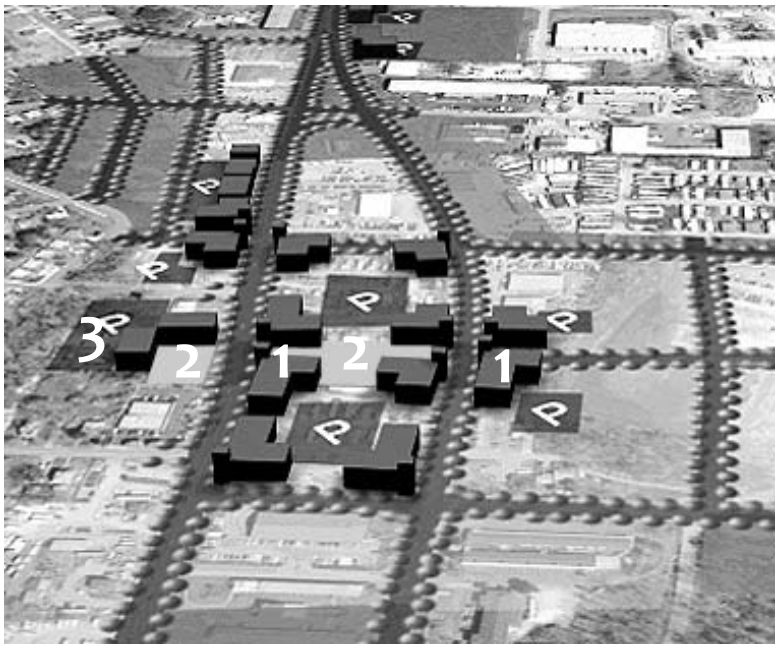
*Figure 2.13. **After**: Concentrated areas of mixed uses with ground floor retail and upper story office and residential uses can transform parts of the corridor into vibrant activity centers.*

*Figure 2.14. **Before**: Existing restaurants and retail uses along Route 1 lack the streetscape amenities that could make them more attractive community-oriented pedestrian destinations*

*Figure 2.15. **After**: Sidewalks, street trees and on-street parking make retail and commercial areas more inviting and convenient. The introduction of multistory buildings can add to the economic viability of these areas*

## Figure 2.10 Concept Plan for the TOD District

**Phase 1**




**Phase 2**


**Legend**

1. **Multistory building with ground floor retail and upper floors office or residential**
2. **Pedestrian amenity area centrally located**
3. **Parking (P) on street and to rear of the buildings**
4. **Multistory residential building**

# Continuing Light Industrial District

## *Purpose*

The Continuing Light Industrial Overlay District intends to allow the continuing use of existing warehouse and light industrial buildings that were developed for these uses before the CE and CAC Districts were adopted. To use the CLI Overlay District, the property must be located in the CE or CAC District and must have either single or multiple tenant warehouse or industrial buildings. Limited new development in the CLI Overlay District is permitted. Any required improvements to the streetscape and site design should enhance the appearance of the corridor.

## *Land Use Goals*

1. Encourage the continuing use and renovation of existing warehouse and industrial facilities.

2. Allow for continuing uses, with limited expansion of buildings and sites. Help bring existing properties into compliance with the Route 1 Manual over time.

## *Design Concepts*

1. Encourage streetscape improvements with required sidewalks and street trees.

2. Promote access improvements and circulation designs that enhance traffic safety and accommodate transit and pedestrian travel.

3. Add landscaping to parking areas and screen any outdoor storage areas.

The photographs in Figure 2.17 show several examples of warehouse and light industrial building types for the CLI Overlay District. To the extent permitted, all additions or improvements to the existing buildings or to the site are encouraged to respond to the land use goals and design concepts of the applicable CE or CAC District. These properties are subject to the Design Advisory Panel's review.

## Figure 2.17 Existing Building Types in the CLI Overlay District

# 3

# STREETSCAPE DESIGN

***P**urpose: This chapter sets forth requirements and recommendations for the design of the public right-of-way. A well-functioning road network is a key component of the revitalization of the Route 1 corridor. The appearance of the public streetscape is also of paramount importance since most people's perception of the corridor comes from travel on the roadway. Therefore, the requirements and recommendations of this chapter focus on improvements to both the function and the appearance of the public roadways. Because of the increased pedestrian orientation of the new districts, this chapter emphasizes the needs of the pedestrian. The image of the streetscape does not end at the edge of the right-of-way; private improvements along the right-of-way are an essential part of the streetscape and are discussed in subsequent chapters on Site Design and Building Design.*

*Figure 3.1. Older sycamores along the roadway edge in Elkridge are the inspiration for the major street tree selected for Route 1.*

*Figure 3.2. The stone work of the historic Thomas Viaduct is the inspiration for the stone patterns used along Route 1.*

## Design Intent

For many decades the Route 1 corridor has been seen as visually chaotic, diverse and not very attractive. The Route 1 Manual identifies design concepts that introduce some continuity and create a style that is distinctive to the corridor and is based on its best features. Many of the requirements and recommendations in this chapter are based on streetscape design ideas endorsed by the citizens' task force in the Route 1 Corridor Revitalization Study, Phase 2 Report. That study established a design theme based on three landscape materials - sycamores, stone and steel - as representative of the corridor's history. Sycamores once lined parts of the corridor. Some remnants remain; thus the smaller, healthier London Plane Tree (a relative of the sycamore) is suggested as a primary street tree (Figure 3.1). The stone of the Thomas Viaduct in Elkridge inspired the gray, stone-like pavers or paving patterns that are recommended for special edging (Figure 3.2). The Bollman Bridge, with its historic industrial ironwork, and other steel structures motivated the selection of an attractive industrial style of street furniture (Figure 3.3). The bridge's red color can be used to enliven elements of the streetscape design.

Using these design elements and materials, the County constructed four community gateway signs in the corridor and is moving forward with construction of streetscape improvements. It is hoped that these streetscape improvements and design ideas will be-

gin to establish a unique visual identity for the corridor and that future streetscape improvements will continue to foster the recommended design character. Property owners and developers throughout the corridor are therefore encouraged to consider these design ideas when they improve their properties.

In 2008 the Maryland State Highway Administration (SHA) completed its multi-year study of Route 1 in Howard County. SHA's consultants, Kittelson and Associates, Inc. and Mahan Rykiel Associates, Inc., produced the US 1 Corridor Improvement Strategy which recommends design standards for the roadway and for adjacent streetscape elements. Because of projected traffic volume, the Strategy's recommendations include having six travel lanes along the major portion of the US 1 roadway and adding a finer-grained street network with more connections within the corridor. Based on the County's vision for the corridor, the Strategy recommends streetscape improvements that help achieve a more attractive and pedestrian-friendly edge to the roadway. This report is available on the County's Web site at: *http://www.howardcountymd.gov/DPZ/Community/communityplanning.htm.*

## Applicability

In this chapter, the requirements and recommendations for streets and streetscape improvements apply not only to sites in the CE, TOD and CAC Districts, but also to all sites that abut the Route 1 right-of-way. These requirements and recommendations apply to both of the following cases:

1. Public street improvements as made by the State or County government.

2. Required improvements both in the Route 1 design right-of-way and to other streets as made by private property owners. Where there is inadequate public right-of-way, improvements will be located on private property adjacent to the right-of-way.

For all public street rights-of-way, private roads and access driveways, the Howard County Subdivision and Land Development Regulations and the Design Manual, Volume III, list specific requirements for such elements as sidewalks, street trees, landscaping, access consolidation and driveway connections between parcels. This chapter articulates how these requirements should be met for developments in the three corridor districts and for all properties adjacent to the Route 1 right-of-way. Where the requirements

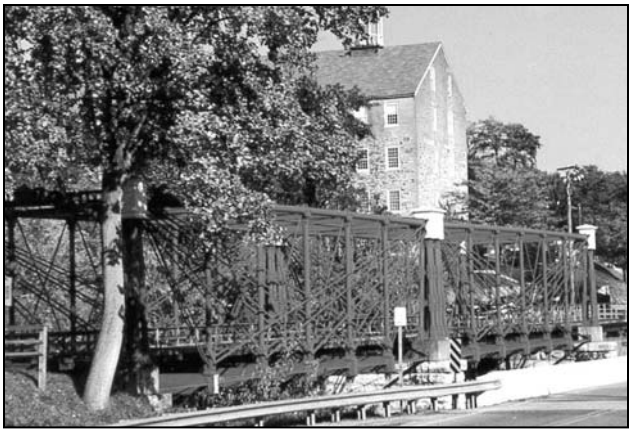


*Figure 3.3. The color and historical industrial design character of the Bollman Bridge is the inspiration for street furniture along Route 1.*

*Figure 3.4. Where space allows, a landscaped median can control traffic movements, increase pedestrian safety and make a more attractive roadway.*

of the Route 1 Manual exceed or are more restrictive than those of other documents, the requirements of this Manual shall apply. The State Highway Administration (SHA) is not responsible for the installation or the maintenance of street trees, pedestrian lighting enhancements or other streetscape improvements required by the Manual. SHA is not responsible for the maintenance of sidewalks within the State right-of-way. However, SHA will maintain the landscaping in the Route 1 medians. Property owners are responsible for the installation and maintenance of sidewalks, street trees, pedestrian lighting enhancements and other streetscape improvements such as benches and trash receptacles within County or State rights-of-way abutting their property. Property owners are responsible for paying the County for the estimated installation costs of pedestrian street lights and for the estimated costs of the first two years of their maintenance.

# Road Network

## *Goals*

The Maryland State Highway Administration's US 1 Corridor Improvement Strategy points out that building a network of road, pedestrian and bicycle connections in the corridor is essential to achieving the goals of revitalizing the Route 1 corridor. A finer-grained street network is needed to accommodate all modes of travel and to reduce circuitous travel in the corridor. The Strategy states that adding roads and paths that provide direct local circulation will reduce dependence upon Route 1 for local trips, improve options for pedestrians and bicyclists, and protect neighborhoods from excessive cut-through traffic. That means that direct, private vehicular access to US 1 should be replaced by access through local streets, thereby enhancing circulation on the local road network in the Route 1 corridor.

The Route 1 corridor should have safe vehicular and pedestrian circulation systems that are separated from each other. The safety and mobility of through traffic should be promoted by minimizing the number of access points to private property from public streets. Wherever feasible and supported by SHA and the County, medians planted with street trees should be provided to enhance the appearance and to provide safe refuge for pedestrians crossing the street (Figure 3.4).

## *Requirements:*

1. Comply with the road design and construction requirements of the Howard County Subdivision and Land Development Regulations, Sections 16.119 and 16.132.

2. Comply with the Design Manual, Volume III, and its requirements for road construction.

3. Comply with SHA requirements for improvements needed to obtain an access permit.

4. Comply with the Route 1 design right-of-way, as established by the State Highway Administration (SHA) and the Department of Planning and Zoning (DPZ). SHA and the County will determine which of the following configurations to use based on design right-of-way, access, traffic and safety considerations:

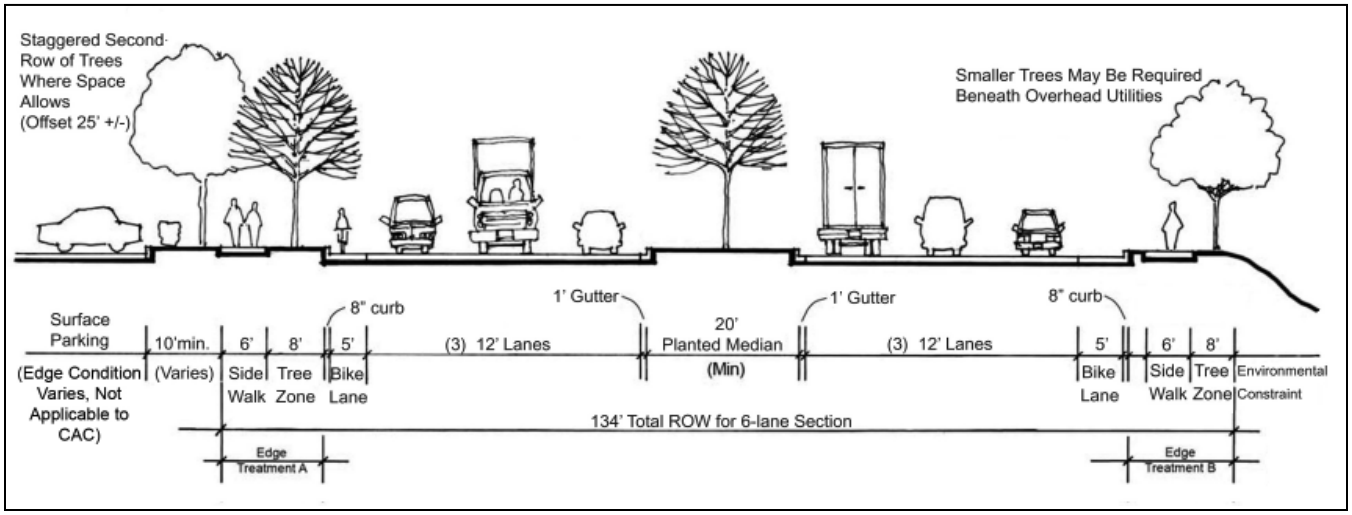



*Figure 3.5. This Route 1 cross-section shows the standard 6-lane, 134-foot right of way with a 20-foot median as it might appear along the major portion of the Route 1 corridor.*

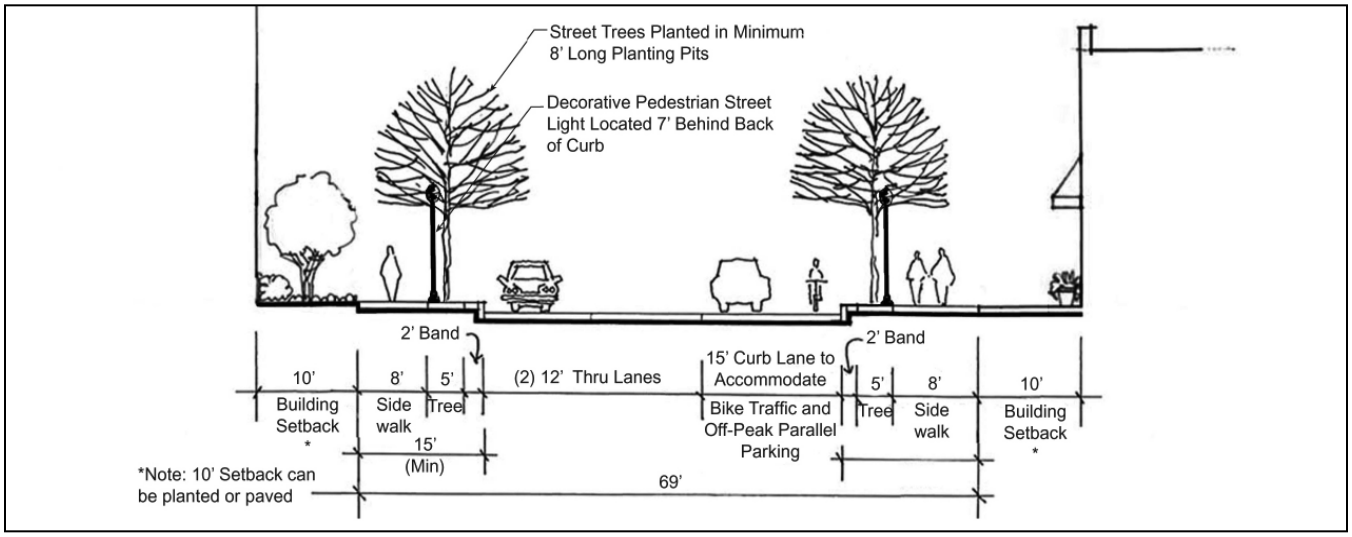



*Figure 3.6. In North Laurel, where the road is bifurcated into 2 one-way sections with three lanes in each direction, off-peak parking may be allowed on the curb lane. Figure 3.12 is a plan view of the pedestrian portion of this street section.*

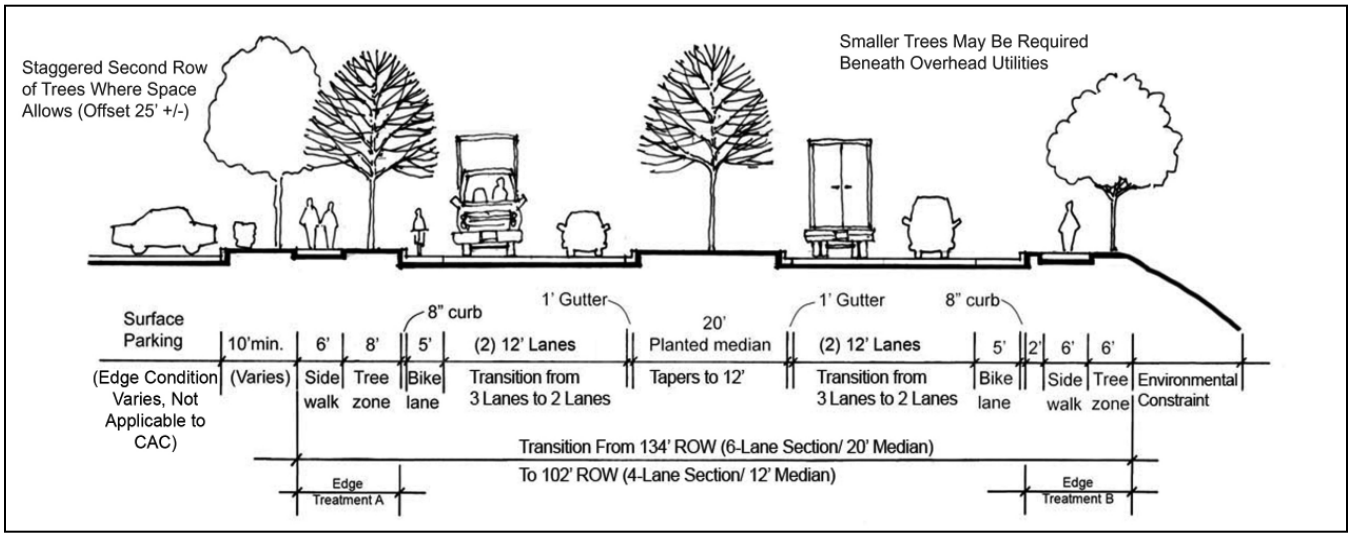



*Figure 3.7. From Montgomery Road north to Bonnie View Lane, the road will transition from a 134-foot section with six lanes and a 20-foot median to a 102-foot section with four lanes and a 12-foot median.*

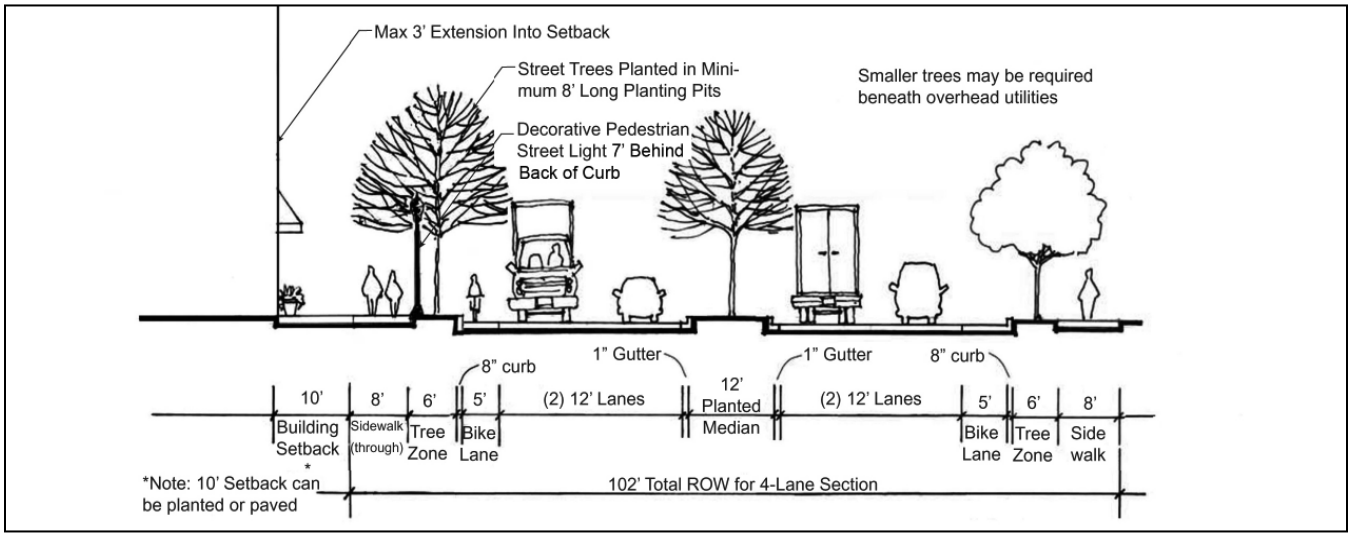



*Figure 3.8. From Bonnie View Lane north to the Baltimore County Line, Route 1 will be a four-lane road with a 12-foot median. The section shows required streetscape improvements for property zoned CAC adjacent to the right-of-way.*

*Figure 3.9. Service roads can provide connections between adjacent commercial uses, limiting the need to travel along arterial highways.*

a. Construct a six-lane cross-section with a planted 20-foot wide median within a minimum 134-foot design right-of-way, or 67 feet minimum from the US 1 center line, in the main line from Davis Avenue to Montgomery Road (Figure 3.5).

b. Construct a two-lane cross-section with off-peak parallel parking in the 69-foot minimum design right-of-way for each one-way section from the Prince George's County line to Davis Avenue (Figure 3.6).

c. Construct a six-lane cross-section with a 20-foot wide median within a minimum 134-foot design right-of-way at Montgomery Road that tapers to a four-lane cross-section with a 12-foot wide median within a minimum 102-foot minimum design right-of-way at Bonnie View Lane (Figure 3.7).

d. Construct a four-lane cross-section with a 12-foot wide median in the 102-foot minimum design right-of-way from Bonnie View Lane to the Baltimore County line (Figure 3.8).

5. If required by SHA, DPZ and/or other County agencies, provide a greater design right-of-way if the need for additional width is anticipated to accommodate acceleration/deceleration lanes, additional through lanes, added turn lanes or improvements to accommodate persons with disabilities, pedestrians, bicycles and/or transit vehicles. Also provide enough right-of-way to allow sufficient space for traffic control devices, especially at intersections to ensure compliance with ADA requirements and utility clearance guidelines.

6. Provide bike lanes that comply with the current SHA bicycle lane policy: five-foot wide bike lanes for northbound and southbound travel along Route 1 as shown in Figures 3.5 to 3.8 and 3.10 to 3.11. Dimensions are subject to change by SHA.

## *Recommendations:*

1. In the TOD and CAC Districts where roadway improvements occur, provide on-street parking, as approved by SHA and only for parallel parking and only in off-peak hours and/or the Department of Public Works.

2. In all districts, construct interconnecting streets wherever possible and avoid using cul-de-sac streets except where environmentally sensitive features require them. A finer grained street network is needed to accommodate all forms of travel and to reduce circuitous travel. For maps on Potential Network Connections, please see the US 1 Corridor Improvement Strategy, posted on the County's Web site at: *http://www.co.ho.md.us/DPZ/DPZDocs/US1J_network_connections.pdf.*

3. In the TOD and CAC Districts, construct roads that connect to neighboring developments.

4. Where retail uses are concentrated, consider designing service roads (Figure 3.9).

## Sidewalks and Crosswalks

### *Goals:*

The Route 1 corridor should have a continuous street sidewalk system to enhance pedestrian use and safety. Sidewalks along the Route 1 roadway should provide a consistent appearance throughout the corridor by using the same or similar materials and designs.

### *Requirements:*

1. Comply with sidewalk construction requirements in Section 16.134 of the Subdivision and Land Development Regulations, and the Design Manual, Volume III.

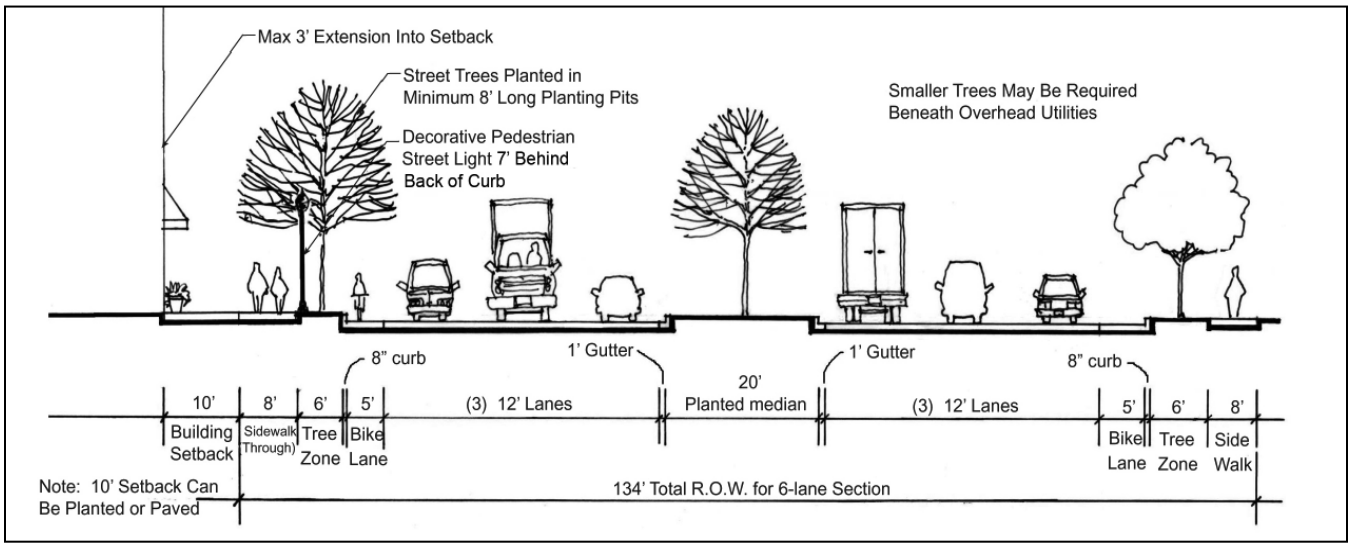



*Figure 3.10. Along Route 1 in the CAC District 8-foot sidewalks and 10-foot building setbacks are required.*

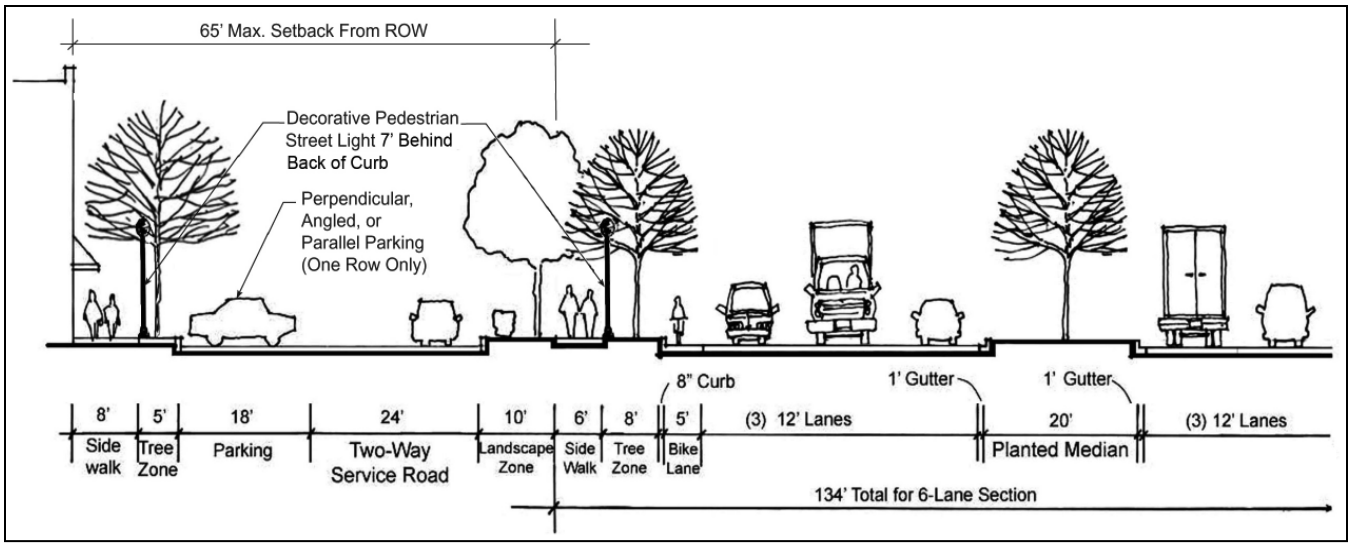



*Figure 3.11. Where frontage roads are allowed in the CAC District, the required 8-foot wide sidewalk must be placed adjacent to the front of the building and a 6-foot sidewalk must be placed along Route 1.*

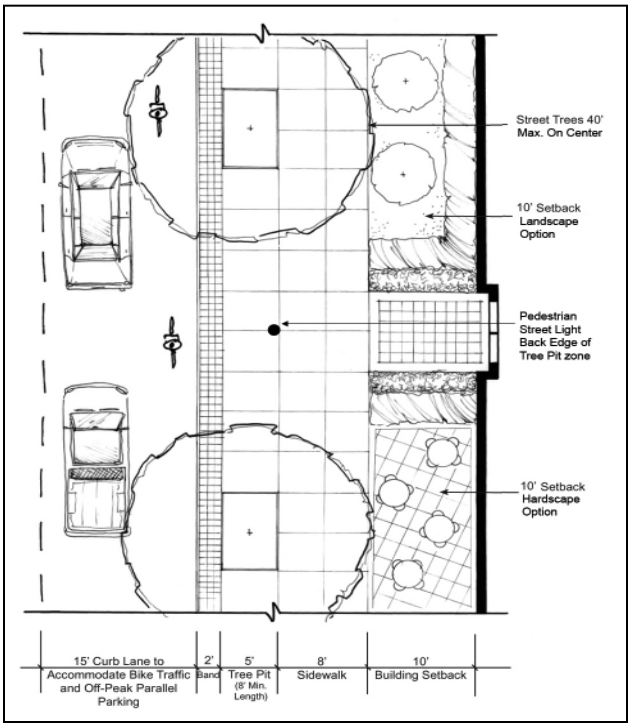



*Figure 3.12. Where off-peak on-street parking may be allowed in North Laurel and in the TOD District along major pedestrian links to MARC stations, a 2-foot wide band of concrete pavers or stamped concrete located along the edge of the roadway will offer ease of access for those exiting parked cars. Figure 3.6 is a section view of this right-of-way detail.*

***Recommended Edging for Sidewalks & Medians***

Concrete pavers: cobblestone pattern, shadow (gray) color, manufactured by Abbotsford Concrete Products, Ltd., or equal by another manufacturer.

Stamped concrete: running bond large cobblestone pattern, laid parallel to the paving edge, shale (gray) color, full depth color release, manufactured by Symons Corporation, or equal by another manufacturer.

***Recommended Crosswalk Striping***

White thermoplastic: all lines 1-foot wide; outside edges to be 2 parallel lines, 10 feet apart; internal striping to be perpendicular to the edge lines, 2 feet apart.

***Recommended Crosswalk Paving***

Stamped asphalt paving: British cobble pattern, granite color, with Texas cobble edges, concrete gray color, manufactured by StreetPrint, or equal by another manufacturer, with white thermoplastic edging.

*Figure 3.13. The list of recommended paving materials for the Route 1 corridor. All decorative paving must be approved by SHA for state roads and by the County for other roads.*

2. In the CAC District along the Route 1 roadway and in the TOD District along major pedestrian access roads that lead to the MARC station, install sidewalks with a minimum width of 8 feet. Provide a minimum 6-foot wide planting strip or tree zone adjacent to the curb. Include any pedestrian street lights, street signs or other such public features in this planting strip (Figure 3.10).

3. If the CAC project's design includes a service road along US 1, the minimum 8-foot wide sidewalk is closest to the building while the sidewalk closest to US 1 is a minimum of 6 feet wide. Provide a minimum 5-foot wide planting strip or tree zone between the frontage road's curb and the minimum 8-foot wide sidewalk. Include any pedestrian street lights in this planting strip. Provide a minimum 8-foot wide planting strip or tree zone between the US 1 curb and the minimum 6-foot wide sidewalk (Figure 3.11).

4. In the CE-CLI and CAC-CLI Districts along Route 1 and on side streets within the TOD and CAC Districts, install sidewalks with a minimum width of 6 feet. Where adequate right-of-way exists, a minimum 8-foot wide green strip should be located between the curb or edge of paving and the sidewalk to provide space for planting trees (Figure 3.5).

5. For the one-way sections of US 1 in North Laurel, provide the 2-foot wide stamped concrete band (Figures 3.6, 3.12 and 3.13) adjacent to both curbs. In CAC Districts where parallel on-street parking may be allowed only during off-peak hours on major public rights-of-way, provide the 2-foot wide stamped concrete band (Figures 3.6, 3.12 and 3.13).

6. Provide special crosswalk pavement treatment at intersections to enhance visibility of crossings and to distinguish the pedestrian from the automobile network.

    a. For public road rights-of-way that intersect with Route 1 where the crosswalk is parallel to and within the Route 1 right-of-way and for crosswalks perpendicular to Route 1, the approved crosswalk is white thermoplastic striping (Figure 3.13). Any decorative or textured crosswalk design must be approved by SHA.

    b. On County rights-of-way alternative materials (concrete pavers, stamped concrete, brick,

etc.) must be approved by the Departments of Public Works and Planning and Zoning (Figure 3.13).

c. Install thermoplastic crosswalk striping at the edges of all textured crosswalks.

7. In all other districts, provide a minimum 6-foot wide sidewalk along the property's entire Route 1 frontage.

8. In the TOD and CAC Districts, construct sidewalks that connect to neighboring developments.

9. Install detectable warning surfaces that comply with ADA requirements at ramps to crosswalks.

10. In the TOD Districts where major pedestrian links to MARC stations occur, 8-foot wide sidewalks and 10-foot building setbacks are required (comply with the edge condition shown in Figure 3.10). In these locations where on-street, off-peak hours parking is allowed, provide a 2-foot wide band of concrete pavers or stamped concrete along the edge of the roadway (Figure 3.12).

## Street Trees

### *Goals:*

The visual character of the corridor should be enhanced with the use of street trees along all public road rights-of-way, private roads and access driveways. Street trees define the street edge and establish a unifying element for the streetscape. Trees serve several aesthetic functions such as defining edges and spaces, directing views and strengthening vistas. Environmental functions served by trees include providing a shaded canopy for pedestrians, reducing ambient air and surface temperatures, improving air quality and reducing ground-level ozone.

### *Requirements:*

1. Comply with the requirements for the installation of street trees in Section 16.124 of the Subdivision and Land Development Regulations, and Chapter V of the Landscape Manual. Comply with the AASHTO Guide for Transportation Landscape and Environmental Design, current edition, and with the Howard County Design Manual, Volume III, for standards for street tree setbacks, clear zones and sight lines.

***Recommended Primary Street Tree***

Platanus x acerifolia - London Plane Tree

***Recommended Medium to Large Street Trees***

*Acer rubrum - Red Maple (varieties)
Ginko biloba - Ginko (male only)
Gleditsia triacanthos inermis - Thornless Honeylocust (varieties)
*Quercus phellos - Willow Oak
*Quercus rubra - Red Oak
Quercus robur - English Oak (fastigiate form)
Zelcova serrata - Japanese Zelcova

***Recommended Small to Medium Street Trees (under or immediately adjacent to power lines only)***

Acer ginnala - Amur Maple
Acer campestre - Hedge Maple
Acer griseum - Paperbark Maple
*Crataegus crusgalli inermis - Thornless Cockspur Hawthorn
Malus species and hybrids - Flowering Crabapple (Adams, Centurion, Harvest Gold, Zumi, Snowdrift, etc.)

* Native Plants (recommended)

*Figure 3.14. The recommended trees for Route 1 have been selected for their hardiness, tolerance of urban conditions and form. Other selections may be approved by the Department of Planning and Zoning.*

***Prohibited Invasive Exotic Trees***

Acer platanoides - Norway Maple
Ailanthus altissima - Tree of Heaven
Albizia julibrissin - Silk Tree / Mimosa Tree
Broussonetia papyrifera - Paper Mulberry
Morus alba - White Mulberry
Paulownia tomentosa - Empress / Princess Tree
Prunus avium - Sweet Cherry / Bird Cherry
Pyrus calleryana - Bradford Pear (Including all cultivars)
Quercus acutissima - Sawtooth Oak

***Other Prohibited Trees***

Fraxinus species - Ash, unless allowed by DPZ
Liquidambar styraciflua - Sweetgum, unless seedles and allowed by DPZ and DPW

*Figure 3.15. Planting trees that may be invasive are prohibited as Street Trees in the Route 1 corridor. Trees that pose concerns due to high maintenance or to severe disease are also prohibited. Other selections may be prohibited by DPZ.*

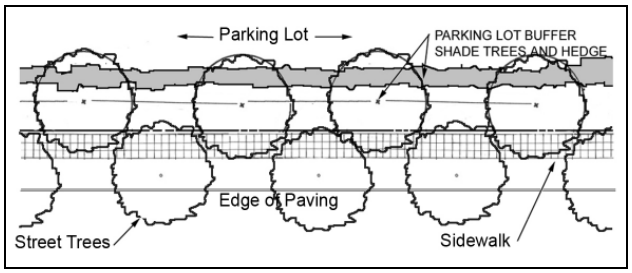



*Figure 3.16 An attractive double row of staggered trees can be created along Route 1 when the placement of the required street trees is coordinated with the placement of the required on-site landscape buffer trees.*

2. Install street trees along both sides of all public roadways, private roads and access driveways in the corridor.

3. In the CE, TOD and CAC Districts, use medium to large deciduous trees with ultimate heights above 40 feet. Plant the trees 40 feet maximum on center with a minimum 2.5-inch caliper.

4. Use small to medium trees with an ultimate height of 20-40 feet in areas with overhead obstructions. Plant the trees 30 feet maximum on center with a minimum 2.5-inch caliper.

5. Provide a minimum 8-foot wide tree planting strip or tree zone for the main line (excludes CAC District projects) of Route 1 (Figure 3.5).

6. Provide a minimum 5-foot wide planting strip or tree zone for the one-way sections of Route 1 in North Laurel (Figure 3.6).

7. Provide a minimum 6-foot wide planting strip or tree zone for the Route 1 section between Montgomery Road and Bonnie View Lane, and between Bonnie View Lane and the Baltimore County line (Figures 3.7 and 3.8).

8. In a CAC District project with a minimum building setback from US 1, provide a minimum 6-foot planting strip or tree zone (Figure 3.10).

9. In the CAC District project with a frontage road design, provide a minimum 5-foot planting strip or tree zone closest to the building. Adjacent to the US 1 right-of-way, the tree zone is 8 feet wide minimum (Figure 3.11).

10. Except where otherwise specified, provide a minimum 6-foot wide planting area for street trees. In any area where continuous plantings strips are not possible, the area excavated for the planting pit should be a minimum of 6 feet wide, 8 feet long and 4 feet deep.

11. Coordinate the installation of street trees and traffic control signs so that vegetation does not block signs from view and continual tree maintenance does not become an issue.

## *Recommendations:*

1. Use the tree palette selected for the Route 1 roadway to provide consistency and to establish a distinct identity for the major roads in the corridor. Initial tree plantings by the County will be Plata-

nus x acerifolia, London Plane Tree; however, development of a tree monoculture (use of only a single species of tree) should be avoided. Figure 3.14 lists principal trees recommended for the Route 1 right-of-way and the CE, TOD and CAC Districts. The Department of Planning and Zoning may approve other trees listed in the Landscape Manual. Native trees species are strongly recommended. Invasive exotic trees are prohibited. Figure 3.15 lists the principal prohibited trees.

2. Choose plants that are suitable as street trees based on the following factors: overhead utility lines, shape of canopy, sun and shade tolerance, drought tolerance, maintenance requirements and tolerance of adverse urban conditions.

3. To provide a more formal or urban character along the Route 1 roadway, plant street trees parallel to the applicable required on-site landscape buffer trees (in the setback from the design right-of-way) to provide a staggered double row of trees (Figures 3.7 and 3.16).

## Street Furniture and Pedestrian Amenities

### *Goals:*

Street furniture, as well as street trees, can help provide continuity between project sites and help support pedestrian travel along streets and pedestrian connections to transit areas. Amenity areas in the form of open areas for the public can provide places to gather. They can also provide a distinct identity, a sense of orientation and a visual focus.

### *Recommendations:*

1. Provide trash receptacles, benches, bicycle storage and gathering areas to serve the needs of pedestrians, and encourage walking and transit use. Recommended street furniture or equal, described below and in Figures 3.17 through 3.20, should be black or red powder-coated metal, as approved by DPZ.

2. Provide space for a bus stop or bus shelter, if requested by the Department of Planning and Zoning. This includes the potential requirement for parallel bus loading areas or pull-outs. Use the approved design, or comparable design, for bus shelters along the Route 1 right-of-way (Figure 3.17).

*Figure 3.17. The recommended bus shelter for the Route 1 corridor is Slimline, 5-foot by 10-foot, black or red powder-coated metal, manufactured by Brasco International, Inc., or equal by another manufacturer.*

*Figure 3.15. The recommended trash receptacle for the Route 1 corridor is Ironsites series model S-42, 36-gallon capacity, manufactured by Victor Stanley, Inc., or equal by another manufacturer..*

*Figure 3.19. The recommended bench for the Route 1 corridor is Classic series, model cs-138, 6-foot length with center arm rest, manufactured by Victor Stanley, Inc., or equal by another manufacturer.*

*Figure 3.20. The recommended bollard for the Route 1 corridor is Bollard 35, BKR permanent mount, manufactured by Victor Stanley, Inc., or equal by another manufacturer. The bollard can also serve as a bicycle storage area.*

3. The County or its designated agent will be responsible for the installation. DPZ will coordinate bus stops or bus shelters with the Department of Public Works and with SHA, if applicable. For information, contact:

   Department of Planning and Zoning
   Division of Transportation Planning
   3430 Court House Drive
   Ellicott City, MD 21043
   410-313-2350

4. Locate bus shelters close to existing and expected bus patronage generators such as retail centers, office and commercial uses, multi-family housing, institutional uses and major employment centers, and also at bus transfer points. The Department of Planning and Zoning's Division of Transportation Planning maintains a map showing existing and recommended bus stop locations.

5. Use the recommended trash receptacle, or equal, along the Route 1 right-of-way (Figure 3.18). Locate trash receptacles in pedestrian activity areas in the TOD and CAC Districts, and at bus stops and shelters.

6. Use the recommended bench, or equal, along the Route 1 right-of way (Figure 3.19).

7. Use the recommended bollard, or equal, along the Route 1 right-of way (Figure 3.20). Bollards may be useful for those areas where pedestrian traffic needs to be shielded from possible vehicular traffic. Bollards must be set back a reasonable distance from the right-of-way so they do not pose a hazard to vehicular traffic. Their location must not impede on ADA clearances or on the placement of automated pedestrian safety devices near ADA ramps and median cut-throughs. The recommended bollard also functions for bicycle storage.

8. Locate bicycle lockers and/or racks near MARC transit stops in highly visible and well-lit areas.

9. In the CE, TOD and CAC Districts, take advantage of the placement of buildings and walls that create opportunities for plazas, courtyards or garden/patio areas. Such areas can serve as gathering places for pedestrians and as common areas for employees. Provide seating and lighting for outdoor gathering areas. However, these outdoor gathering areas may not be located in the public right-of-way.

## Pedestrian Street Lights

### *Goals:*

Ornamental pedestrian street lights help create a distinct identity along the corridor and help promote pedestrian safety. The use of these fixtures is especially important in the pedestrian-oriented TOD and CAC Districts, but it can also be beneficial in areas of high pedestrian use such as major intersections where retail uses or high-density housing occur.

### *Requirements:*

1. Comply with the requirements in the Outdoor Lighting section of the Zoning Regulations and Section 16.135 of the Subdivision and Land Development Regulations.

2. In the TOD and CAC Districts, provide pedestrian light fixtures. Use the required acorn fixture along the Route 1 right-of-way or along the main pedestrian routes to the MARC stations where minimum 8-foot wide sidewalks are required (Figure 3.21). The required light fixture is subject to change. Spacing of fixtures will be determined by engineering analysis.

3. For information and details on the approved pedestrian light fixture, contact:

   Department of Public Works
   Bureau of Highways
   Traffic Engineering Division
   9250 Bendix Road
   Columbia, MD 31045
   410-313-2430

### *Recommendation:*

1. Provide pedestrian light fixtures. Use the fixtures selected for the TOD and CAC Districts and elsewhere in the corridor, particularly where concentrated pedestrian activity occurs.

*Figure 3.21. The ornamental pedestrian street light selected for the Route 1 corridor is an acorn full cut-off fixture atop a 12-foot tall black finish pole with fluted shroud base. The selected light is subject to change.*

## Utilities

### *Goals:*

The visual and noise impacts of utilities, mechanical equipment, data transmission dishes, towers, and similar antennas and equipment should be minimized by their placement, or mitigated with planting or architectural features.

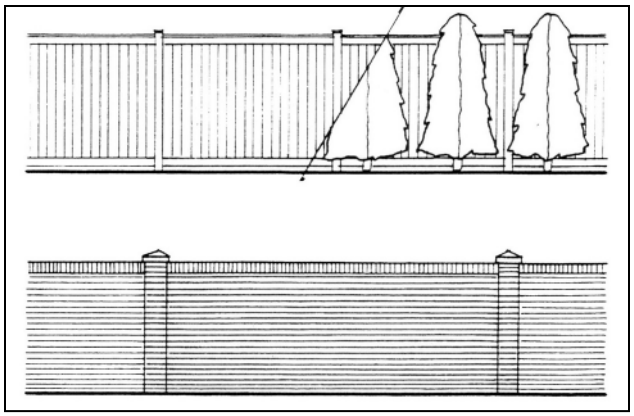


*Figure 3.22. Examples of continuous, solid, opaque screening fences or walls with landscaping.*

## Requirements:

1. Locate transformers, telecommunications devices, equipment switching boxes and other utility cabinets away from the street, major pedestrian routes and outdoor seating areas. Locate equipment and devices away from residential areas, especially if they produce noise.

2. If transformers, telecommunications devices, equipment switching boxes and other utility cabinets must be located in an area visible from the street and pedestrian areas, then buffer with architectural fence, wall, and/or landscaping screens (Figure 3.22).

## Recommendations:

1. Install all permanent utility lines underground, where feasible. Move utilities to the rear of the property to help hide them from view along the roadway. Use dark metal poles for utility lines in place of wood poles.

2. Install underground conduits where feasible, so that utilities can be moved underground in the future if cost and construction improvements allow.

# 4

# SITE DESIGN

***P**urpose: The Route 1 corridor's three corridor zoning districts are intended to encourage new land development patterns. Most of the existing patterns are suburban in character and use large amounts of land at relatively low intensities. The new patterns intend to make more efficient use of the land and to establish a more urban character for portions of the corridor. This chapter provides guidance in achieving the new patterns.*

*Figure 4.1. Buildings that line the right-of-way establish a uniform street edge and provide an inviting scale for pedestrians.*

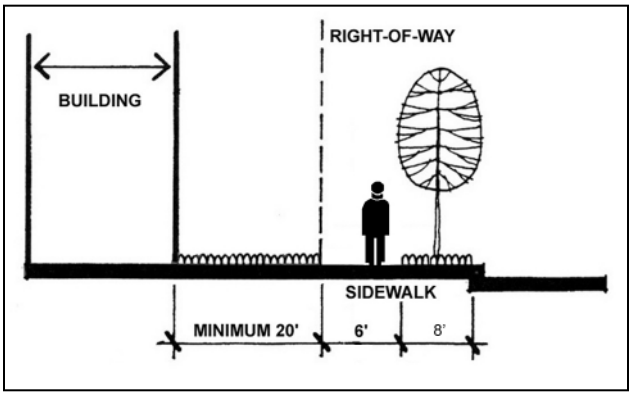



*Figure 4.2. CE setback and building placement will make buildings more prominent by reducing the distance from the edge of the road.*

## Building Location

### *Goals:*

The location of buildings should reinforce the street as the center of activity and take advantage of the Route 1 streetscape improvements, particularly in the CAC District. Setbacks from the street are generally experienced as part of the public realm. To produce a more urban character, the buildings should be close to the sidewalks and rights-of-way (Figure 4.1). The buildings should extend across a substantial portion of the property's frontage so that a more urban and pedestrian friendly environment can be created. Buildings should be clustered to establish a uniform street edge thereby enhancing the visual quality of the streetscape.

### *Requirements:*

1. In the CE District, place buildings at a 20-foot setback from the Route 1 design right-of-way (Figure 4.2).

2. In the CE District, buildings shall occupy preferably 50% but not less than 30% of a property's Route 1 right-of-way frontage (Figure 4.3).

3. In the TOD District, place buildings at the minimum 10-foot setback along primary circulation roads and along public and private roads that serve as major pedestrian access routes to MARC stations (Figure 4.4). Elsewhere, including along secondary circulation routes, the setback may be zero feet.

4. In the CAC District, place buildings at the minimum 10-foot setback along Route 1. On roads

other than Route 1, the buildings may be located at a setback of zero to ten feet from the right-of-way line. If the service road option is used, the maximum setback is 65 feet.

5. In the TOD and CAC Districts, this setback may be used to accommodate amenity plantings, outdoor seating, courtyards, plazas, entries, outdoor eating areas, displays or other special features. In the TOD District, a greater than the minimum setback may also be used to meet the added setback requirements for building heights over 60 feet (see Chapter 5, Building Design).

6. In the TOD or CAC Districts, buildings shall occupy at least 75% of a property's frontage along major pedestrian roads to MARC stations or of a property's Route 1 right-of-way frontage, or other major frontage if located off Route 1, respectively (Figure 4.5). This will create a more continuous pedestrian friendly environment.

## *Recommendations:*

1. Throughout the corridor, locate the office portion of flex-space and light manufacturing uses in the front of buildings, facing the street.

2. Unify various site components, including buildings, accessory structures, fencing, walls, signage, etc. through the use of similar design, materials and colors.

3. Establish a visual or physical link among various buildings in multi-building complexes by using site design elements such as courtyards, plazas, landscaping and walkways to unify the project.

4. Where two or more office buildings are located on a site, orient buildings toward public streets. If these buildings are set back from the street, provide a view of the building entrances from the street, possibly across a green space or through a plaza (Figure 4.6).

# Vehicular Access

## *Goals:*

Safe vehicular access is always a concern at site entrances; however, especially in the TOD and CAC Districts where pedestrian traffic is encouraged, pedestrian traffic safety is also a major concern. To increase pedestrian safety, vehicular traffic patterns need to be separated from pedestrian traffic patterns.

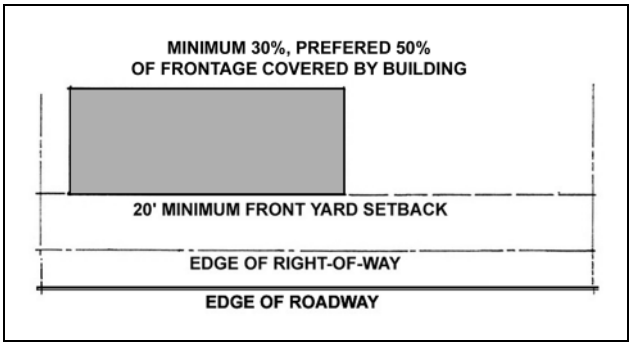



*Figure 4.3. In the CE District, buildings should span a significant portion of the Route 1 right-of-way frontage.*

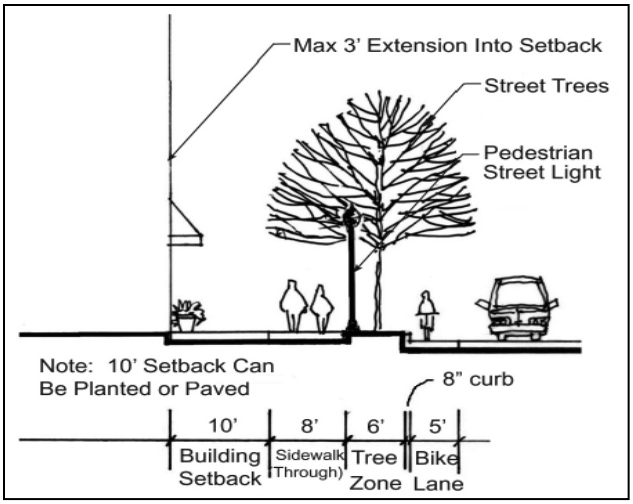



*Figure 4.4. TOD and CAC setbacks and building placement will create an attractive area for pedestrians.*

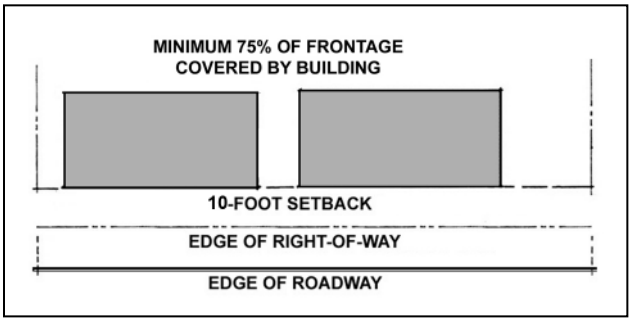



*Figure 4.5. In the TOD and CAC Districts, buildings should dominate the Route 1 right-of-way frontage to produce a more urban and pedestrian friendly environment.*

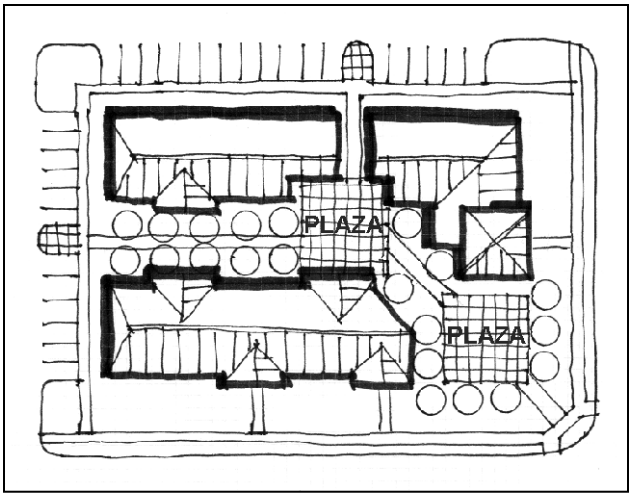



*Figure 4.6. Office buildings oriented to street and to plaza or green space become important elements of the streetscape.*

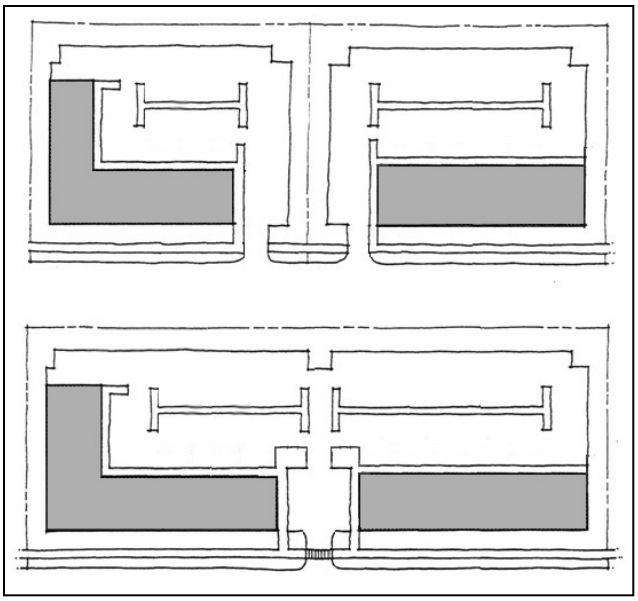


*Figure 4.7. A minimum number of curb cuts reduces traffic congestion, improves safety and allows for additional parking.*

For safety, properties in the Route 1 corridor should be designed to limit the number of curb cuts, consolidate entrances and articulate them for ease of identity, and ensure that pedestrian crossings are clearly marked. The Maryland State Highway Administration's US 1 Corridor Improvement Strategy states that reducing the number of driveways and creating parking access from local connecting streets, instead of from US 1, will enhance both the appearance and the safety of the corridor. Curb cuts tend to increase pedestrian exposure to moving vehicles, limit opportunities for landscaping, street trees and on-street parking spaces, and reduce the sidewalk space available for pedestrian interaction and amenities.

## *Requirements:*

1. Comply with the access requirements in Section 16.119(b)(4) of the Subdivision and Land Development Regulations, and the Design Manual, Volume III.

2. Design access to sites with multiple frontages from the lower classification public road, especially at signalized intersections, to reduce pressure on US 1.

3. Use the minimum number and size of curb cuts to promote traffic safety, to minimize the pedestrian/vehicle conflict and to maximize building frontage (Figure 4.7).

4. Articulate site entrances through building placement, landscaping features, signage, low walls or similar structures to promote safety by making the entrances visually clear.

5. Continue the sidewalk pattern across driveways that serve as main entrances to major mixed use communities, retail and employment centers. The pattern shall be thermoplastic white striped markings, at the minimum.

## *Recommendations:*

1. Share entrances with adjacent parcels. Shared access reduces traffic congestion (and also conflicts between pedestrians and vehicles) by consolidating entrance and exit points, and by allowing vehicular movement between properties without using the street. Especially in the CAC District, shared entrances help to achieve the 75% building frontage of properties on the Route 1 roadway.

2. In the TOD and CAC Districts, evaluate using one-way vehicular access to properties to limit the driveway width, thus reducing the distance that pedestrians must cross (although the number of curb cuts may be increased).

3. Use minimum, rather than maximum, commercial driveway widths stipulated in the Design Manual, provided an analysis of turning movements supports the minimum.

## Parking Areas

### *Goals:*

Convenient parking is necessary but the visual impact from the corridor's public street rights-of-way of parked cars in parking lots should be reduced. The locations of parking areas should be restricted and plantings that help screen the cars from view should be provided. Because prominent parking areas deaden pedestrian activity, they should be located away from pedestrian centers of activity, especially in the pedestrian-oriented TOD and CAC Districts.

### *Requirements:*

1. In the CE, TOD and CAC Districts, locate parking areas at the side or rear of buildings (Figure 4.8).

2. In the CE District, minimize the number of parking spaces located between the primary façade of the building and the street right-of-way. The maximum building setback of 100 feet allows for a single-loaded bay of parking between the building and the design right-of-way.

3. Create landscaped islands and medians that divide the parking areas and that help define traffic patterns.

4. Provide curbs to keep vehicles from damaging buildings and landscaping. Allow wheel stops at parking edges where landscaped areas serve as bioretention or infiltration areas for stormwater management.

5. For safe pedestrian access to buildings, provide walkways and paths from parking lots to building entrances.

6. Provide landscaped areas (paved, planted or otherwise enhanced) between all parking areas and buildings, except for loading/parking areas on the

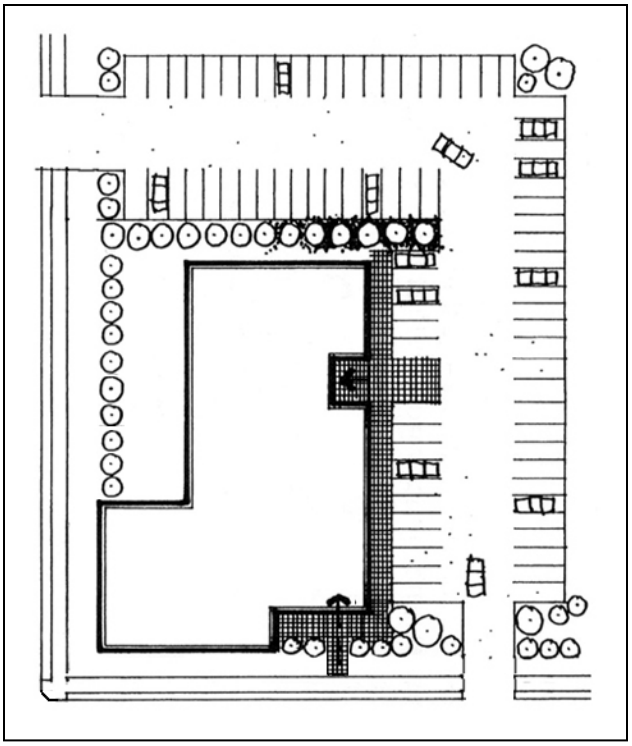


*Figure 4.8. Parking areas should be located at the side and rear of buildings.*

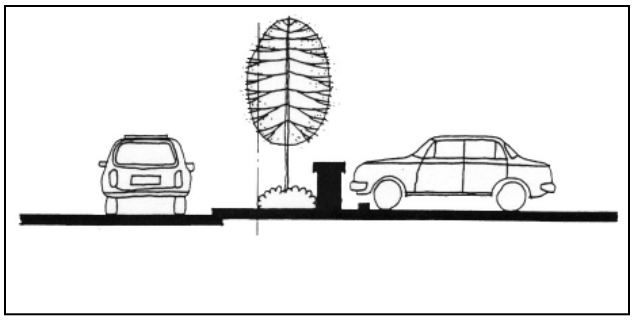


*Figure 4.9. Walls and plantings along parking lots at street edge help reduce the visual impact of parking lots from the street.*

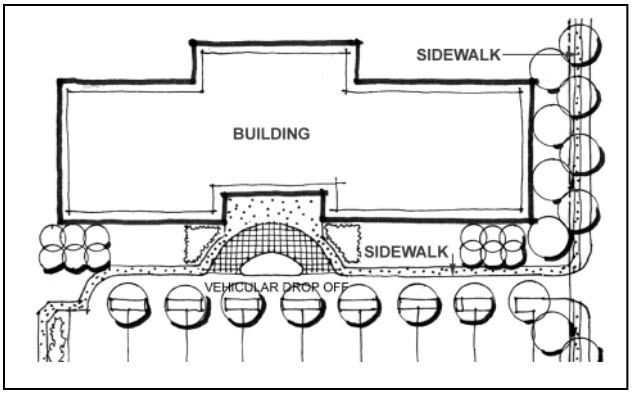



*Figure 4.10. Drop-off areas and pedestrian areas with special paving and plantings make building entrances more attractive and easier to identify and access.*

*Figure 4.11. By providing bike racks and bike parking areas in convenient locations, people may be encourged to use bicycles and an alternative mode of transportation.*

rear of flex space buildings and for loading areas in general. Increase the size of these landscaped spaces in proportion with the increased height of the building.

7. Comply with the requirements in Chapter IV of the Landscape Manual and with the requirements of this Manual for landscape buffers between parking lots and public streets. Where the requirements of this Manual exceed or are more restrictive that those of the Landscape Manual, the requirements of this Manual shall apply (see Landscape Planting & Screening, below).

### *Recommendations:*

1. Without limiting sight distance, add architectural elements such as low walls or fences at the main entrance to a parking lot to accent the entry and to create a sense of street edge (Figure 4.9).

2. Link parking lots for adjacent commercial properties by a common drive aisle. The intent is not that parking be shared but to provide ease of access, limit curb cuts along major roads and reduce the number of trips that use major roads. Drive aisles may occur in various locations, most commonly in front of buildings as a service road or at the rear of properties or other locations.

3. Do not locate parking directly in front of main entrances to buildings. Provide drop-off areas or expanded pedestrian areas with enhanced paving and plantings (Figure 4.10).

4. Provide parking areas for bicycles in areas of concentrated pedestrian activity and also at the MARC train stations in the TOD developments (Figure 4.11).

## Loading and Storage Areas

### *Goals:*

In all parts of the Route 1 corridor, to provide an attractive image of properties, loading and storage areas should be located away from and screened from public view. A safe environment should be created by minimizing conflicts between loading areas and travelways.

### *Requirements:*

1. Prohibit any loading at the front of a building or between the building and any adjacent public

right-of-way. Locate loading docks, outside storage and service areas away from public view, at the rear (non-street side) of buildings. If the site is constrained, these areas, if screened, may be on the side of buildings.

Comply with the requirements in Chapter IV of the Landscape Manual and with the requirements of this Manual for landscape buffers and screening of loading and storage areas. Where the requirements of this Manual exceed or are more restrictive that those of the Landscape Manual, the requirements of this Manual shall apply (see Landscape Planting & Screening, below).

Recommendations:

Combine service areas or locate them next to each other in multi-building complexes to minimize the visual and noise impacts on the surroundings.

Locate loading areas in a service yard at the rear of a multi-building complex, preferably incorporated into the design of the building (Figure 4.12).

Minimize the interaction between service vehicles and parked automobiles in service yards and loading areas. Where possible, separate parking areas from service yards and loading areas.

## Landscape Planting and Screening

### *Goals:*

Planting and screening should be used to improve the appearance of properties along Route 1, hiding unattractive views and buffering incompatible uses. These refinements and expansions of the requirements of the Landscape Manual are intended to establish a distinct landscape character for the Route 1 roadway. Formal landscape treatments can reinforce the desired image of a more urban character for the corridor. In the three corridor districts, where setbacks are reduced and development intensity may increase, planting can help soften and beautify the environment.

### *Requirements:*

1. For the CE, TOD and CAC Districts, provide a Type D screen along the perimeter of all non-residential uses that adjoin residential properties (Figure 4.13). Non-residential uses include

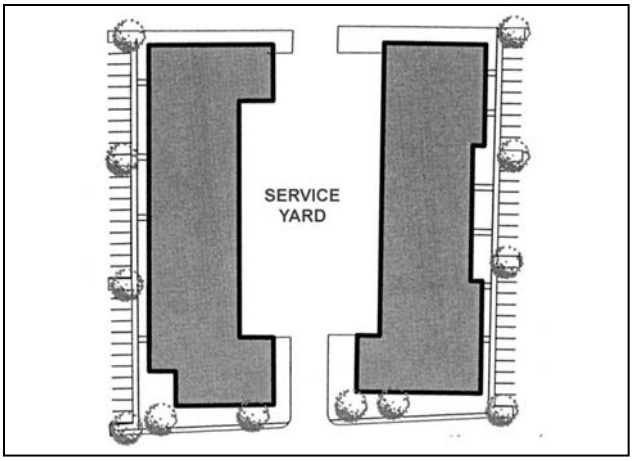



*Figure 4.12. Shared loading areas can be located away from public view.*

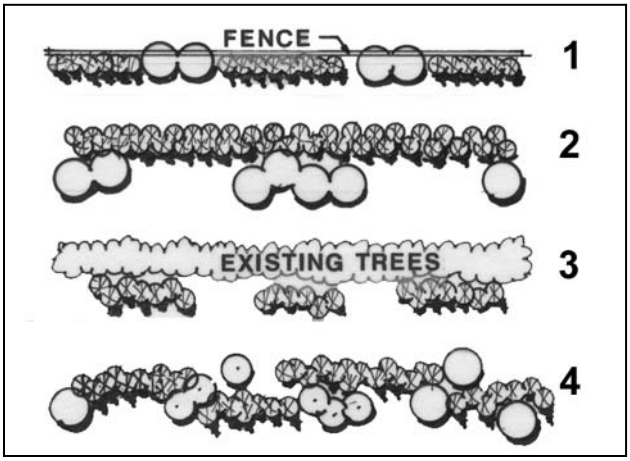



*Figure 4.13. Recommended Type D perimeter screens: options 1, 2 and 3 are preferred for their formal planting layout; option 4, with its informal massings, is not desirable.*

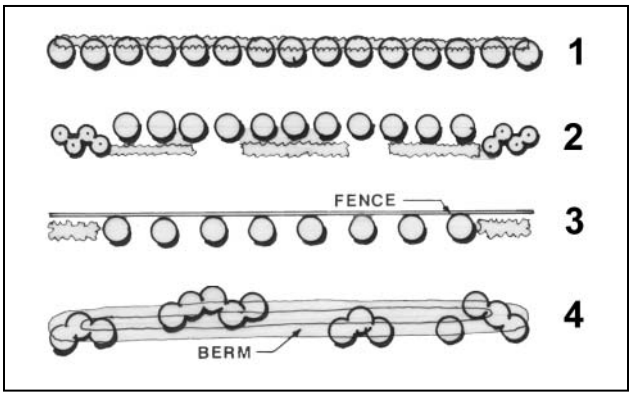



*Figure 4.14. Recommended Type E perimeter buffer: options 1, 2 and 3 are preferred for their formal planting and fence or wall; option 4, with berm and informal massings, is not acceptable.*

*Figure 4.15. Exposed storage areas along Route 1 enclosed with chain link fence are unsightly.*

*Figure 4.16. Storage yard and chain link fence can be efficiently screened with a Type D buffer. Plantings must comply with applicable setbacks, clear zones and sight lines.*

*Figure 4.17. This formal parking lot buffer planting features a row of evenly spaced shade trees and straight hedges. It defines a strong edge for the street, buffers the parking lots, yet does not obscure visibility into the site.*

buildings, parking and loading, but do not include retained forest protected by forest conservation easements. The increased planting requirements are intended to mitigate reduced setbacks allowed in these districts.

2. In the CE, TOD and CAC Districts, screen parking lots from the street using a Type E buffer; however, the berm option is excluded. To ensure that planting patterns will be consistent along Route 1 frontage, DPZ may require the Type E buffer to be extended across the entire frontage, buffering non-residential open space as well as the parking lot (Figure 4.14).

3. Distribute landscaping throughout parking lots to reduce the effect of heat and glare from pavement.

4. Screen all service areas such as loading, trash enclosures and outside storage, using a combination of fences, walls, gates and landscaping. Integrate walls and fences into the landscape design. Fully screen outside storage areas with screen wall or fence enclosures. Stored materials may not be stacked or be visible above the enclosure height.

5. In the TOD and CAC Districts, do not use corrugated metal, corrugated fiberglass, sheet metal or wire mesh as a screening material along the Route 1 frontage. If chain link fencing is used in the TOD and CAC Districts, it must be landscaped with a Type D screen.

6. In all other Districts, if chain link, corrugated metal, corrugated fiberglass, sheet metal or wire mesh fences are needed for security purposes and if they are visible from Route 1, landscaping shall obscure the fence with a Type D screen (Figures 4.15 and 4.16).

## *Recommendations:*

1. Use walls, fences and plantings to define boundaries, provide access control and distinguish private and public areas.

2. Use formal design layouts for plantings adjacent to the Route 1 right-of-way and in the new zoning districts. Formal plantings are in keeping with the more urban image that is envisioned for the corridor (Figure 4.17).

3. In the CE, M-1, M-2, B-1 and B-2 Districts, discourage the use of chain link, corrugated metal, corrugated fiberglass, sheet metal or wire mesh fences.

4. In all districts, encourage the use of steel picket or solid board, continuous, opaque fencing and/or landscape screening (Figure 4.18).

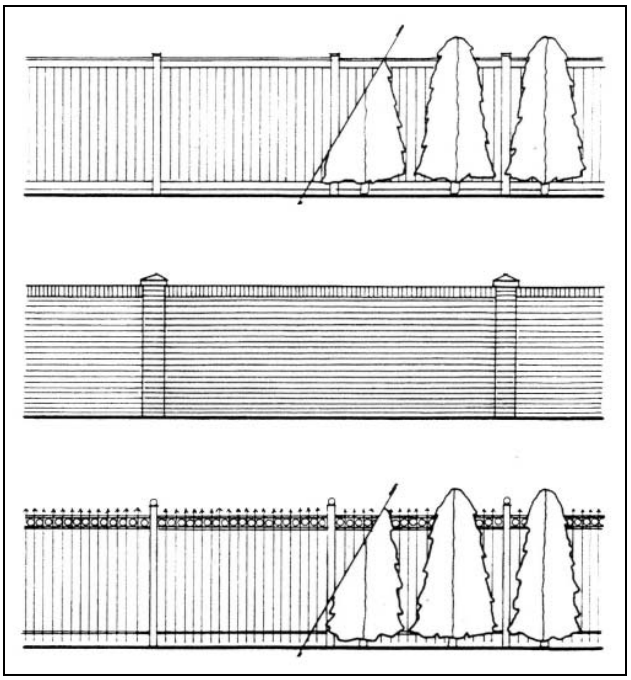


*Figure 4.18. Examples of preferred screening walls and fences for loading docks, storage yards, trash enclosures and mechanical equipment include solid board fence, brick wall and steel picket fence.*

## Trash Enclosures

### *Goals:*

Trash enclosures should be located so they are not visible from public rights-of-way, building entrances and amenity areas, and they should be easily accessible by collection trucks.

### *Requirements:*

1. Enclose dumpsters with a continuous, solid, opaque wall or fence, or a Type D landscape screening treatment.

2. Buildings shall consolidate their trash collection needs in a single, central location away from public view.

## Mechanical Equipment

### *Goals:*

The visual and noise impacts of utilities, mechanical equipment, data transmission dishes, towers, and similar antennas and equipment should be mitigated.

### *Requirements:*

1. Screen mechanical equipment on the ground from view of residential developments using a continuous, solid, opaque wall or fence. Select a screen design that is compatible with the architecture of the building(s) on the site.

2. Do not locate mechanical equipment in the setback between the building and the public right-of-way. If it is not feasible to locate the equipment elsewhere, screen the mechanical equipment with a continuous, solid, opaque wall or fence that is architecturally integrated with the building.

3. If allowed by DPZ as part of an integrated landscape design, use a dense landscape screen of evergreen trees or tall shrubs as an alternative to a wall or fence if space is available and if it will not

*Figure 4.19. Stormwater management facilities can be visual amenities.*

*Figure 4.20. Bioretention areas can be designed attractively to suit urban stormwater management conditions.*

hinder the operation of mechanical equipment. If perimeter site landscape buffers already screen the mechanical equipment, DPZ may waive the requirement for additional screening.

Recommendations:

Architecturally integrate the method of screening with the structure in terms of materials, color, shape and size. Where freestanding mechanical equipment is provided, use a continuous solid screen.

## Stormwater Management

### *Goals:*

Stormwater management in the Route 1 corridor should protect the natural stream system by improving water quality and reducing the volume and velocity of stormwater entering streams.

### *Requirements:*

1. Comply with the requirements in the Howard County Design Manual, Volume I, and the 2000 Maryland Stormwater Management Design Manual, Volumes I and II, and subsequent updates when approved by State or County legislation.

2. Integrate stormwater management facilities with other site elements through the use of landscaping.

### *Recommendations:*

1. Utilize multistory buildings to reduce the building footprint and reduce impervious areas. Where appropriate, use parking lot islands and buffers for bioretention and infiltration.

2. Retrofit existing stormwater management facilities to the maximum extent possible.

3. Consider using underground retention facilities where space is limited.

4. Design stormwater management facilities as amenities that are visible from a building or a street (Figures 4.19 and 4.20).

5. Use green or vegetated roof technology to collect and detain runoff.

6. Explore other methods of stormwater management as listed in the 2000 Maryland Stormwater Management Design Manual, Volumes I and II.

## Lighting

### *Goals:*

Exterior lighting should be integrated with the site design so that maximum efficiency of the necessary lighting is achieved, and possible glare and spillover effects of such lighting are avoided.

### *Requirements:*

1. Comply with the Outdoor Lighting section of the Zoning Regulations.

### *Recommendations:*

1. Incorporate exterior light fixture design into the building design and landscape scheme of the development.

## Freestanding Signs

### *Goals:*

The Route 1 corridor, being an older commercial and industrial corridor, has many freestanding signs that have, over time, helped to create an overall chaotic appearance of the corridor. Citizens have stated that the existing signage along the Route 1 roadway contributes to the corridor's overall negative character. Providing a more consistent placement and orientation of signage should reduce this sense of visual clutter.

### *Requirements:*

1. Comply with the requirements of the Howard County Sign Code, administered by the Department of Inspections, Licenses and Permits.

### *Recommendations:*

1. Instead of freestanding signs, select building mounted or wall signs that are integrated into the building's architecture.

2. For wall signs, please see the chapter on Building Design and the section entitled Signs Attached to Buildings.

3. Use durable materials, subdued colors and professionally executed graphic design.

4. Select monument or low-profile, ground mounted type signs instead of freestanding pole mounted signs (Figure 4.21).

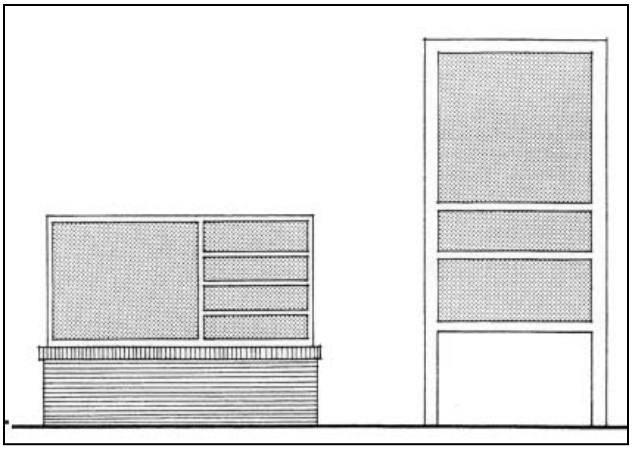


*Figure 4.21. Low-profile signs are preferred over pylon signs.*


*Figure 4.22. Signs that use colors, materials and details derived from the site's architectural features provide an attractive and harmonious image from the street.*

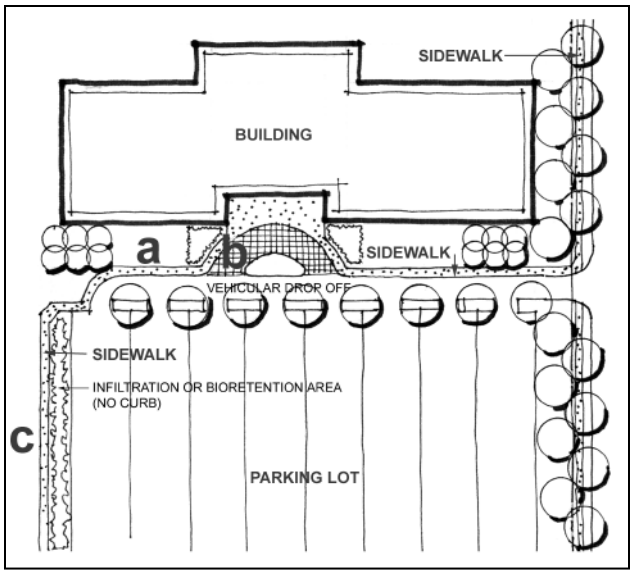



*Figure 4.23. Pedestrian paths should be (a) separated from driveways by a 6-inch curb, (b) clearly defined by textured paving if pedestrians and vehicles share the same routes, and/or (c) separated from vehicular areas by a landscaped strip if no curb or no special change in paving is used.*

Without limiting sight distance, place freestanding signs closer to the property line to promote a street edge appearance.

Coordinate materials and colors for freestanding signs with materials and design elements/character from the principal buildings on the site. This helps bring the identity of the building to the street edge (Figure 4.22).

Eliminate any glare visible to motorists and pedestrians from the sign's lighting source. Freestanding signs may be internally or externally lit.

## On-Site Pedestrian Circulation

### *Goals:*

Properties in the Route 1 corridor should offer safe opportunities for walking. A continuous system of sidewalks and crosswalks should be created to connect buildings to sidewalks along public street rights-of-way, link multiple buildings on sites and make connections to amenity areas. This system should provide a comfortable and inviting environment.

### *Requirements:*

1. Make internal pedestrian walkways a minimum of 5 feet wide.

2. Provide clearly defined paved pedestrian connections:

    a. Between a public right-of-way and building entrances.

    b. Between parking lots and building entrances.

    c. Between transit stops and building entrances.

    d. Along the front facade of a building with multiple entrances for multiple tenants so that access is provided among entrances. This connection is especially important for retail and flex space buildings. In multi-building complexes, design pedestrian circulation and internal landscape areas so they connect buildings together.

3. Clearly separate pedestrian connections from vehicles by one of the following (Figure 4.23):

    a. A 6-inch vertical concrete curb.

b. Textured paving if pedestrians will share vehicular circulation, particularly in arrival/drop off areas, or where pedestrians cross vehicular lanes.

c. A continuous landscape area a minimum 3 feet wide on at least one side of the walkway.

## Open Space and Pedestrian Amenity Areas

### *Goals:*

Because of the density allowed in the CAC district, requirements for open space have been set proportional to the size of the development. Open space will provide for the protection of the environment, for recreation or for public use. Plazas, courtyards or similar visitor and employee amenities should be incorporated into site development plans for office, residential and retail uses, especially if part of a multi-building complex. Pedestrian amenity areas must be designed to be open to the public, easily accessible and comfortable for a substantial part of the year. Areas not designed in this manner could be considered to be open space. In sufficiently large developments, a centrally located public open area or focal point should be linked with other amenities through open area corridors that have paths.

To ensure that development complies with this Manual, applicants are required to include locations, designs and calculations of sizes of pedestrian amenity areas on subdivision or site development plans, as applicable, illustrating how their design responds to this Manual's requirements and recommendations.

### *Requirements:*

1. Provide safe, comfortable places where people can stop, view, socialize and rest within the pedestrian circulation system but without impeding pedestrian traffic (Figure 4.24). The area of the sidewalk is not included in the pedestrian amenity area calculations.

2. In the CE District, for sites that are a minimum of 5 acres (not including manufacturing uses), provide 5% of the net acreage for pedestrian amenity areas.

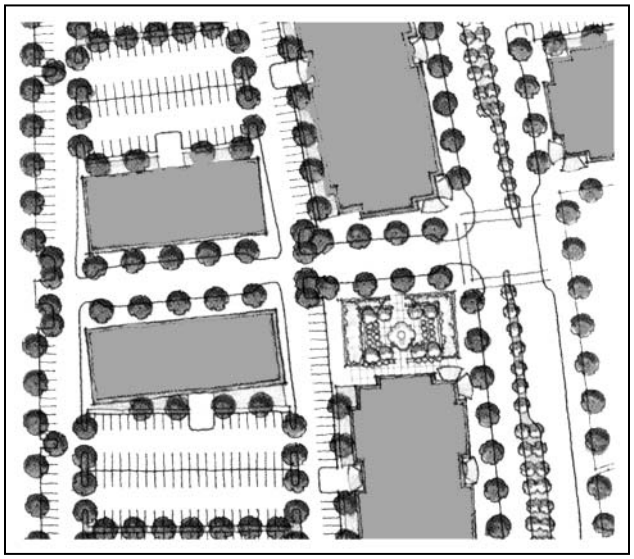


*Figure 4.24. Small parks and plazas can be located along streets or within multi-building complexes to provide spaces for gathering and to serve as an attractive focal point.*

*Figure 4.25. Landscaped plazas can provide space for gathering and outdoor eating, and they can offer pleasant pedestrian connections between buildings.*

3. In the TOD and CAC Districts, provide 10% of the net acreage as open space which must be designed as an amenity area open to the public. For sites in the CAC District that are 20 acres or larger, 25% of the net acreage must be provided as open space of which at least 50% must be designed as an amenity area open to the public. Facilities, such as club houses or pools, that are open only to residents and not to the public, cannot be included in the amenity area calculations but would be included in the open space calculations.

4. In the TOD and CAC Districts, furnish spaces with pedestrian amenities such as benches, planters, lighting, newspaper racks, transit shelters, landscaping, and/or recreational facilities. Incorporate the site furniture and fixtures into the site design.

5. Plan courtyard, plazas and other outdoor areas so that they have good physical and visual connections with the building(s).

## *Recommendations:*

1. Refer to Chapter 3, Streetscape Design for recommended site furniture.

2. Have green space fulfill more than one function. For example, stormwater management facilities may be designed as an amenity or a visual focal point.

3. Orient open area locations with seating that receive both sun and shade.

4. In multi-building complexes, design internal landscape areas that connect the buildings. Accent the walks and open areas with landscaping that provides seasonal interest and color. Take maximum advantage of landscaping by providing outdoor eating areas and plazas between buildings (Figure 4.25). Outdoor dining areas can enhance an urban atmosphere and increase activity on the street but may not encroach into a public right-of-way or onto the required minimum dimensions for sidewalks.

5. Where appropriate, provide space for installing bicycle racks or bicycle parking spaces at a minimum of 1 space per 50,000 square feet of gross floor area in all new retail and office developments.

6. For the larger CAC development projects, especially those 20 acres or larger, design a hierarchy of amenity areas. For example, a large central amenity area could be connected by walks to several smaller amenity areas located throughout the development project.

# 5

# BUILDING DESIGN

***P**urpose: The corridor zoning districts aim to promote new development patterns that allow for more intensive and efficient use of prime sites. The multistory and greater pedestrian orientation of these zoning districts is a departure from the current pattern found in business and manufacturing districts. Consequently, the buildings in these locations should have more urban character than buildings in the corridor do presently. The building design requirements and recommendations in this chapter are meant to aid property owners and developers in understanding and achieving the land use goals and design concepts that were agreed upon by citizens and policy makers during the Route 1 Corridor Revitalization Study.*


*Figure 5.1. Building facades that have variety and visual interest, especially on the first floor, are important in pedestrian-oriented areas.*

*Figure 5.2. Although one-story flex space and light industrial buildings will continue in the corridor, multistory office buildings are encouraged in the corridor zoning districts.*

## Design Concepts

Although this chapter deals with building design, it is not the intent of this Manual to dictate architectural design. Instead, these requirements and recommendations address basic urban/suburban design concepts that relate primarily to land use and site relationships. Many of these requirements and recommendations reflect community opinions expressed in the Visual Preference Survey taken at the citizen workshop.

Because of the concern about the corridor's appearance and the establishment of pedestrian-oriented areas, increased attention should be paid to the visual interest of a building (Figure 5.1). Both for commercial and light industrial buildings, and particularly for those with Route 1 frontage, a well-designed exterior can contribute greatly to improving the appearance of the corridor.

Multistory buildings have traditionally been used to house many different uses in a compact area. Taller buildings can make more efficient use of land and increase the intensity of development, providing the potential for more jobs and more residents in a community (Figure 5.2). Multistory buildings also give a stronger presence on the street than one-story buildings.

To ensure that development complies with this Manual, applicants are required to include schematic architectural elevations on subdivision plans and more detailed elevations on site development plans, as

applicable, illustrating how building design responds to this Manual's requirements and recommendations. For sites with grade changes, include building sections to illustrate how the building and the parking structure, if applicable, relate to the grade changes.

## Height

### *Goals:*

Multistory buildings help form an edge to the street, thus defining public space and differentiating it from private space. The increased density of multistory buildings should yield more potential users for pedestrian and transit improvements. In the new corridor zoning districts, certain ground floor retail and commercial uses are allowed as incentives to encourage the construction of multistory buildings.

### *Requirements:*

1. In the CAC District, establish a minimum height of 25 feet so that two-story buildings will be constructed (Figure 5.3). Alternatively, use steep roof lines, false fronts, clerestory windows or other such architectural devices to give the appearance of two-story height.

2. In the CE and TOD Districts, use the height provision that allows for buildings over 60 feet in height if setbacks are increased (Figure 5.4). If the building height is greater than 60 feet, the following additional setbacks shall be provided:

    a. Set the portion of the building that is higher than 60 feet back from the street design right-of-way 1 foot for every 2 feet of height above 60 feet, or

    b. Set the entire building back from the street design right-of-way 1 foot for every 2 feet of height above 60 feet.

## Mass and Articulation

### *Goals:*

1. The three corridor zoning districts in the Route 1 corridor encourage new buildings to be located nearer to the street to help form a more urban character to the corridor. In addition to its location, the building itself can add to the urban character. A building's proportion, height and width, as well

*Figure 5.3. Two-story minimum building heights will improve the scale of buildings and provide opportunities for a mix of uses on upper floors in the CAC District.*

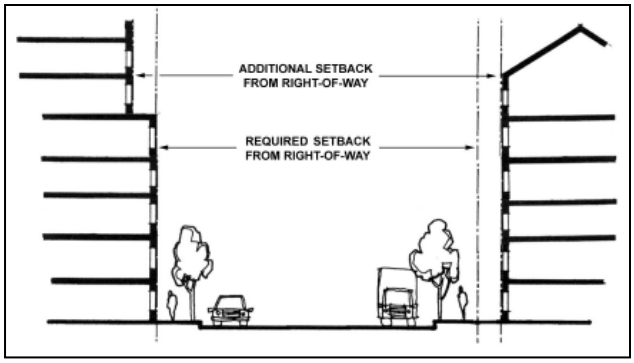



*Figure 5.4. To reduce the impact of tall buildings along pedestrian-oriented streets in the CE and TOD districts, either the portion of the building that is higher than 60 feet or the building itself must be set back from the street right-of-way.*

*Figure 5.5. Facades should be divided into 3 parts: base, middle and top. Architectural details are important at the base.*

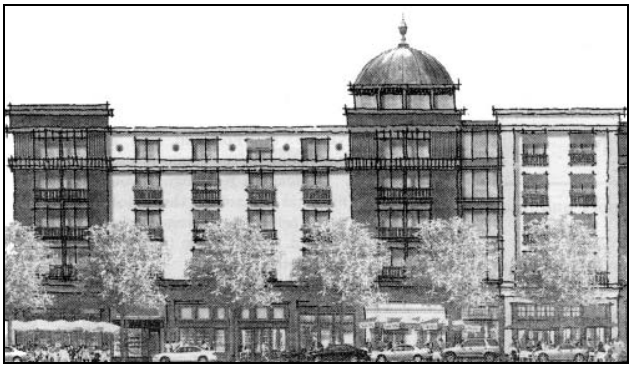


*Figure 5.6. To avoid a large undifferentiated facade, provide articulation through changes in the planes, materials and colors.*


*Figure 5.7. Well-designed corner entry architecture engages the pedestrians and adds visual interest.*

*Figure 5.8. Because of the prominence of corners of buildings, use designs such as towers that emphasize their importance.*

as the relationship of various design elements, such as windows and doors, to the entire building should be carefully designed and balanced. A building's size and proportion in relation to other surrounding buildings should be evaluated to ensure a sense of harmony. A comprehensive architectural concept should be developed and maintained in multi-building complexes.

2. With the emphasis on increasing opportunities for pedestrians in the corridor, buildings will increasingly be viewed from a pedestrian's point of view. This means that greater detail and greater articulation of building features are warranted, particularly in the TOD and CAC Districts. Articulated building footprints and facades reduce the perceived volume or massing of the building and promote architectural interest.

3. Flex space buildings are common in the Route 1 corridor and are a permitted use in the CE District. Their one-story design and often long, undifferentiated building mass may not make an attractive or strong visual impact from the road. To add visual interest to this type of building, the building facades should be articulated with architectural design details.

## *Recommendations:*

1. Design new multistory buildings with three distinct components: base, middle and top (Figure 5.5). Define each component by horizontal and/or vertical articulation. Facade articulation may consist of changes in the wall plane, use of openings and projections or protrusions from the wall plane, and material and color variations. Integrate parking structures with their associated buildings. If the parking structure is freestanding, apply the same design concepts listed here. These same design concepts also apply to multistory buildings that have "shoulders" or that sit on a low, wide base like a pedestal.

2. Introduce exterior articulation such as changes in color, material or plane for facades that are visible from public streets, if the building's function requires a basic, box-like building form. If the facade is more than 100 feet in length, use recesses and offsets, angular forms or other features to provide visual interest (Figure 5.6).

3. Articulate the corner on corner buildings. Treat corner entry architecture distinctively, to enliven

intersections and facilitate pedestrian flow around the corner. Examples of treatments include angled or rounded corners, corner entries, towers, arches, and other architectural elements (Figure 5.7 and 5.8).

4. Provide the greatest visual interest at the building base, especially in the pedestrian-oriented areas. Articulate the building materials and openings. Carefully design the rhythm, or repetition, of windows, columns, indentations or projections in the facade to create a balanced pattern. Designing for visual interest at the building base is especially important for structures used for parking. Ideally, the parking function should be hidden from the street with retail or office uses adjacent to the street. But if the parking function abuts the sidewalk, design the building base with visually interesting articulation to compensate for the lack of activity along the building base.

5. Avoid large expanses of highly reflective surface and mirror glass exterior walls, to prevent heat and glare impacts on the adjacent public streets and properties.

6. Avoid bright colors, particularly primary colors; limit them to trim and accents. Avoid bright white or off-white for nonresidential buildings.

## Roof Design

### *Goals:*

Building roofs should be an integral part of the building design. They are an important element contributing to the visual interest of a building. Roofs should also be designed to screen rooftop mechanical equipment.

### *Requirements:*

1. Integrate parapets and roof screens into the roof design of new buildings and new additions. The material and color of roof screens shall appear identical to those in the roof or building (Figure 5.9).

2. Screen on-roof mechanical equipment by solid building elements. Wherever possible, cluster roof equipment and include in one screen.

### *Recommendations:*

1. Break up long horizontal roof lines by providing articulations in the facades of new buildings. These articulations include change in the height

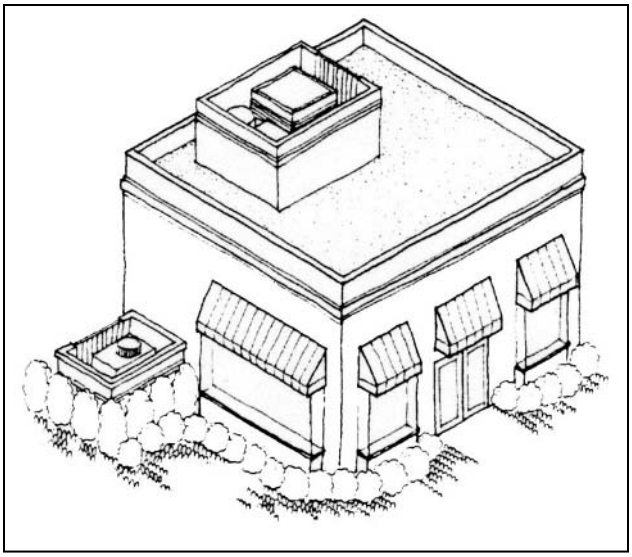


*Figure 5.9. Parapets and roof screens help hide mechanical roof equipment.*

*Figure 5.10. Minor changes in roof heights, materials and details can break up long building facades.*

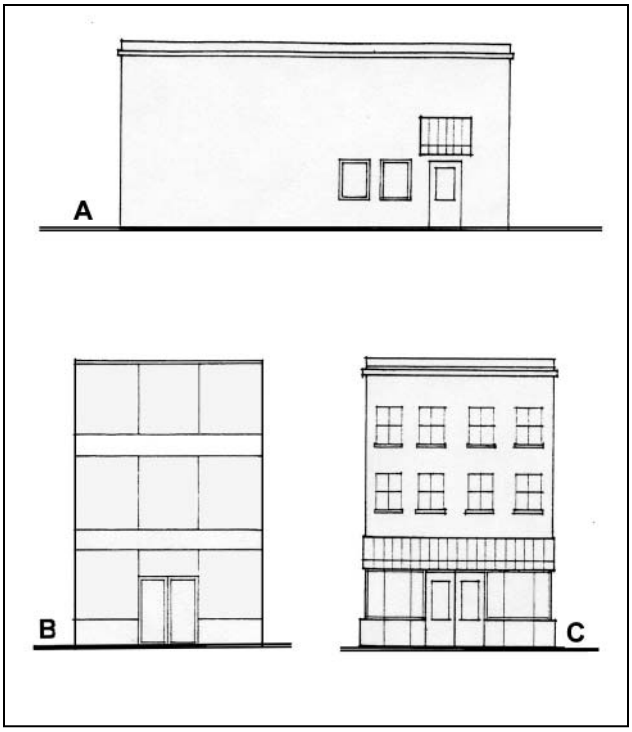



*Figure 5.11. A. The doors and windows are unimportant features in this facade and are uninviting features to pedestrians. B. Although this facade offers visibility, the overall design is not animated or interesting. C. The repetition of windows and the balanced design of this facade is pleasing and attractive.*

*Figure 5.12. Ground floor windows with views of merchandise provide interest for pedestrians and attract customers.*

or slopes of portions of roofs, or change in color, material, forms, etc. (Figure 5.10).

2. Encourage the use of equipment wells for sloped or pitched roofs.

3. Consider the use of decorative roof elements, such as projecting cornices, to enhance roof edges especially for mixed-use buildings and buildings that include retail uses.

4. For large or tall buildings, set roof-mounted mechanical equipment back from the edge of the roof so that it is not visible from the public right-of-way. Such setbacks may make roof screens unnecessary.

## Door and Window Openings

### *Goals:*

Windows and doors in the facade provide visual interest, encourage pedestrian use and improve safety. Especially in pedestrian-oriented areas, buildings should have doors and first floor windows facing the streets. People using the doors and looking at and through windows on the street sides of buildings will help to enliven the streetscape. Pedestrian activity can help make streets and the buildings that line them safer. Therefore, the placement of doors and windows is an important element for designing an attractive and well-functioning streetscape.

### *Requirements:*

1. In the TOD and CAC Districts, provide street-oriented primary entrances (Figure 5.11). Although an entrance on the public street side of the building is preferred, this requirement may also be satisfied by placing the major entrance on the side of the building, provided the entrance is visible from the street and connected to the street by a sidewalk. Dual access is also acceptable, with entries oriented to the street and to parking at the back or side of the building.

2. In the TOD and CAC Districts, maximize transparency and windows on the ground floor for pedestrian interest (Figure 5.12).

### *Recommendations:*

1. Avoid windowless walls along the public street.

2. Establish recesses for entries and for outdoor eating or display areas. Besides providing gathering areas, these recesses can create visual interest along the street. Planters or landscaping may be incorporated into such recesses, but must not extend into the public sidewalk or right-of-way.

## Signs Attached to Buildings

### *Goals:*

Wall and projecting signs should be integrated into the building design to minimize visual clutter and help achieve a more pleasing view from public streets (Figure 5.13).

### *Requirements:*

1. Comply with the requirements of the Howard County Sign Code (Subtitle 5).

### *Recommendations:*

1. Encourage the use of canopies to display the names of businesses.

2. Encourage the use of similar colors and styles in the signs and in the building facades.

3. Use durable materials; limit the use of bright colors and use professionally executed graphic design.

4. Limit signs in windows to no more than 25% of the total window glass area of each retail tenant on the first floor facing the street. Window signs are limited to retail uses only, not for office and industrial uses (Figure 5.14).


*Figure 5.13. Locating signs on canopies or on special wall-mounted sign panels provides a consistent and attractive appearance.*


*Figure 5.14. Signs on windows need to be limited so that they don't distract from the building itself and so that store interiors remain visible to pedestrians.*

# 6

# APPLICATION OF THESE STANDARDS

***P**urpose: Because these requirements and recommendations will apply both to new developments and to existing developments as they are changed, it is important to clarify when they will apply completely and when they will apply only partially. Although it is not possible to cover all situations, this chapter provides guidance in making these distinctions.*

## Introduction

The requirements and recommendations of this Manual seek to augment and amplify the Zoning Regulations for the CE, TOD and CAC Districts and for all properties abutting the US 1 right-of-way. Compliance with this Manual's requirements and recommendations will, ideally, result in a more complete realization of the intent of the Zoning Regulations.

## Design Advisory Panel

In 2008, the County Council approved the establishment of a Design Advisory Panel (DAP). The Panel's purpose is intended to encourage excellence in architecture and site design, to improve design compatibility with the surrounding development, to promote revitalization and to enhance property values. Comprised of design professionals, the Panel reviews and makes recommendations for development projects in the Route 1 Corridor.

DAP review is mandatory for all projects in areas where there is a design manual, such as the Route 1 Manual, that is adopted by the County Council. DAP review precedes the normal plan review process to allow the Panel's recommendations to influence the design of the development project at the earliest opportunity. Only a pre-submission community meeting, if required, comes before the DAP review. Subtitle 15 of the Subdivision and Land Development Regulations describes the Design Advisory Panel's functions and procedures. New Development

## New Development

All new development in the CE, TOD and CAC Districts must comply with the requirements listed in Chapters 3, 4 and 5 of this Manual. New development in all other districts on sites with Route 1 frontage must comply with the applicable requirements listed in Chapter 3. For both categories, compliance with applicable recommendations listed in this Manual is strongly encouraged.

## Exemptions

It is not the intent of these new regulations and this Manual to impose an undue hardship on the owners of existing structures and uses who propose minor improvements. Thus, the following minor alterations or enlargements are exempt from complying with the Manual:

1. Expansion of a building by less than 10% of the floor area of the building, as existing on the effective date of this legislation, up to a maximum of 5,000 square feet of floor area.

2. Building repairs, repaving or restriping of parking areas, and other maintenance or repair that does not enlarge a building or a use.

3. Removal of parking areas, driveways or other paved areas.

4. A change in the use of an existing building (to a use permitted in the district), if the Department of Planning and Zoning determines, in accordance with the Subdivision and Land Development Regulations, that no changes to site improvements are required.

5. Other minor alterations to a developed site that do not require a site development plan or a revision to an approved site development plan. This includes alterations approved through a waiver of the site development plan requirement or a red-line revision to an existing site development plan.

## Existing Improvements

Because much of the development in the corridor occurred prior to the establishment of the three corridor zoning districts, treatment of existing uses is important. Although the CE, TOD and CAC Districts are intended to encourage redevelopment, owners of existing uses may continue those uses and make some changes and enlargements without upgrading the entire site or building to meet the new standards.

Nonconforming uses and noncomplying structures cannot be modified by using the bulk regulations for the CE, TOD and CAC Districts unless the site is brought into full compliance with the requirements of this Manual as determined by the Department of Planning and Zoning (DPZ). Those sites that DPZ determines cannot be brought into full compliance should use the bulk regulations stipulated in the Zoning Regulations for sites not complying with the regulations.

Existing warehouses and industrial buildings in the CE and CAC Districts that were developed for these uses prior to the adoption of these districts may continue through the use of the Continuing Light Industrial (CLI) Overlay District. The existing warehouses or industrial buildings should be documented by property owners with an approved site development plan. If necessary, other materials such as aerial photography may be used to document the existing buildings. The CLI Overlay District allows by right expansions of up to 25% of the square foot area for warehouse and industrial uses. These expansions must meet the bulk regulations and other requirements of the Route 1 Manual for properties in the CE or CAC District.

Alterations or enlargement of existing uses, except as described above, must comply with the Manual. The

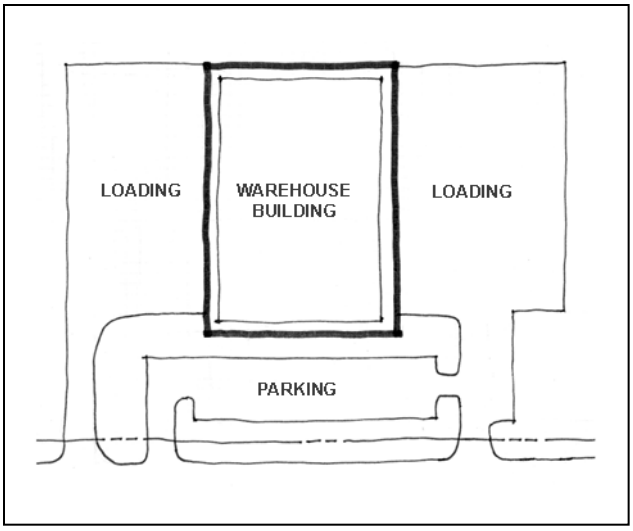



*Figure 6.1.* ***Before.*** *Building and parking comply with current M-1 setbacks, parking is in front of the building and multiple driveways provide site access.*

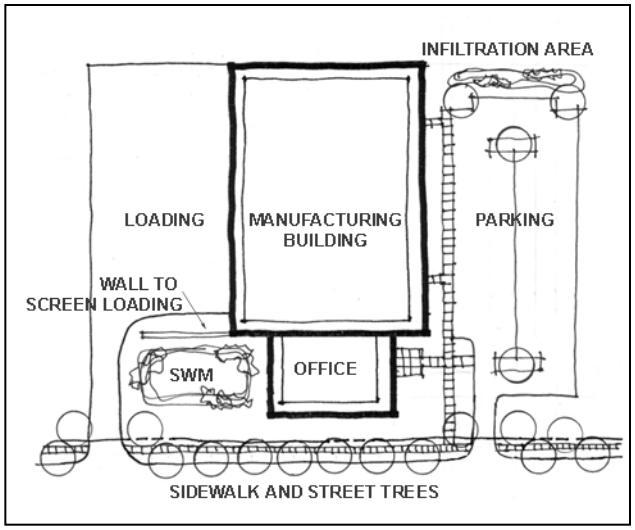



*Figure 6.2.* ***After.*** *Building is converted to office and manufacturing uses, building and parking comply with CE setbacks, side entrance to building is oriented to roadway, number of driveways is reduced, some loading is converted to parking and loading is screened.*

extent to which they must comply, however, will be in proportion to the extent of the expansion. If buildings or site improvements are expanded, the site shall be brought into compliance with the Route 1 Manual in equal proportion to the percentage of the site impacted by the expansion. The area impacted by the expansion includes the square foot area of building additions and additional parking, loading, driveways, infrastructure, and land cleared or graded.

Site improvements that do not change existing buildings are required to comply only with the Site Renovation and Expansion priorities listed below. Building expansions that do not change site improvements are required to comply only with the Building Renovation and Expansion priorities. When both site and building expansion occurs, compliance with both sets of priorities is required (Figures 6.1 and 6.2).

## *Site Renovation and Expansion*

When partial improvements are made to a site, priority improvements, generally in the order given, are as follows:

1. Add a public sidewalk and construct an on-site sidewalk that links the public sidewalk to the building entrance.
2. Channelize or reduce the number of access points and provide planting, signage and other features to accent the site entrance.
3. Provide street trees.
4. Eliminate outdoor storage areas or screen the view of loading and outdoor storage areas from the Route 1 roadway, other major roads and adjacent residential properties.
5. Use planting or low walls to buffer parking areas from the street.
6. Add landscaped islands and interior planting to existing parking lots.
7. Remove pole mounted signs and replace with low profile, monument type signs.

## *Building Renovation and Expansion*

Relocating or reconstructing existing buildings is not required, but any expansions of buildings should attempt to locate and design the addition to be consistent with the requirements and recommendations in this Manual. Priority building improvements, generally in the order given, are as follows:

1. Expand the building so that the addition brings the building closer to the Route 1 roadway or to the setback from the design right-of-way.
2. Expand the building by adding floors to the existing building or by constructing a multistory addition.
3. Provide a main entrance to the building that faces the Route 1 roadway or provide a side entrance that is visible from the Route 1 roadway.
4. Ensure that there are windows along the street facade.
5. Install new or bring existing wall mounted signage into compliance with the sign code and make it compatible with building materials and design.
6. Screen roof or ground mounted mechanical equipment or utility boxes.

# Interpretation

Interpretation of this Manual is the responsibility of the Department of Planning and Zoning. Relief from any of the requirements of this Manual can be requested through an administrative process via an Alternative Compliance Request. A zoning variance is not required. Relief from any of the subdivision regulations can be requested through an administrative process via a waiver petition. Refer to Section 16.104 of the Howard County Subdivision and Land Development Regulations.

If the Department finds extraordinary hardships or practical difficulties with strict compliance with the requirements of this Manual, or if the Department determines that the purposes of this Manual may be better served by an alternate proposal, then a modification to the requirements of this Manual may be granted.

Applicants seeking modifications to these requirements shall submit a Route 1 Manual Alternative Compliance Request form to the Department of Planning and Zoning specifying the section of this Manual they propose to fulfill through alternative compliance. The request must demonstrate that:

1. Strict compliance with the requirements is not feasible or practical or

2. An attractive alternate means of compliance is beneficial or preferred.

3. An Alternative Compliance Request form is posted at *http://www.co.ho.md.us/DPZ/formsfeesapplications.htm*

# APPENDIX A

***P**urpose: This appendix presents an overview of the key requirements and recommendations for properties in the CE, TOD and CAC Districts and/or that are adjacent to the Route 1 right-of-way. Please note that not all requirements and recommendations are listed in the appendix. The appendix should be used for general information only. For specific requirements and recommendations, please refer to the appropriate chapter in this Manual.*

## Summary Matrix

| Key Requirements and Recommendations | CE | TOD | CAC | OTHER* |
|---|---|---|---|---|
| **STREETSCAPE DESIGN** | | | | |
| With roadway improvements, provide off-peak on-street parking, if allowed | | ❍ | ❍ | |
| Construct interconnecting streets; avoid cul-de-sacs | ❍ | ❍ | ❍ | ❍ |
| Along Route 1 and pedestrian access roads to MARC stations, install 8' wide sidewalks and pedestrian street lights | | ● | ● | |
| Install 6' wide sidewalks and, where adequate r-o-w exists, provide 6' wide green strip next to sidewalk (for streets where 8' wide sidewalks are not required) | ● | ● | ● | ● |
| Provide crosswalk pavement treatment | ● | ● | ● | ● |
| Where off-peak on-street parking is allowed, place 2' wide band of concrete pavers next to curb | ❍ | ❍ | ❍ | ❍ |
| Along Route 1, provide trash receptacles, benches and bollards and provide space for bus shelters if requested | ❍ | ❍ | ❍ | ❍ |
| Create plazas, courtyards and gardens | ❍ | ❍ | ❍ | |
| Locate utility cabinets and mechanical equipment away from streets and residential areas; otherwise, screen them | ● | ● | ● | ● |
| Place utility lines underground or provide underground conduits for future utility location | ❍ | ❍ | ❍ | ❍ |
| Plant medium/large shade street trees 40' apart | ● | ● | ● | ❍ |
| Establish a 134' r-o-w for the main line of Route 1, except where it must be greater, as determined by SHA & DPZ | ● | ● | ● | ● |
| **SITE DESIGN** | | | | |
| Establish a 10 foot build-to line where applicable | | ● | ● | |
| Occupy 75% of applicable frontage with buildings | | ● | ● | |
| Occupy at least 30% of Route 1 frontage with buildings | ● | | | |
| Minimize curb cuts | ● | ● | ● | ❍ |

**LEGEND:** ● Required ❍ Recommended

*** OTHER:** Properties in all districts that abut the Route 1 right-of-way.

| Key Requirements and Recommendations | CE | TOD | CAC | OTHER* |
|---|---|---|---|---|
| **SITE DESIGN, Continued** | | | | |
| Share entrances | ❍ | ❍ | ❍ | ❍ |
| Locate parking at the side or rear of buildings | ● | ● | ● | ❍ |
| Link adjacent commercial properties by common drive aisle | ❍ | ❍ | ❍ | ❍ |
| Provide walkways from parking lots to building entrances | ● | ● | ● | ❍ |
| Create a pedestrian amenity area with at least 5% of the net site area in CE and 10% in TOD and CAC | ● | ● | ● | |
| Add low walls at main entrance to parking lot | ❍ | ❍ | ❍ | |
| Distribute landscaping throughout parking lot; landscape islands and medians | ● | ● | ● | |
| Screen all outside storage areas | ● | ● | ● | ❍ |
| Provide pedestrian amenities such as benches, planters, etc. | ❍ | ● | ● | |
| Prohibit loading at front of building | ● | ● | ● | ❍ |
| **BUILDING DESIGN** | | | | |
| Build to a minimum height of 25’ | | | ● | |
| Articulate building facades to provide visual interest | ❍ | ❍ | ❍ | |
| Integrate mechanical equipment screens into roof design | ● | ● | ● | |
| Provide street-oriented primary entrances | ❍ | ● | ● | |
| Provide windows on the ground floor | ❍ | ● | ● | |

**LEGEND:** ● Required ❍ Recommended

*** OTHER:** Properties in all districts that abut the Route 1 right-of-way.

***Credits:***

The following publications and consultants were sources for images and text used in this document:

American Planning Association, PAS Report 468, Creating Transit-Supportive Land-Use Regulations
A. Nelessen Associates, Inc.
City of San Carlos, Downtown Urban Design Guidelines
College Park US 1 Corridor Sector Plan, Prince George's County, M-NCPPC
Design Collective, Inc. / Maple Lawn, Maryland, developed by Greenebaum and Rose, Associates
ERM, Inc.
d. w. taylor associates inc.
Greenman-Pedersen, Inc.
Internet Web Sites
URS Corporation
Visions for a New American Dream, A.C. Nelessen, APA Planners Press

***For information or alternative formats contact:***


## DEPARTMENT OF PLANNING AND ZONING

3430 Court House Drive
Ellicott City, Maryland 21043
410-313-2350
www.howardcountymd.gov