THE MERRIFIELD SUBURBAN CENTER

The Plan for the Merrifield Suburban Center consists of a description of the area's character and planning history, the provision of a concept for future development and implementation strategies, and recommendations for future development. The recommendations include area-wide guidance for land use, urban design, transportation, and public facilities/infrastructure, as well as specific guidance for each of the land units that comprise the Merrifield Suburban Center.

LOCATION AND CHARACTER

The Merrifield Suburban Center is generally located south of I-66, north of Woodburn Road, west of Holmes Run, and east of Long Branch Stream Valley and Prosperity Avenue. (See Figure 1: Merrifield Suburban Center Location and Boundary Map.) The area is served by the Dunn Loring-Merrifield Metro Station and has regional and local access from I-66, I-495, Route 29, Route 50, and Gallows Road. The area contains a mix of uses, including office, medical facilities, hotel, residential, light industrial, and retail. Major land uses include the Exxon-Mobil Oil office complex, Fairview Park (a mix of office, hotel, and residential uses), the Merrifield Regional Post Office, and Inova Fairfax Hospital.

PLANNING HISTORY

Planning studies that have occurred during the last three decades significantly shaped development in the Merrifield Suburban Center. Starting in 1975, with the Planned Land Use System Program (PLUS), the geographic area known today as the Merrifield Suburban Center was identified as three separate areas. These areas were: the Dunn Loring Metro Complex Area, which is generally located north of Route 29; the Merrifield Industrial Area, which is generally located north of Route 50 and south of Route 29; and the Chiles Tract Special Study Area, which encompassed what is today Fairview Park and the Exxon-Mobil Oil property.

In June 1975, the Board of Supervisors authorized the Route 50/I-495 Area Study, which included the three areas identified during PLUS. Due to the magnitude of development possibilities for this area, the Board of Supervisors directed landowners and staff to investigate a variety of land use options, and to develop Comprehensive Plan text, that would maximize opportunities for benefit to Fairfax County while avoiding adverse impacts from development on nearby residential communities. This study resulted in a Plan Amendment that was adopted by the Board of Supervisors on July 8, 1977. The amendment maintained three planning areas: North Merrifield, South Merrifield, and the Route 50/I-495 Area.

After the 1977 Route 50/I-495 Area Study, several Area Plans Reviews (APR) and Out-of-Turn Plan Amendments (OTPA) looked at portions of the Merrifield Suburban Center. For example: APR Item 79-I-3J, which was adopted by the Board of Supervisors in July/August 1979, modified Plan text dealing with the northeast quadrant of Route 50/I-495 (Fairview Park North); and APR Item 80-I-1J, which was adopted by the Board of Supervisors on July/August 1980, modified Plan text in the southeast quadrant of Route 50/I-495 (Fairview Park South) to allow for non-residential development of up to 2.25 million square feet and up to 400 residential units.

The next major study was of the Dunn Loring Metro Station Area, which originated from the Board of Supervisors' 1981 authorization of a comprehensive review of the County policy regarding development around the County's then six future Metrorail stations. Phase 1 consisted of an overview of land use and transportation facilities in the vicinity of each station and the identification of the objectives and development guidelines for each station. Phase II, which began in November 1984, provided detailed planning studies of each station area. These studies

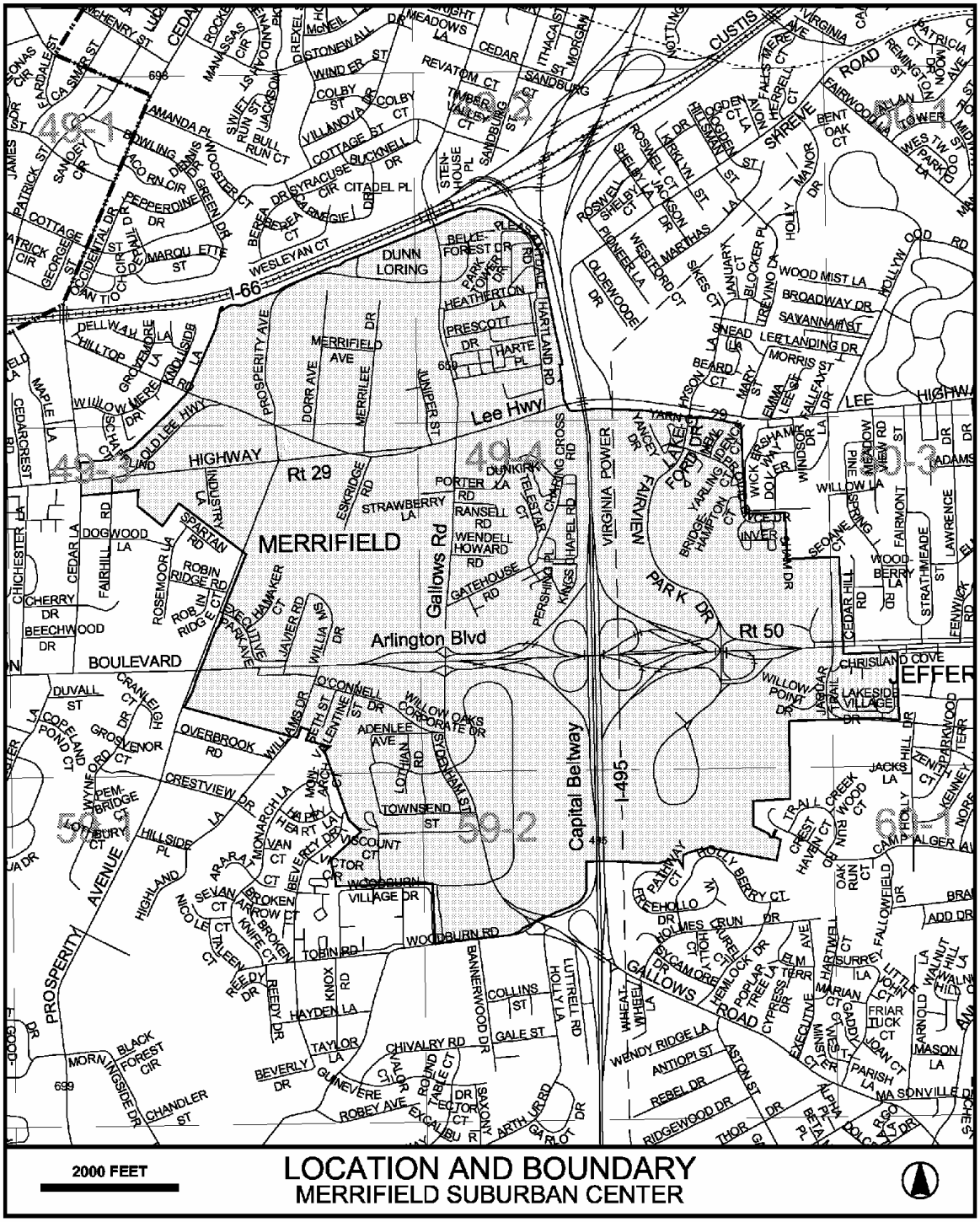

2000 FEET
LOCATION AND BOUNDARY
MERRIFIELD SUBURBAN CENTER
MERRIFIELD
Arlington Blvd
Lee Hwy
Rt 29
Rt 50
Gallows Rd
Capital Beltway
I-495
I-66
PROSPERITY AVENUE
GALLOWS ROAD
PARK DR
VIRGINIA POWER
DUNN LORING
JEFFER

FIGURE 1

analyzed land use, transportation, urban design, environmental impacts, and economic development to formulate plans for each station area. The Dunn Loring Metro Station Area Study, which addressed an area generally bounded by I-495, I-66, Route 29, and Long Branch Run, resulted in the Board of Supervisors adopting a Plan Amendment on May 18, 1987.

The next study resulted from the Board of Supervisors' countywide revitalization study in 1984, which identified Merrifield as an area that needed special attention. As a result, the Board of Supervisors initiated the Merrifield Area Study in 1985, encompassing a 300-acre area generally bounded by I-495 on the east, Old Lee Highway and Route 29 on the north, and Route 50 on the south. The purpose of the study was to develop amendments to the Plan that would encourage land use and development to take advantage of Merrifield's strategic location. At the time the Merrifield Area Study was undertaken, the Board determined that it was not appropriate to incorporate this area into the Dunn Loring Metro Station Area Study because the resulting area would be too large and the scope of the Dunn Loring Study was transit-related development. The Merrifield Area Study resulted in a Plan Amendment that was adopted by the Board of Supervisors on April 27, 1987.

By the late 1980s the Merrifield Area continued to be addressed in the Comprehensive Plan as three separate areas. This issue was addressed at a conceptual level during the next major Plan review, known as the Fairfax Planning Horizons. The first phase of the Planning Horizons process, which began in 1988, resulted in a Countywide Policy Plan and the Concept for Future Development. The County's Concept for Future Development established a hierarchy of employment centers, in which Merrifield was identified as a "Suburban Center" that extended from the Dunn Loring-Merrifield Metro Station on the north to the now Exxon-Mobil Oil property on the south. During the second phase of the Planning Horizons, the Area Plans were revised. To reflect the broad guidance of the Concept for Future Development, the three areas (i.e., the Dunn Loring Metro Station Area, Merrifield and the Route 50/I-495 Area) were placed under a new section of the Comprehensive Plan called the Merrifield Suburban Center. Other than reorganizing the Plan's format, there were only minor changes made to the Plan recommendations. The Area Plans update portion of the Planning Horizons resulted in the Board of Supervisors adopting a new Area I Plan on July 1, 1991.

Since 1991, there have been five Plan Amendments adopted by the Board of Supervisors that affect the Merrifield Suburban Center Area, four of which were 1994 Area Plans Review items (APR). As a result of the 1994 APR, an option for a restaurant park in the northwest quadrant of the Route 50 and Gallows Road was added to the Plan. Other changes included adding a mixed-use option for the northwest quadrant of Route 50 and I-495; adding a residential option for a property in the northeast quadrant of Route 29 and Gallows Road that resulted in the dedication of Providence Forest Drive; and adding text that clarified that development at the Inova Fairfax Hospital could include ancillary uses such as medical office and clinics. The fifth Plan Amendment was an Out-of-Turn Plan Amendment that provided for a townhouse office option for the area known as Pennell Street. These Plan Amendments affected only a small portion of the Merrifield Suburban Center.

Since most of the Plan recommendations for the Merrifield Suburban Center were primarily from the 1970s and 1980s, the Greater Merrifield Business Association and other citizen groups identified the need for a comprehensive review of the Merrifield Suburban Center. As a result, on June 10, 1998, a visioning workshop was held which included participants representing the Greater Merrifield Business Association, property owners located within the Merrifield Suburban Center and citizens from nearby neighborhoods. The purpose of this visioning workshop was to identify how the Merrifield Suburban Center should change in the future from the development that exists today, in terms of land use, intensity and character, as well as to

identify transportation and pedestrian circulation improvement needs. The vision that emerged from the workshop was that the Merrifield Suburban Center needs to be a place to work, shop, live and play. In order to achieve that vision, the group felt a focal point, such as a town center, was needed in the center of Merrifield; and that this future town center should be linked to the Metro Station by vehicular and pedestrian facilities that include urban green spaces.

To refine this vision, the Board of Supervisors formed a task force in October 1998. The product of this task force is the following guidance, which is intended to reshape portions of the Merrifield Suburban Center to a more urban and increasingly viable area. The areas that are encouraged to be more urban in character include the two core areas: the town center and the transit station area. Most of the remaining portions of Merrifield Suburban Center are envisioned to retain a suburban character. However, within both areas, the new Plan adds substantial urban design guidance to encourage high quality development as well as a more pedestrian-oriented environment. This future development concept is further described below under the Concept for Future Development and under the Land Use section of the Area-Wide Recommendations.

CONCEPT FOR FUTURE DEVELOPMENT: A VISION FOR THE MERRIFIELD SUBURBAN CENTER

The "Concept for Future Development" identifies Merrifield as a "Suburban Center," which encompasses a "Transit Station Area" at the northern end. The vision for the Merrifield Suburban Center includes the development of two core areas. One core area focuses development near the transit station and the other core area, located north of Luther Jackson Intermediate School, is planned to evolve into a "town center", with the two core areas being connected by a new "Main Street." The two core areas and the area between each are envisioned to be more pedestrian-oriented and relatively urban in character. However, the majority of the Merrifield Suburban Center would remain suburban in character, with the areas at the edges providing transitions in intensity and scale to the surrounding low-density residential areas.

Planning Objectives

The following objectives for the Merrifield Suburban Center provide a general framework to achieve this future vision.

- Encourage revitalization and redevelopment of portions of the Merrifield Suburban Center to create more attractive and functionally efficient commercial and residential areas with pedestrian-friendly and transit-oriented environments.

- Ensure a pattern of land uses that promotes stability in the adjacent residential areas by establishing transitional areas to prevent commercial encroachment on these adjacent areas.

- Create focal point(s) within the "town center" and the "transit station area" where development should be more intense and have a more urban form through the use of appropriate building heights, setbacks, building bulk, and site design.

- Encourage mixed-use development that includes pedestrian and auto circulation systems that integrate the development both internally and externally, resulting in transit-oriented and pedestrian-friendly environments.

- Encourage the development of additional housing (including affordable dwelling units) in the Merrifield Suburban Center so that employees may live near their workplace and transit services, in order to reduce the number and length of commuter auto trips.

- Develop a cohesive roadway system that provides a more extensive grid of streets to serve the town center, transit station area, and the area between.

- Establish a streetscape hierarchy along the roadways that will visually unify the Merrifield Suburban Center and create a pedestrian-oriented environment.

- Develop a cohesive pedestrian circulation system linked to open spaces such as plazas, courtyards, greenways, and parkland in order to facilitate walking and reduce reliance on private automobiles.

- Develop mass transit options, transportation strategies and planned highway improvements to mitigate traffic impacts in the Merrifield Suburban Center and in adjacent residential neighborhoods.

- Ensure that many of the community-serving commercial uses are retained and that new uses are encouraged to develop, such as a grocery store, pharmacy, book store, and a variety of small retail shops, as well as automotive and home service repair shops.

- Encourage the provision of additional community-serving institutional uses, as well as public uses that will serve the Merrifield Suburban Center and the surrounding neighborhoods. These uses may include a library, museum(s), theater, childcare, housing for the elderly, as well as religious and educational institutions.

- Encourage high-quality development in terms of site design, building design and materials, and open space amenities throughout the Merrifield Suburban Center. A more urban and pedestrian-oriented environment should be provided in the transit station area and the town center; and, a suburban character should be provided throughout the remainder of the Merrifield Suburban Center.

- The environmentally sensitive areas of the Holmes Run and Long Branch stream valleys and their tributaries should be retained as permanent open space. In addition, measures should be taken to ensure that runoff from new development will not deteriorate the environmental quality of these streams.

The attainment of the above objectives for the Merrifield Suburban Center, as well as the area-wide and specific land unit recommendations presented in this Plan will encourage a more urban character in a portion of the Merrifield Suburban Center. As mentioned previously, the areas encouraged to be more urban in character are the two core areas and the area connecting the core areas. Encouraging some areas to become more urban should result in a reduced dependence on the private automobile for local travel by linking future more urban development to significantly improved pedestrian and transit facilities. The area primarily outside of the core areas, which includes most of the Merrifield Suburban Center, will remain suburban in character, with its edges providing compatible transitions in intensity and scale to the nearby residential neighborhoods. However, even in the suburban areas, additional pedestrian and transit facilities are planned to help improve circulation and access throughout the entire Merrifield Suburban Center.

IMPLEMENTATION

To achieve the vision for the Merrifield Suburban Center and to address short-term and long-term issues, an integrated program of implementation strategies is needed. These implementation strategies should meet the major objectives of the Merrifield Suburban Center and are grouped into four categories: Development Review Process, Zoning Ordinance and Development Process Amendments, Citizen Involvement, and Public/Private Cooperation for Funding Planned Improvements.

Development Review Process

The primary approach to implementing the Comprehensive Plan has been through the rezoning process during which commitments are proffered that may include commitments for high quality design as well as contributions towards transportation and/or public facility improvements. This will continue to be a key element for Plan implementation, with staff's review identifying whether a development proposal is in conformance with the Plan's recommendations and whether the proposal is adequately mitigating its impacts.

Zoning Ordinance and Development Process Amendments

In 1998, a portion of the Merrifield Suburban Center was designated as a "Commercial Revitalization Area." This designated area includes the majority of the Suburban Center that is located west of I-495. Within this Commercial Revitalization Area and all other County Commercial Revitalization Areas, the development process has been amended to include policies promoting concurrent processing of a Plan Amendment/Rezoning application and an expedited Site Plan process. Other ordinance or development process changes may be appropriate for implementing the Plan for this Suburban Center. These include an evaluation of the Affordable Dwelling Unit (ADU) Ordinance, to determine whether ADUs should be provided in mid and high-rise residential buildings, and an evaluation of whether a Merrifield Commercial Revitalization District (CRD) should be created for the Merrifield Revitalization Area.

Citizen Involvement

As mentioned above, the Comprehensive Plan will continue to be implemented through the rezoning process. During this process, citizen groups such as the Greater Merrifield Business Association, area civic and homeowners associations, as well as other citizen groups can provide public input that helps shape proffers and/or other development commitments. Another area of citizen involvement could be the creation of a non-profit corporation, which as a public-private partnership could promote revitalization efforts and facilitate the provision of streetscape amenities and other improvements within the context of the Comprehensive Plan's guidance.

Public/Private Cooperation for Funding Planned Improvements

Several funding sources are currently available within the Commercial Revitalization Areas, such as the County's tax abatement program and funding for streetscape demonstration projects. Other mechanisms for funding include partnerships between private groups such as the Greater Merrifield Business Association or other non-profit organizations and the County. These partnerships should continue to utilize existing programs and new funding mechanisms to implement the Plan. These programs and funding mechanisms can include, but are not limited to the following:

- The existing Tax Abatement Program, which permits tax abatement for improvements to buildings that are at least 25 years old;
- Leveraging available funds to generate new funding sources through grants and fund raising from the private and public sectors; and
- Considering the creation of a Business Improvement District (BID), or a Community Development Authority, or other appropriate measures that may be necessary to provide funds to implement and maintain revitalization efforts.

AREA-WIDE RECOMMENDATIONS

The area-wide recommendations that follow are intended to help achieve the future vision for the Merrifield Suburban Center. These recommendations present overall concepts as a framework for the specific land unit recommendations that follow, and provide guidance on area-wide issues that may not be specifically addressed in the land unit text. The following area-wide recommendations are organized into four sections: land use, urban design, transportation, and public facilities.

LAND USE

To further define the broad vision for the Merrifield Suburban Center, a land use concept is provided that identifies the quantity, general type, and distribution of development. Since achieving the vision for the Merrifield Suburban Center will be a long-term process, guidance on land use compatibility and land use flexibility is provided in this section.

LAND USE PATTERN

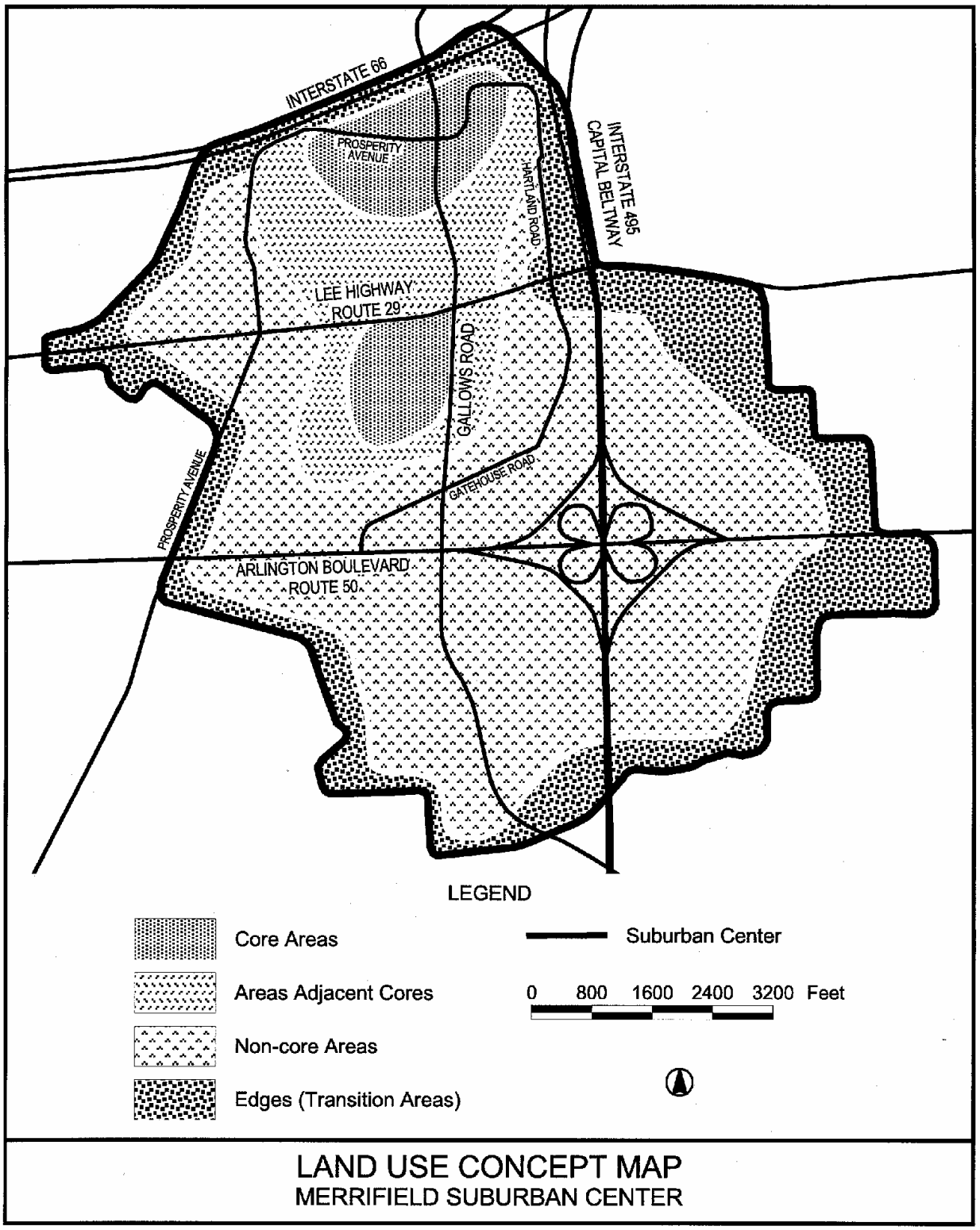
The Land Use Concept's pattern of development significantly modifies the planning policy that has shaped Merrifield over the last three decades. The fundamental new policy direction is to establish two core areas (i.e., the Transit Station Area and the Town Center) with urban characteristics. The areas adjacent to these cores are also envisioned to become more urban in character. However, the majority of the Merrifield Suburban Center (i.e., the non-core areas) is to remain suburban in character, with the edges of the suburban center providing well-defined transitional areas to the surrounding single-family neighborhoods. The Plan further describes the core areas, areas adjacent cores, non-core areas and edge areas, and illustrates the location of these areas on the Land Use Concept Map (See Figure 2).

Core Areas and Areas Adjacent Cores

The highest development intensities and the most “urban” areas of the Merrifield Suburban Center will be located within the designated core areas: the “Town Center Area” and the “Transit Station Area.” Within these areas, mixed-use development is encouraged and may include office, residential, retail, hotel, major entertainment uses, as well as institutional, cultural, recreational, and governmental uses. To encourage a more urban environment, new buildings should be located close to roadways while allowing for streetscape amenities such as street trees, sidewalks, plazas, street furniture, and landscaping. Locating buildings closer to the roadway means that most off-street parking will be located in structures behind or beneath buildings. Parking structures should generally be integrated with an associated building in a manner that maximizes usable open space and the provision of pedestrian linkages. The areas adjacent core areas will also have the potential to become more urban and pedestrian-oriented in character, but will have less intense development than the core areas.

Non-core Areas (Suburban Areas)

The remainder of the Merrifield Suburban Center should be more pedestrian-oriented than today, but remains planned to have a predominantly suburban appearance. These areas should also have high quality development in terms of site and building design and materials, and open space amenities, which will provide a sense of place in a suburban setting.



LAND USE CONCEPT MAP
MERRIFIELD SUBURBAN CENTER

FIGURE 2

Edge Areas (Transition Areas)

A critical planning concept within the Merrifield Suburban Center is to restrict intense development within specified areas and not allow encroachment upon adjacent neighborhoods. The maintenance of transitional areas or "edges" that define the limits of the Merrifield Suburban Center takes several forms that provide a significant degree of land use compatibility with the adjacent residential neighborhoods. These transition areas include permanent open space, transitional uses such as low rise and/or low intensity office, neighborhood retail, garden apartments, and expansive roadway rights-of-way, such as I-66 and a portion of the Beltway that is north of Route 29.

QUANTIFICATION OF DEVELOPMENT

An important aspect that helped to determine the Land Use Concept's development potential for the Merrifield Suburban Center was an analysis of future planned infrastructure and environmental constraints. The most significant infrastructure constraint on future development was the capacity of the planned transportation system. The evaluation of the transportation system's future capacity assumed increased utilization of the existing Metro rail service, improvements in bus circulatory service, increased utilization of Transportation Demand Management (TDM) programs and numerous road improvements to establish a more urban grid of streets. By optimizing this transportation capacity, the Plan's maximum development potential was formulated through several iterations of analysis.

Figure 3 provides a comparison of the area's 1999 development and by-right zoning potential with the Plan's base and maximum development potential under the Plan's options. The Plan's base generally recognizes what is currently built; and for vacant parcels, the development level is generally planned consistent with the property's current zoning. Within the core areas, properties may have two options. Option 1 usually provides the maximum potential for office development. Option 2 generally provides the maximum potential for mixed-use and/or residential development. In non-core areas, some properties have redevelopment options; however, these options encourage substantially less intensity than in the core areas.

Figure 3 indicates the Plan's maximum potential under its options by assuming the highest intensity recommended for each parcel. If the maximum non-residential potential under the two options is achieved, build-out development would be similar to the current zoning potential. Option 1 allows 4% more and Option 2 allows 3.3% less non-residential square footage than the 1999 by-right zoning. However, the Plan's most significant square footage change is for housing potential. Under the two options, the Plan could achieve from a 2% to 154% increase in residential square footage beyond that of the 1999 by-right zoning. When the Plan's options for non-residential and residential potential are combined, the total maximum development potential could eventually be 4% to 22% above the 1999 by-right zoning. The expected timeframe for achieving the maximum build-out would be 20 to 30 years, depending upon the pace of growth. However, it is not likely that the maximum development will be totally achieved, for it would necessitate every site developing at the maximum under the Plan options. Existing site constraints and market conditions may result in development below these maximum intensities. The Plan's major change from the current zoning is not just to have substantial increases in housing potential, but a change in much of the predominantly industrial zoned properties within and adjacent to the core areas to zoning permitting a more urban form of development such as pedestrian and transit oriented mixed-use developments.

Figure 3: Comparison of Quantity of 1999 Development, Zoning and the Plan [1, 2]

LAND USES	1999 DEVELOPMENT	1999 BY-RIGHT ZONING	COMPREHENSIVE PLAN		
			BASE LEVEL	OPTION 1: MAXIMUM DEVELOPMENT POTENTIAL FOR OFFICE INCLUDING MIXED-USE AREAS	OPTION 2: MAXIMUM DEVELOPMENT POTENTIAL FOR RESIDENTIAL INCLUDING MIXED-USE AREAS
NONRESIDENTIAL IN SQUARE FEET (% Above Existing By-right Zoning)	14,213,000 *N/A*	22,762,000 *N/A*	20,690,000 *-9%*	23,741,000 +4%	22,009,000 *-3.3%*
RESIDENTIAL IN SQUARE FEET [3] ***Dwelling Units (D.U)*** (% Above Existing By-right Zoning)	4,308,000 *3860 D.U.* *N/A*	4,338,000 *3,900 DU* *N/A*	4,308,000 *3,860 DU* -1%	4,429,000 3980 DU +2%	11,005,000 10,979 DU +154%
TOTAL IN SQUARE FEET (% Above Existing By-right Zoning)	18,521,000 *N/A*	27,100,000 *N/A*	24,998,000 -8%	28,170,000 +4%	33,014,000 +22%

Note 1: Percentages are the Plan's percent increase or decrease from the 1999 by-right zoning square footage. These numbers are rounded to the nearest whole percentage.
Note 2: Both the by-right zoning and the development potential under the Plan do not include potential housing as allowed under the Affordable Dwelling Unit (ADU) Ordinance. Cellar space, which is defined and governed by the zoning ordinance, is also excluded from the totals.
Note 3: The ADU ordinance provides for the number of affordable dwelling units and bonus units to be calculated at a maximum of 10% for multifamily development under four stories. If the ADU formula was applied to all future housing development, the maximum number of ADU and bonus units for Option 1 would be approximately 8 units (8000 square feet); and the maximum for Option 2 would be approximately 745 units (745,000 square feet).

LAND USE GUIDELINES

The Land Unit section, which follows the Area-Wide Recommendations, provides guidance for achieving the vision for the Merrifield Suburban Center by recognizing existing or permitted uses and recommending future land use and intensity/density for each Land Unit. Appropriately addressing the Land Unit Recommendations along with the Area-Wide Recommendations will implement the vision for the Merrifield Suburban Center.

Since achievement of the vision for the Merrifield Suburban Center will be a long-term process, additional land use guidance beyond the Land Unit Recommendations is essential to the implementation of the area's vision. Development proposals in the Merrifield Suburban Center will be reviewed for conformance with the specific Land Unit Recommendations and the Objectives of the Merrifield Suburban Center Concept for Future Development, as well as for conformance to Countywide policies and regulations regarding the mitigation of development impacts on surrounding residential neighborhoods, public facilities, transportation, and stormwater management. In addition, situations may occur where the Land Unit recommendations may not adequately address items such as affordable housing, parcel consolidation, coordinated development plans, guidance for existing uses and buildings, and guidance for alternative land uses. For these situations, the following guidelines supplement the Land Unit Recommendations.

Affordable Housing – County policies include promoting the development of multifamily housing in mixed-use centers in an effort to diversify the County's housing stock and to encourage lower cost housing options near employment opportunities. In order to implement these policies within the Merrifield Suburban Center, development proposals having a residential component should provide for Affordable Dwelling Units (ADUs). This can occur preferably through the provision of ADUs within the residential development, or the provision of units elsewhere within the Merrifield Suburban Center. Only if the provision of ADUs is not feasible, a contribution to the Fairfax County Housing Trust Fund could be made, as indicated below.

- For those areas planned for residential development, the provision of ADUs should be a condition for attaining the high end of the development range. Developments below the high end of the range should also provide ADUs or contribute to the Trust Fund, as indicated below.

- For those areas planned for mixed-use with residential units, such as the town center and the transit station area, ADU and bonus units should be provided for the residential component as a condition for attaining the high end of the area's mixed-use potential. The amount of ADU and bonus units should utilize the ADU Ordinance formula. Since the ADU Ordinance formula uses a density range, the applicable density range should be determined as follows: For an area planned for office use at .8 FAR under Option 1 and up to 1.2 FAR under Option 2, the intensity range would be considered .8 FAR to 1.2 FAR, which is equivalent to 35 to 50 dwelling units per acre (assuming approximately 1000 square feet per unit). In this example, the high end would be considered the top 60% of the range, or intensities above .96 FAR.

The calculation of ADU and bonus units to be provided should be based on the formula in the ADU ordinance. In cases where ADUs are not provided, development proposals within the Plan's density/intensity range are to contribute to the Housing Trust Fund at an amount of 1% of the development's residential value. If the proposed development is below the low end of the Plan's development potential, then ½% of the value for proposals below the high end, which is consistent with County policy.

Parcel Consolidation – Parcel consolidation should be provided when necessary to achieve planning objectives for the Merrifield Suburban Center. Parcel consolidation should be logical and of sufficient size to allow projects to function in a well-designed, efficient manner, and should not preclude the development of any unconsolidated parcels from developing in conformance with the Plan. Additional consolidation guidelines may be provided in the specific Land Unit Recommendation.

Coordinated Development Plans – Coordinated development plans may be an alternative to consolidation. Coordinated development plans refer to: 1) at least two concurrent and contiguous development applications that have a combined acreage equal or greater than specified in the consolidation guidance within the sub-unit or 2) a development application with at least two acres that demonstrates how the proposed new development integrates with previously approved development application(s) that met the minimum consolidation requirements. In addition, these subsequent applications: 1) should have a similar architectural character and use of building materials as approved in earlier development applications, and 2) should provide connections to established locations for interparcel access and open space areas as approved in earlier development applications. When coordinated development plans are used in lieu of, or in addition to substantial consolidation, development proposals will need to ensure that projects function in a well-designed, efficient manner, and do not preclude development on adjacent parcels from developing in conformance with the Plan. In addition, see specific land unit guidance for those instances where a coordinated development plan may be appropriate in lieu of major parcel consolidation.

Existing Uses and Buildings – In some instances, existing development may not be consistent with the long-term vision for the Merrifield Suburban Center. It is not the intent of the Plan to interfere with the continuation of these existing land uses or buildings. If the adaptive reuse and/or expansion of these buildings should occur prior to site redevelopment, the following guidelines should be met:

- The replacement of existing uses (except for replacements necessitated by casualty, i.e., from storm, fire) or expansion and/or remodeling of existing buildings, should implement certain design-related aspects of the Plan, such as improvements to building façades, open space/pedestrian amenities, and streetscape. If design-related improvements (i.e., building facades, open space/pedestrian amenities, and streetscape) are not feasible due to the existing building's location on the site, or other site constraints, alternative site design improvements should be considered to help implement the Plan's intent. For example, if a double row of street trees is recommended for the streetscape, but cannot be provided due to the location of existing sidewalks, a single row of street trees could be an appropriate alternative. In addition, road improvements, right-of-way dedication and/or right-of-way reservation are appropriate for consideration when there are significant expansions to a structure (i.e., over 15% additional floor area) and/or the existing use is replaced with a more intense use (i.e., a warehouse conversion to office or retail use) that necessitates changes in circulation or other site design issues.

- Retention of existing uses during redevelopment should be encouraged by permitting incorporation of the old use into the new, such as incorporating light industrial uses into a portion of a parking structure, or incorporating community retail or other commercial/ business-related uses into office and residential development.

- Landscaped screening and/or buffering should be used to separate existing industrial uses from office and residential uses where necessary to achieve Plan objectives, but without

blocking the provision of utilities as well as inter-parcel access recommended by the Transportation and Land Unit Recommendations.

Alternative Land Uses within Mixed-Use Option Areas – In order to provide significant opportunities to promote "Merrifield as a place to work, shop, live and play", and to reduce peak-hour traffic, alternative land uses are recommended in the proposed town center, the transit station area, and in areas between the two cores, as indicated under the specific sub-unit recommendations. In these areas, the sub-unit recommendations provide for two development options, in addition to the base Plan. The first development option usually is for office development with support retail and service uses. The second development option encourages a mix of uses that could include residential, retail, hotel, entertainment, and/or institutional uses, as well as office use. Development potential under the second option provides a greater opportunity to create a more pedestrian-oriented environment, as well as an improved sense of place. The mix of uses that results will provide a synergy in the area and high-quality development. To encourage mixed-use areas, the planned office intensity under Option 1 can be converted to any of the sub-unit's recommended alternative uses at a ratio of 1:3 (one office square foot to convert to three alternative use square feet). To ensure a compatible scale, the maximum intensity increase under the above ratio should be limited and could result in an intensity that is 50% to 85% greater than Option 1's office use intensity, as specified in the sub-unit recommendation. In addition, a development's proposed mix of uses should have similar or less traffic impact (i.e., less peak-hour trips or a substantially different peak directional flow) than Option 1. The application of this conversion ratio is illustrated in Figure 4.

FIGURE 4: EXAMPLE OF ALTERNATIVE USE CONVERSION FOR PLANNED OFFICE USE AT AN INTENSITY OF 1.0 FAR WITH A BONUS CAP OF 50%

INTENSITY OF OFFICE	FAR CONVERSION FACTOR OF 1 TO 3 FOR ALTERNATIVE USE	OFFICE AS % OF DEVELOPMENT	ALTERNATIVE USES AS % OF DEVELOPMENT	TOTAL FAR	
1.00 FAR	0	100%	0%	1.00 FAR	
0.85 FAR	.15 FAR x 3 = .45 FAR [0.45 FAR]	65%	35%	1.30 FAR	
0.75 FAR	.25 FAR x 3 = .75 FAR [0.75 FAR]	50%	50%	1.50 FAR	50% BONUS CAP
0.65 FAR	.35 FAR x 3 = 1.05 FAR* [0.85 FAR]	43%	57%	1.50 FAR	
0.45 FAR	.55 FAR x 3 = 1.65 FAR* [1.05 FAR]	30%	70%	1.50 FAR	
0.35 FAR	.70 FAR x 3 =2.1 FAR* [1.15 FAR]	23%	77%	1.50 FAR	
0.00 FAR	1.0 FAR x 3 = 3.0 FAR* [1.50 FAR]	0%	100%	1.50 FAR	

*Note: In this example, when the 50% bonus cap has been reached, regardless of land use mix, the FAR can not be increased above 1.50 FAR. This table identifies what the total FAR and mix would look like without the 50% bonus cap. In some Sub-Units the bonus cap exceeds 50%. The number in brackets is the intensity for the alternative use.

The following alternative uses may be considered in addition to the area's planned office use only when the alternative uses are identified in the sub-unit recommendation and when consistent with the above guidance for alternative uses.

- Residential Use: In the town center, the transit station area and the areas adjacent to core areas, where the sub-unit recommendations identify housing as a desirable component of an area's mix of land uses, planned office use can be converted to housing. As a condition of the conversion, the application should demonstrate that a viable, quality living environment can be created that is of a scale similar to the planned office use and provides recreational facilities and other amenities. Recreational uses should be appropriately designed and located to serve the residents within these developments and may include, but not be limited to, facilities such as tot lots, playgrounds, multi-use courts, tennis courts, pools, fitness centers, picnic areas, and park benches. In addition, the application should demonstrate that there is adequate pedestrian and vehicular access and circulation from residential development to public transportation, schools, parks and recreation facilities, commercial uses such as office and retail, as well as other community service uses.

  Since the planned office intensities are relatively high in the town center, transit station area, and other areas where mixed-use is encouraged, the housing type (when the above conversion is used) should be limited to primarily mid-rise or high-rise multifamily development, which could include assisted living facilities. Multifamily development five stories and greater has the design flexibility necessary for integrating within nonresidential areas, and provides a comparable and compatible scale of development.

- Hotel Use: In the town center area and the transit station area, and where the sub-unit recommendations identify hotel as a desirable alternative use, planned office use could be converted to hotel use.

- Retail and Service Uses: In some sub-units, the alternative use flexibility should be applied to encourage retail and service uses that serve the needs of the greater Merrifield community. Retail uses that serve the surrounding area may include a large bookstore, full-service restaurants, boutiques, and other retail uses that are not ancillary in nature. Service uses that serve the greater Merrifield area could include health clubs and childcare centers for example. These uses should be designed and located on property consistent with the sub-unit guidance. In some instances these uses are specified as only being located within an office building, hotel, and/or residential development; in other instances the sub-unit guidance may provide flexibility for these uses by allowing for separate multi-tenant retail buildings if these structures are designed as an integral part of the development in terms of design, architecture, materials, access and parking. Retail and service uses typically range from 5% to 30% of the development's total square footage. The alternative use conversion factor should be applied only to the portion of retail and service uses that exceed 5% of the development's total square footage, or as otherwise specified in the specific sub-unit recommendation.

- Support Retail and Service Uses: In some sub-units, the alternative use flexibility should be applied to encourage support retail and service uses that are accessory and ancillary uses and that primarily serve the building's occupants and may serve some of the needs of the immediate area. Support retail uses are typically located on a building's first floor and may include a small restaurant or deli, dry cleaners, and other small retail shops. Service uses may include employee amenities such as an employee's fitness center, childcare for the children of employees and employee cafeterias. These uses usually comprise 3% to 10% of a development's total square feet. The alternative use conversion factor should be applied only to the portion of support retail and service uses that exceed 3% of the development's total

square footage, or as otherwise specified in the specific sub-unit recommendation. These should be located within office, hotel and residential buildings and are typically integrated into a building's first floor, however, other examples can include rooftop restaurants, childcare centers and fitness centers located on the roof top of parking structures or elsewhere in the building.

- Major Entertainment Uses: In the town center and transit station area, major entertainment uses should be encouraged by allowing the conversion of planned office use to major entertainment use as an alternative use, as specified in the specific sub-unit recommendation. Major entertainment uses include theater complexes, performing arts theaters, and retail entertainment centers. A retail entertainment center is a complex that includes theme retail and restaurants with high-tech entertainment and interactive games. These complexes should be 20,000 to 100,000 square feet.

- Institutional, cultural, recreational, and governmental uses which are compatible within mixed-use areas in terms of character and scale should be encouraged by allowing the conversion of planned office use to these uses as an alternative use, as specified in specific sub-unit recommendations. These uses should be an integral component of an office, hotel, and residential or mixed-use development. These facilities generally enrich community life, improve the provision of public services, and/or enhance the area's competitive edge. For example, these facilities may include the provision of museums, a theater/performing arts center, educational and/or religious institutions, a library, governmental office, or park facilities, which could be incorporated into a development within the Town Center or Transit Station Area.

Alternative Land Uses within the Remainder of the Merrifield Suburban Center – Alternative land uses may also be appropriate throughout the remainder of the Merrifield Suburban Center and should be considered when the specific use is compatible in scale and character with surrounding planned uses, and promotes an improved sense of place within the Merrifield Suburban Center. The following alternative uses may be considered in addition to those uses specifically identified under the Land Unit recommendations:

- Institutional, cultural, recreational, and governmental uses which are compatible with the area's planned use in terms of scale and character with surrounding planned uses should be considered as an alternative land use to that recommended in the Land Unit recommendations. As mentioned previously, these uses generally enrich community life, improve the provision of public services, and/or enhance the area's competitive edge. These facilities could develop on separate sites and may include, but are not limited to, governmental offices, a police station, museums, a theater/performing arts center, educational and/or religious institutions, park facilities, and a library.

- Support retail and service uses should be encouraged within office, hotel and residential buildings and are intended to primarily serve the development and the immediately surrounding area. Support retail and service uses typically range from 3% to 10% of the development's total square footage, and may include fitness facilities, childcare, food services, and other retail and business service uses. These uses are typically integrated into a building's first floor, however, other examples can include rooftop restaurants, childcare centers and fitness centers located on the roof top of parking structures or elsewhere in the building.

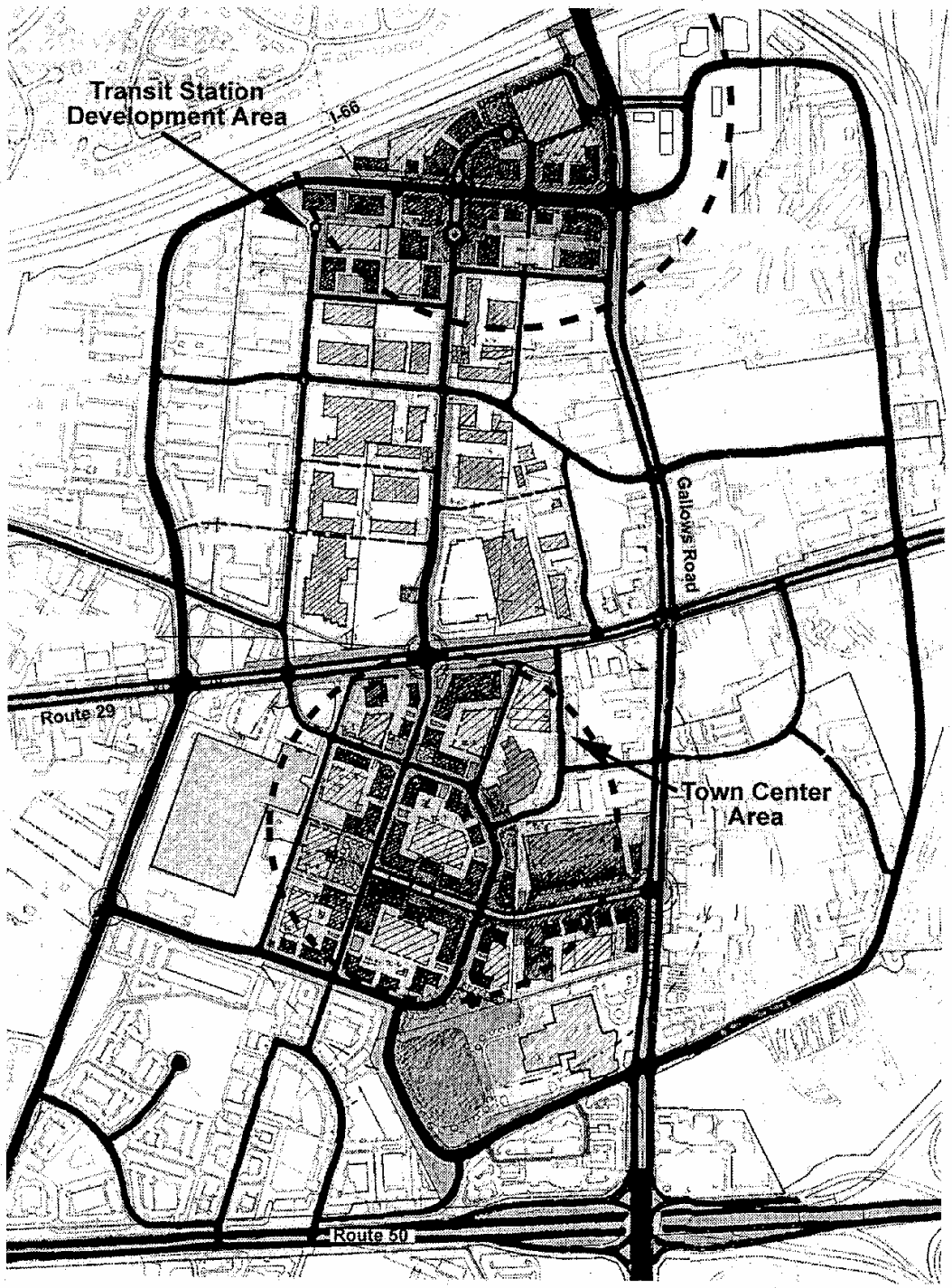
URBAN DESIGN

The Merrifield Suburban Center has developed over the years with a mix of industrial, office, retail, hotel, and multifamily uses. The development pattern that has resulted has not provided areas with a "sense of place". The existing development tends to be auto-oriented with surface parking and abutting properties are isolated from each other due to the lack of an adequate network of pedestrian facilities. In order to facilitate the establishment of areas with a "sense of place" and with an overall improvement in image, redevelopment is encouraged within portions of the Merrifield Suburban Center.

The urban design concept identifies areas which should develop with a more urban and pedestrian-oriented environment, and which should include a mix of office, retail, and residential uses. These new more urban environments are to be concentrated in two core areas as described in the previous Land Use section: the Town Center and the Transit Station Area. Figure 5 illustrates the location of the two cores and how each is inter-linked with the surrounding areas (see Transportation Section for planned Roadway Improvements). The majority of the Merrifield Suburban Center, which is outside of the transit station area and the town center, will remain suburban in character and provide transitions in scale and intensity to the surrounding area.

The urban design concept for the Merrifield Suburban Center is designed to achieve a balance between the more urban character of the proposed Town Center and the Transit Station Area and the more suburban character of the rest of the Merrifield Suburban Center and the surrounding residential neighborhoods. The principles for establishing the Urban Design Concept are as follows:

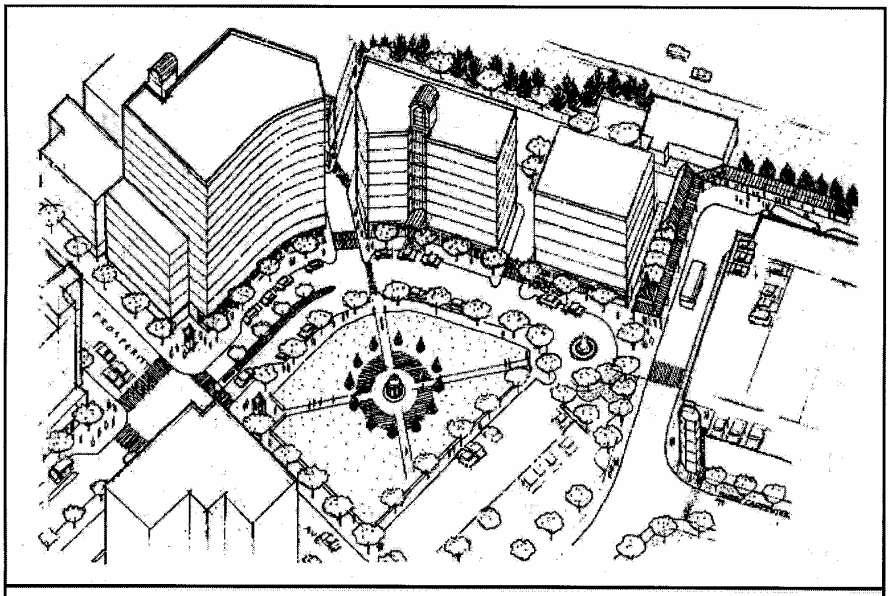
- Create a sense of place by encouraging the development of mixed-use focus areas (i.e., the Transit Station Area and the Town Center);
- Provide transportation connections throughout the Merrifield Suburban Center by creating an extensive grid of well-lit and landscaped streets, pedestrian paths, and other transportation linkages;
- Integrate land uses through architectural and landscape transitions;
- Create buildings with a distinctive architectural character and a street presence;
- Encourage high-quality development in terms of site design, building design and materials, and open space amenities;
- Avoid a community dominated by surface parking;
- Accommodate alternative transportation modes (i.e., walking, bicycling, busses, shuttles, and metro); and
- Provide attractive and usable community-serving civic and recreation space.



MERRIFIELD SUBURBAN CENTER
ILLUSTRATIVE OF THE TWO CORE AREAS

Note: This figure illustrates how each of the core areas is inter-linked with the surrounding Areas.

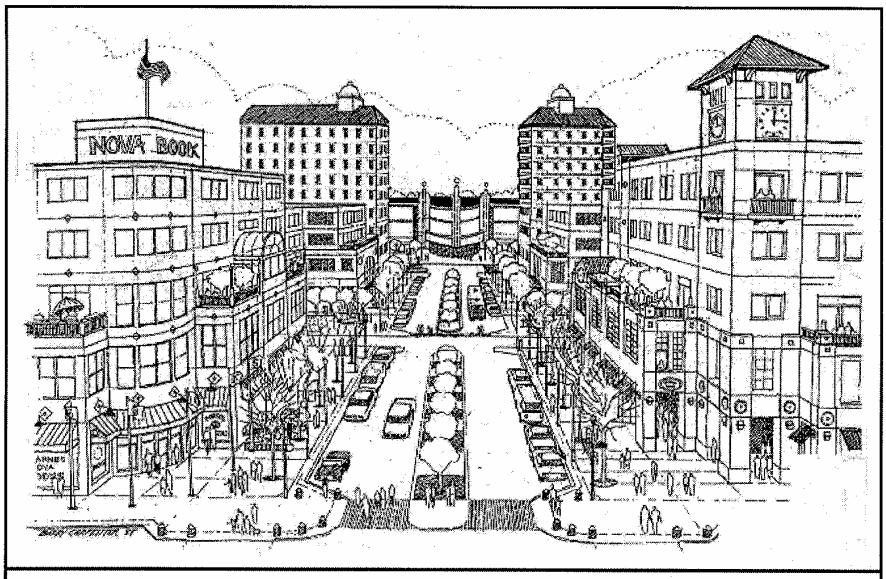
FIGURE 5



EXAMPLE OF POTENTIAL METRO STATION DEVELOPMENT

Note: This figure is intended to be illustrative only. The Metro Station site could have buildings up to 150 feet, with the tallest buildings located at the southern portion of the Land Unit. See Land Unit recommendations for further guidance on building heights.

FIGURE 6



EXAMPLE OF POTENTIAL TOWN CENTER DEVELOPMENT

Note: This figure is intended to be illustrative only. Building heights within the Town Center should vary with maximum building heights being up to 115 feet (9 stories), as indicated in the sub-unit recommendation.

FIGURE 7

A variety of elements are needed to provide guidance to encourage more urban and pedestrian-oriented areas, and to improve the overall appearance and sense of place within the Merrifield Suburban Center. The following elements include guidance for the pedestrian and open space system, streetscape design, building and site design, and building heights. This urban design guidance is intended to encourage in the core areas the type of environment illustrated by Figures 6 and 7, that show potential development encouraged on the Metro station property and at the Town Center.

PEDESTRIAN AND OPEN SPACE SYSTEM

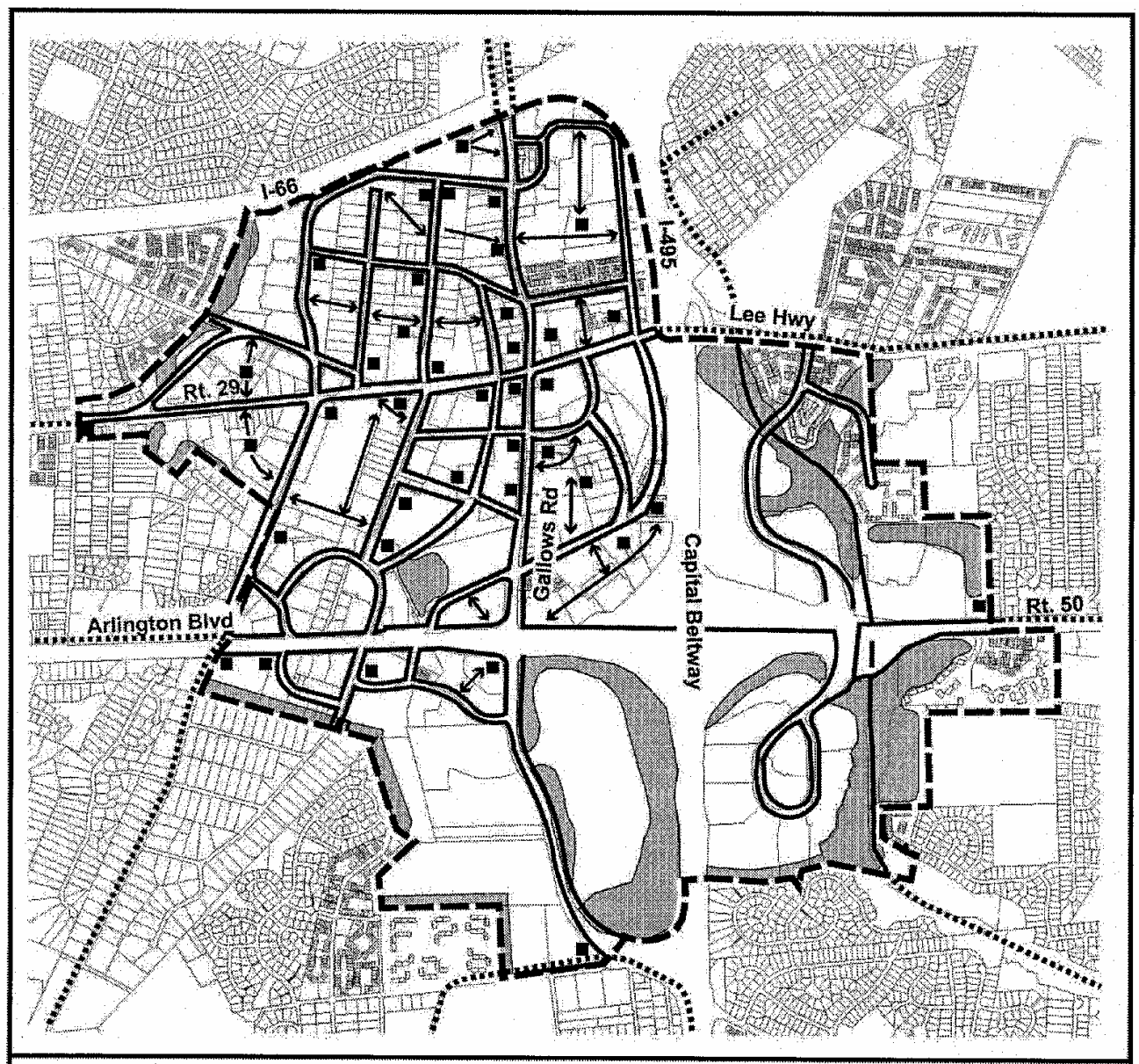
One of the key objectives of the Merrifield Suburban Center Plan is to encourage alternative modes of transportation as substitutes for the single-occupant auto. Good design can contribute to the attainment of this goal by creating a convenient, pleasant and safe experience for the pedestrian, thus making walking a viable alternative to driving. The pedestrian system should consist of well-lit sidewalks, crosswalks, and/or trails that also connect plazas, courtyards, or other open spaces to create places for pedestrians to walk, rest, or gather for recreational or community activities. Such a pedestrian system is a critical component for creating a transit and pedestrian-friendly environment, as well as for providing high-quality development. To encourage workers to travel by public transportation, either by bus or rail transit, the walk to the workplace must be an experience that pedestrians are willing to repeat at least twice a day. For this reason, planning for pedestrians and transit access is a vital part of the successful implementation of the Merrifield Suburban Center Plan.

Mixed-use developments and areas are also an important component of pedestrian-friendly environments. Projects should be designed in a manner that bring a variety of uses in proximity to each other. Pedestrian access between those uses should be convenient, safe, and pleasant in order to discourage use of automobiles. Designing for the pedestrian includes designing the streetscape to include trees, signage, and street furniture (benches, lighting, etc.). Trees are one of the most important features of the streetscape, as they provide shade to pedestrians, add natural beauty to the street, and soften the hard edges of the building forms. Additional landscaping can also enhance pedestrian paths among buildings, between developments, or mid-block, making these areas attractive and encouraging people to walk rather than drive between uses. The use of trees in ornamental grates, planter boxes, planting strips, or larger landscaped areas are some of the many techniques that can be employed to enhance the pedestrian experience.

Pedestrian safety should also be considered when designing the landscape, and pedestrian-level lighting should be factored into the design. Street lighting and other street furniture, such as trash receptacles, seating, and gateway signage, can reinforce the identity of an area.

Good signage also contributes to good pedestrian-oriented design. For example, signage within a development should be coordinated in terms of scale, design, color, materials, and placement in order to create a unified identity for the area. Signage should also be designed appropriately for its location and purpose, without sacrificing legibility.

The Open Space and Pedestrian System Map, Figure 8, depicts an integrated pedestrian system to unify development within sub-areas and link neighboring sub-areas. This map is not intended to be definitive. Additional pedestrian connections will be identified over time that will provide refinements to the system. These connections could be either sidewalks or trails, alone or in combination with plazas, courtyards or parks.



MERRIFIELD SUBURBAN CENTER
Open Space and Pedestrian System Map

- Sidewalks or Trails Outside the Study Area
- Sidewalks or Trails Within the Study Area
- Mid-block Connections
- Boundary for Merrifield Suburban Center
- Plaza/Urban Greens
- Open Space

Note 1: All new developments should provide pedestrian open space amenities.
Note 2: This graphic represents the general location of pedestrian connections and major plazas and is not intended to indicate size and scale. Specific locations to be determined during the development review process.

FIGURE 8

Open Space and Pedestrian System Guidelines

A part of the vision for the Merrifield Suburban Center is to create pedestrian-oriented areas with usable open space amenities. The following open space and pedestrian system design guidelines should be considered during the review process:

- In development proposals which entail new development or redevelopment, increased intensity/density, increased building heights, and/or which substantially change the design of a previously approved development commitment, pedestrian linkages should be provided to adjacent development and to the countywide trail system where feasible. The goal is to connect local sites with the larger community and to enhance the continuity of the pedestrian system. Pedestrian linkages could include sidewalks, trails, plazas, courtyards and parks with path systems.

- Additional sidewalks and trails beyond those indicated on Figure 8 (the Open Space and Pedestrian System Map) are encouraged, and are in some cases described in the Land Unit Recommendations Section. Providing fewer connections than those on the map is discouraged, unless it can be demonstrated that those connections are not needed because another circulation pattern would serve the same users as well or better.

- Opportunities should be provided for pedestrians to sit, especially in plazas, courtyards, urban greens and parks. Seating opportunities include the provision of low walls, wide steps, benches and other outdoor furniture.

- Auto and pedestrian traffic should be separated, i.e., pedestrians should not be required to walk in a travel lane or through a parking structure to reach their destination.

- Pedestrian safety should be an important factor in designing sidewalks, crosswalks and trails. Adequate lighting is essential. Pedestrian linkages between buildings and parking areas should be well-lit and landscaped. Site development should ensure that the landscaping does not impede visibility or create unsafe conditions.

- Pedestrians should be provided with safe and convenient access to transit stops/stations.

- Design of pedestrian linkages should minimize impacts on mature trees and other established vegetation. Where pedestrian linkages (existing or new) have few shade trees, additional trees should be planted.

- Signage along roadways should be provided to contribute to good pedestrian and vehicular orientation. Within the Merrifield Suburban Center, a signage theme should be established that provides consistency in terms of scale, design, color, materials and placement.

- Usable open space in the form of plazas, urban greens, courtyards or parks should be provided throughout the Merrifield Suburban Center, especially in the Transit Station Area and the Town Center, in order to create a strong pedestrian focus. Developments should provide these pedestrian amenities, which include landscaped areas with shade trees, seating areas, public art and other amenities that make attractive gathering places for the local workforce, shoppers, and residents. In some instances, these open space amenities should be large enough and designed in a manner to accommodate informal activities as well as programmed events during lunch-hours and after-work hours.

- The siting of buildings and the quality of design also influences the pedestrian experience. Care should be taken to ensure that buildings are not designed to create barriers to pedestrian circulation.

STREETSCAPE DESIGN

Attractive streetscape includes a well-designed road edge with street furniture and other features and provides improved identity, visual continuity and user safety. The streetscape concept shown on Figure 9 provides a streetscape hierarchy with four types of streetscape designs: Boulevard, Ring Road, Main Street and Cross Street. These streetscapes should create a unifying theme along each of the roads to visually and physically link Merrifield. This unifying theme consists of guidance for street tree location, spacing, and size. Below are general guidelines for all streetscapes, which are followed by design guidelines for each individual streetscape type.

General Streetscape Guidelines

Underground utilities: Undergrounding of utilities should be encouraged and should be coordinated with future roadway improvements and the rebuilding of sidewalks to foster a pedestrian environment and other Plan objectives. New development should provide underground utility conduits or provide commitments to construct these improvements in the future. If undergrounding utilities is not feasible, consideration should be given to relocating the utilities to the rear or side of the development.

Street Lighting: Street lighting should be provided that maintains the overall character and quality of the area, while providing adequate lighting levels that ensure public safety without creating glare or light spillage into neighboring low-density residential areas.

Gateways: Gateways define the major approaches to the area and are shown on Figure 9. At these points of entry to the Merrifield Suburban Center, gateways should have additional plantings and tree groupings in addition to the basic streetscape, and could also include signage and other design treatments that distinguish the location as an entrance to the Merrifield Suburban Center.

Streetscape Design Flexibility: When infill or expansion of buildings or other existing features constrain a site's design, variation from the streetscape guidance should be permitted when that variation results in acceptable sidewalk widths and amounts of street trees and landscaping. For example, if the guidance is to provide a double row of street trees, but due to site constraints not enough space exists for the staggered rows, an equal number of street trees planted in a single row may be an appropriate alternative.

When street trees and other plantings are to be located in proximity to roadways or within medians, safety and sight distance should be taken into consideration upon reviewing a development proposal's streetscape design. Modifications to the streetscape guidance is appropriate to account for these issues, but only if viable alternatives in streetscape design can be provided to ensure continuity in the streetscape pattern.

Streetscape Maintenance: The provision of the streetscape may be provided on a combination of publicly owned right-of-way and private property. In order for a future development to utilize the public right-of-way to provide streetscape improvements, commitments will need to be made by the property owner to maintain the streetscape area within the public right-of-way. In addition, in order to provide streetscape, the sidewalk may not be entirely within the right-of-

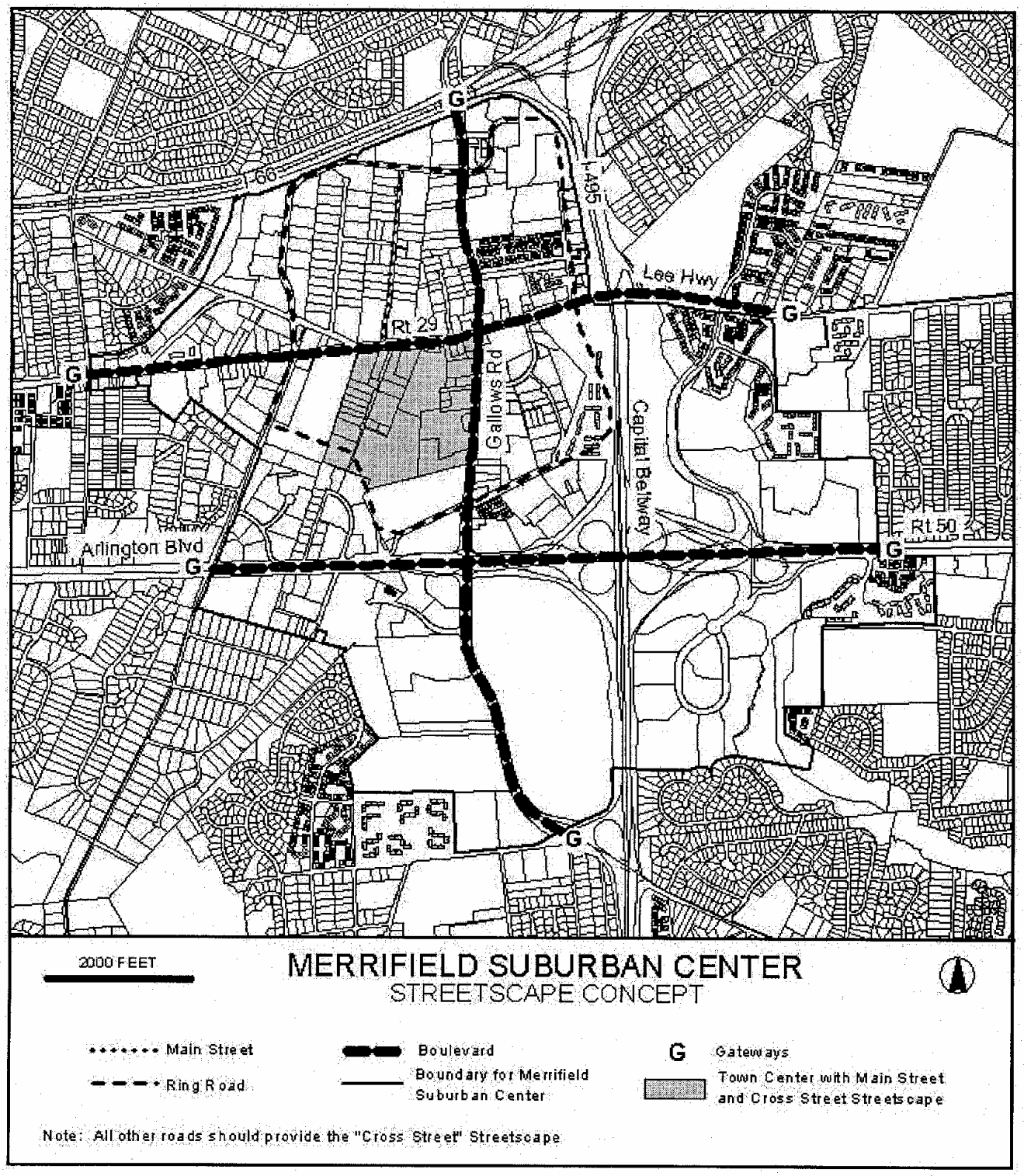

I-66
I-495
Lee Hwy
Rt 29
Gallows Rd
Capital Beltway
Rt 50
Arlington Blvd
G
2000 FEET
MERRIFIELD SUBURBAN CENTER
STREETSCAPE CONCEPT
Main Street
Ring Road
Boulevard
Boundary for Merrifield Suburban Center
Gateways
Town Center with Main Street and Cross Street Streetscape
Note: All other roads should provide the "Cross Street" Streetscape

FIGURE 9

way; therefore, additional right-of-way may be needed or a public access easement will need to be provided for that portion of the sidewalk located on private property.

Boulevard Streetscape Guidelines (Gallows Road, Route 29, and Route 50)

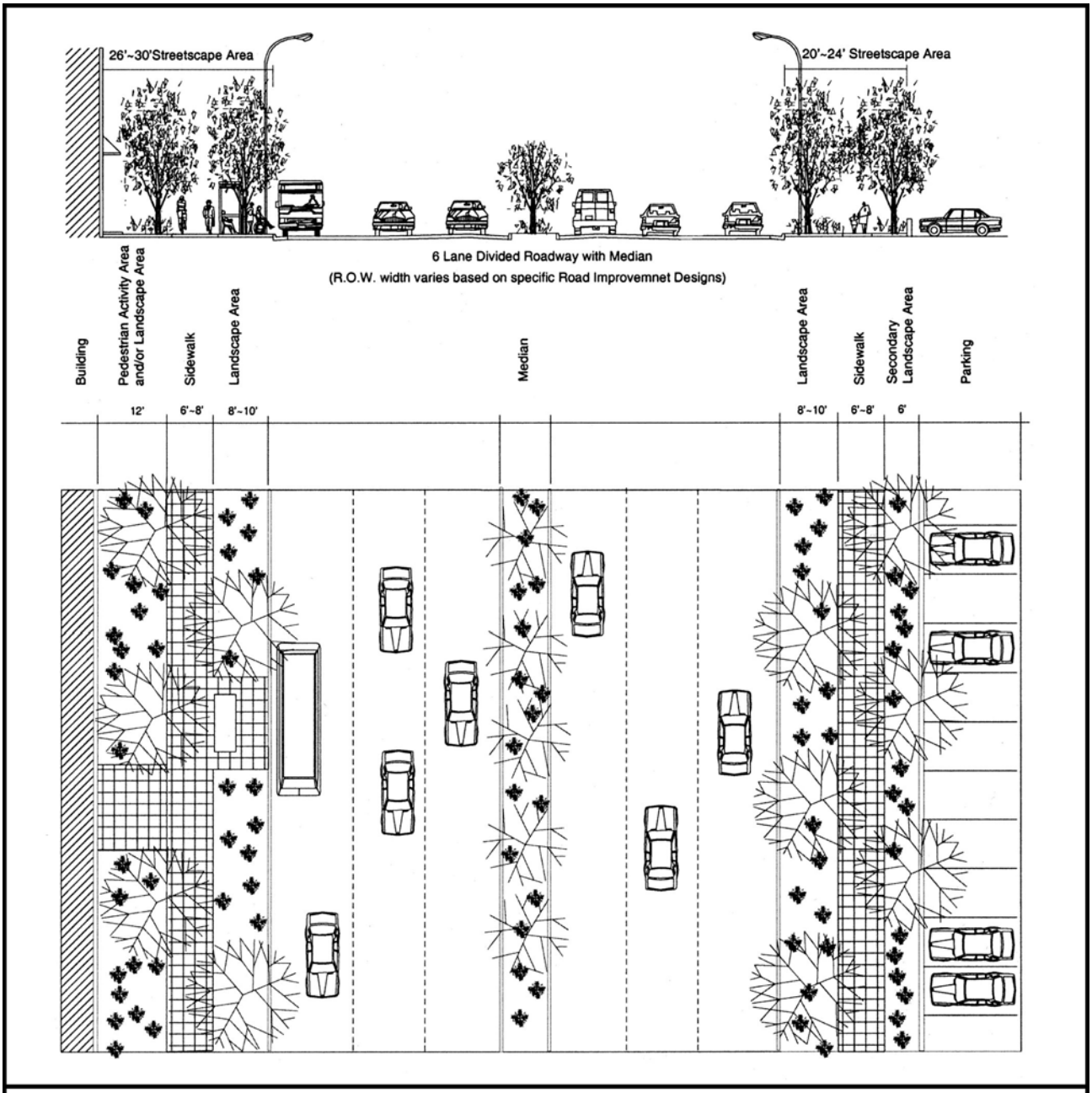
The boulevard streetscape, shown on Figure 10, should be used for Gallows Road, Route 29 and Route 50. This streetscape concept features a wide, tree-lined road with well-defined pedestrian and bicycle features that include wide sidewalks along both sides of the street, street trees evenly spaced, medians with plantings of flowering trees, shrubs, and flowers. Street lighting should be distinctive, and designed for both pedestrian and vehicular use. The following guidelines are provided for achieving the boulevard streetscape character:

- Landscape area next to curb: Along a boulevard, the landscape strip should be, at a minimum, 8 feet in width; however, a 10-foot wide landscape strip is encouraged. Plantings should occur closest to the sidewalk, leaving room adjacent to the road for street lighting and signage. Major shade trees should be planted with a spacing of 40 to 50 feet on center, using trees that are 2½ to 3-inch caliper in size at the time of planting. Vegetation within the planting strip should include supplemental plantings such as ornamental shrubs, ground cover, flowering plants, and grasses. Where appropriate, special pavement treatments and trees in grates may be considered as alternatives to a planting strip.

- Adjacent to the landscape strip along Route 29, an eight-foot wide sidewalk is planned along the north side of the road to provide continuity with the trail plan and along the south side, at a minimum, a six-foot wide sidewalk is planned. Along Gallows Road north of Route 50, an eight-foot wide sidewalk is planned for both sides of the road. Along Gallows Road south of Route 50, an eight-foot wide trail is planned along the west side of the road and a six-foot wide sidewalk is planned along the east side of the road. Along Route 50, an 8-foot wide trail is planned for the north side of the road and a 6-foot wide sidewalk is planned for the south side of the road.

- Pedestrian activity area and/or landscape area between the sidewalk and building and/or parking: A secondary landscape strip should be, at a minimum, 12 feet wide when adjacent to a building and 6 feet wide when surface parking is adjacent. Major shade trees should be planted with spacing of 40 to 50 feet on center, using trees that are 2½ to 3-inch caliper in size at the time of planting. The tree spacing along this landscape strip should be staggered with the first row of trees between curb and sidewalk, so that the effect of the two rows of trees is tree spacing at approximately 20 to 25 feet. Vegetation within the planting strip should include supplemental plantings such as ornamental shrubs, ground cover, flowering plants, and grasses. This pedestrian activity area/landscape strip, when adjacent to parking areas, should have supplemental plantings that will help to screen the parking from the pedestrian walkway and from the road. When ground level retail is provided in a building, a portion of this pedestrian activity area/landscape strip can be used for retail browsing and/or outdoor dining.

- Median landscape strip: Median plantings should consist of flowering trees, low ornamental shrubs, and flowers. The median plantings may be informal; however, the massing of trees should be equivalent to the planting of a tree every 25 feet on center. Plantings should be selected that are drought tolerant and low in maintenance, resistant to disease, pollution, and heat.



MERRIFIELD SUBURBAN CENTER
BOULEVARD STREETSCAPE CONCEPT
(Representative of Gallows Road, Route 50 and Route 29)

FIGURE 10

- At pedestrian crossings, ramps and special pavement should be designed to create a well-delineated and safe area for pedestrians to cross the street. Medians should be designed to create a safety island for pedestrians waiting to finish crossing the street.

Ring Road Streetscape Guidelines (Prosperity Avenue/Hartland Road/Gatehouse Road

The "Prosperity/Hartland/Gatehouse Ring Road" streetscape, shown on Figure 11, is intended to serve the core areas by distributing local traffic from neighborhoods and commercial districts to Gallows Road and Lee Highway. This street should typically be a four-lane undivided roadway. The street trees should be organized in evenly spaced, ordered plantings. The following guidelines are provided for achieving the Ring Road streetscape character:

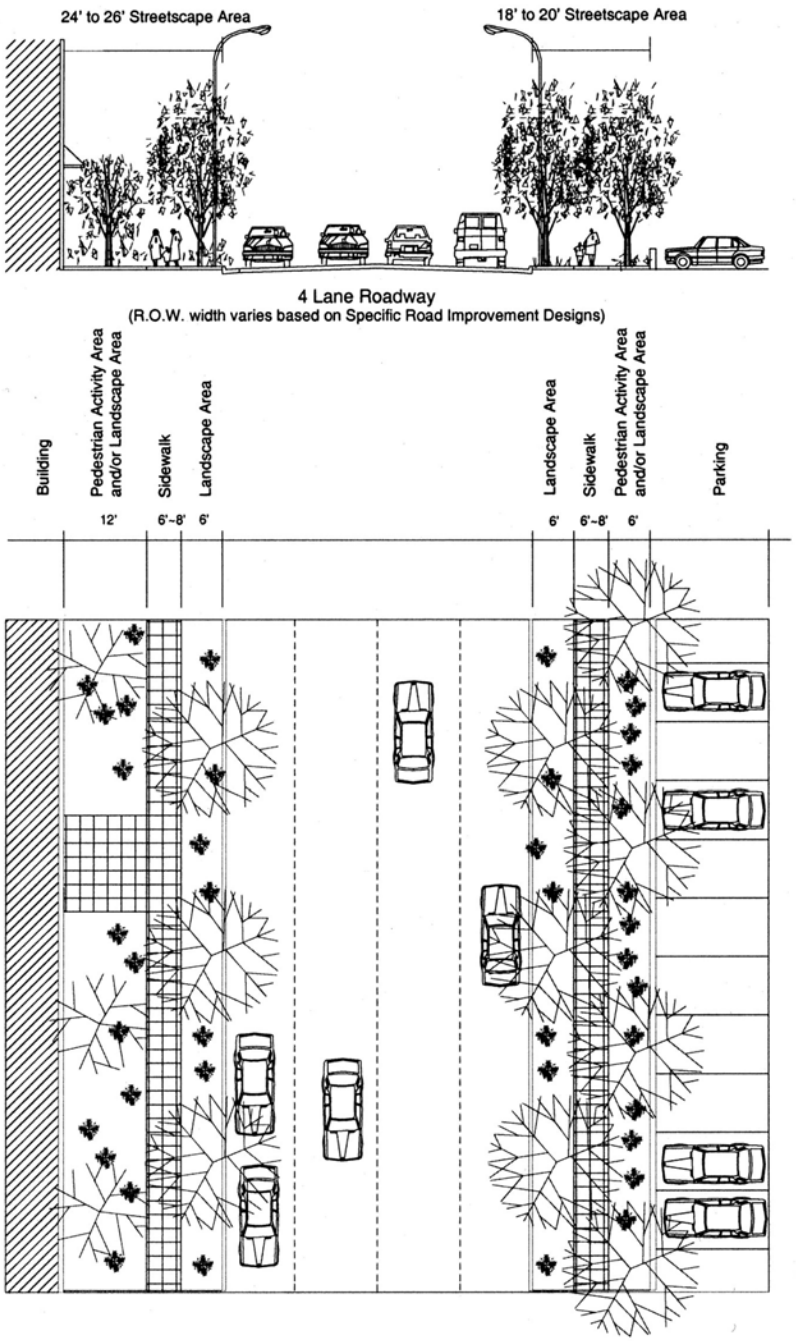
- Landscape area next to curb: Along the ring road, the landscape strip should be, at a minimum, 6 feet. Plantings should generally be placed in the center of the landscape strip, with major shade trees planted with a spacing of 25 to 30 feet on center, using trees that are 2½ to 3-inch caliper in size at the time of planting. Vegetation within the planting strip should include supplemental plantings such as ornamental shrubs, ground cover, flowering plants, and grasses. Where appropriate, special pavement treatments and trees in grates may be considered as alternatives to a planting strip, as well as pedestrian amenities such as bus shelters. Adjacent to this landscape strip, an 8-foot wide multi-purpose trail should be provided on the outside edge of the ring road. Along the inside edge of the ring road a 6-foot wide sidewalk should be provided, except adjacent to the Metro station where an 8-foot wide multi-purpose trail should be provided.

- Pedestrian activity area and/or landscape area between the sidewalk and building and/or parking: A secondary landscape strip should be, at a minimum, 12 feet wide when adjacent to a building and 6 feet wide when adjacent to surface parking. Plantings should be provided (to include shade and flowering trees, ornamental shrubs, ground cover, flowering plants, and grasses). When adjacent to parking areas, plantings should help buffer and screen parking from the pedestrian walkway and from the road. When ground level retail is provided in a building, a portion of this pedestrian activity area/landscape strip can be used for retail browsing and/or outdoor dining.

- At pedestrian crossings, ramps and special pavement should be designed to create a well-delineated and safe area for pedestrians to cross the street. Should a median be provided, it should be designed to create a safety island for pedestrians waiting to finish crossing the street.

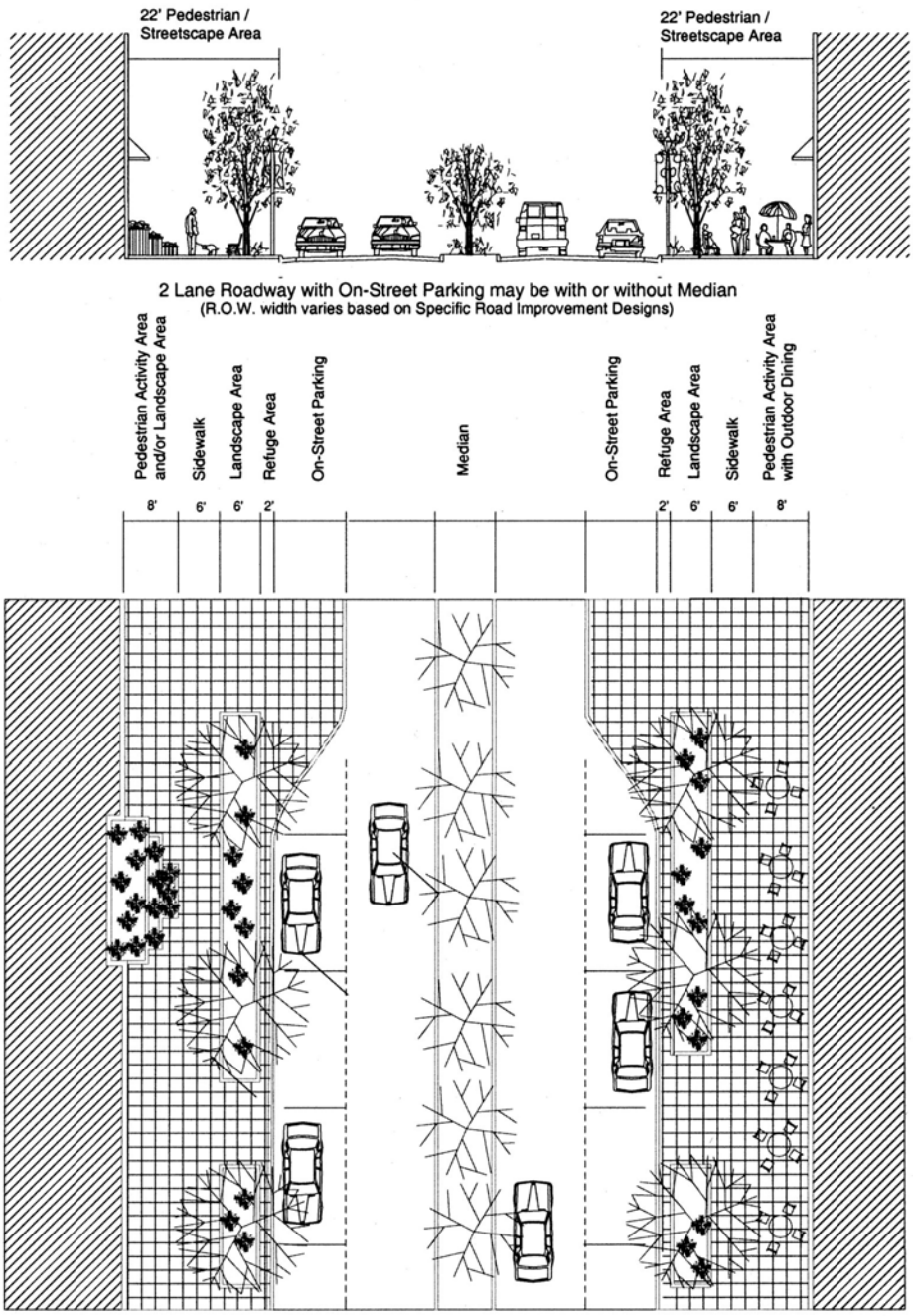
Main Street Streetscape Guidelines (Merrilee Drive/Eskridge Road and Festival Street)

The "Main Street" streetscape, shown on Figure 12, should be used in the Town Center as well as for the connection of the Town Center to the Transit Station Area, along Merrilee Drive to Eskridge Road. The streetscape treatment on the road connection from the transit station should help to provide an inviting, safe and direct vehicular and pedestrian link to the town center. At a minimum, streets should have two traffic lanes with on-street parking on each side of the street. Traffic calming features should be employed to enhance pedestrian and bicycle safety. A generous pedestrian area, generally between 20 to 25 feet wide, should be provided on each side of the street; this area should feature evenly spaced street trees, unified streetscape furniture design, and special paving accents. In the transit station area and the town center areas, buildings should have street-level retail, with restaurant and entertainment uses enlivening the street. Some segments of the "Main Street," such as a "festival street" in the town center area, may contain a center median with special landscaping,



MERRIFIELD SUBURBAN CENTER
RING ROAD STREETSCAPE CONCEPT
(Representative of Prosperity Avenue, Hartland Road and Gatehouse Road)

FIGURE 11



MERRIFIELD SUBURBAN CENTER
MAIN STREET STREETSCAPE CONCEPT
(Representative of the Town Center Area and Merrilee Drive)

FIGURE 12

paving and amenities (such as fountains). The following guidelines are provided for achieving the Main Street streetscape character:

- Landscape area next to curb: At a minimum, a 2-foot paved refuge strip should be located between the landscape area and the curb (refuge strip is where people get out of their cars that are parked on the street). Adjacent to the refuge area, a minimum 6-foot wide landscape area should be provided. Plantings should generally be placed in the center of the landscape strip, with major shade trees planted with a spacing of 25 to 30 feet on center, using trees that are 2½ to 3-inch caliper in size at the time of planting. Vegetation within the planting strip should include supplemental plantings such as ornamental shrubs, ground cover, flowering plants and grasses. Special pavement treatments and trees in grates should be considered as alternatives to a planting strip. Adjacent to this landscape strip should be a 6-foot wide sidewalk.

- Pedestrian activity area and/or landscape area between the sidewalk and building and/or parking: Between the sidewalk and the building, there should be, at a minimum, an 8-foot combination landscape strip and browsing area. Within the browsing area, outdoor seating for restaurants or sidewalk cafes may be appropriate as well as special entrance features to shops and buildings. A variety of treatments for this area may be used such as a plaza, a landscaped area with seating and lighting, a sidewalk and landscaped area, formal arrangements of trees (bosques), informally grouped trees and other plantings, and any of the above with public art or a water feature.

- Median landscape strip: When a median is provided, the area should have plantings consisting of flowering trees, low ornamental shrubs, and flowers. The median plantings may be informal, however the massing of trees should be equivalent to the planting of a tree every 25 feet on center. Plantings should be selected that are drought tolerant and low in maintenance, resistant to disease, pollution, and heat.

- At pedestrian crossings, ramps and special pavement should be designed to create a well-delineated and safe area for pedestrians to cross the street. Should a median be provided, it should be designed to create a safety island for pedestrians waiting to finish crossing the street.

A cross street, which applies to the majority of the streets within the Merrifield Suburban Center, not otherwise designated, helps to define the street grid system by connecting the boulevards, ring road and main streets. Providing additional cross streets will be critical in enhancing internal traffic flow within the core areas (i.e. the town center and transit station areas). Cross streets typically have two-traffic lanes with on-street parking along at least one side. Traffic calming measures such as raised mid-block pedestrian crossings, small traffic rotaries, and curb and sidewalk "bulb outs" at intersections should be provided. The cross street streetscape concept is shown on Figure 13 and features a tree-lined sidewalk on both sides of the street. The following guidelines are provided for achieving the Cross Street streetscape character:

- Landscape area next to curb: Streets with parking should have, at a minimum, a 2-foot paved refuge strip next to the curb. A refuge strip is where people get out of their parked cars. Adjacent to the refuge area, a minimum a 6-foot wide landscape area should be provided. Plantings should generally be placed in the center of the landscape strip, with major shade trees planted with a spacing of 25 to 30 feet on center, using trees that are 2½ to 3-inch caliper in size at the time of planting. Vegetation within the planting strip should include supplemental plantings such as ornamental shrubs, ground cover, flowering plants and grasses. Where appropriate, special pavement treatments and trees in grates may be considered as alternatives to a planting strip. Adjacent to this landscape strip should be a 6-foot wide sidewalk.

Cross Street Streetscape Guidelines

- Pedestrian activity area and/or landscape area between the sidewalk and building and/or parking: A secondary landscape strip should be, at a minimum, 12 feet wide when adjacent to a building and 6 feet wide when adjacent to surface parking. Supplemental plantings should be provided (to include shade and flowering trees, shrubs, flowering plants, ground cover, and grasses). When adjacent to parking areas, plantings should help buffer and screen parking from the pedestrian walkway and from the road. When ground level retail is provided in a building, a portion of this pedestrian activity area/landscape strip can be used for retail browsing and/or outdoor dining.

- At pedestrian crossings, ramps and special pavement should be designed to create a well-delineated and safe area for pedestrians to cross the street. Should a median be provided, it should be designed to create a safety island for pedestrians waiting to finish crossing the street.

BUILDING AND SITE DESIGN

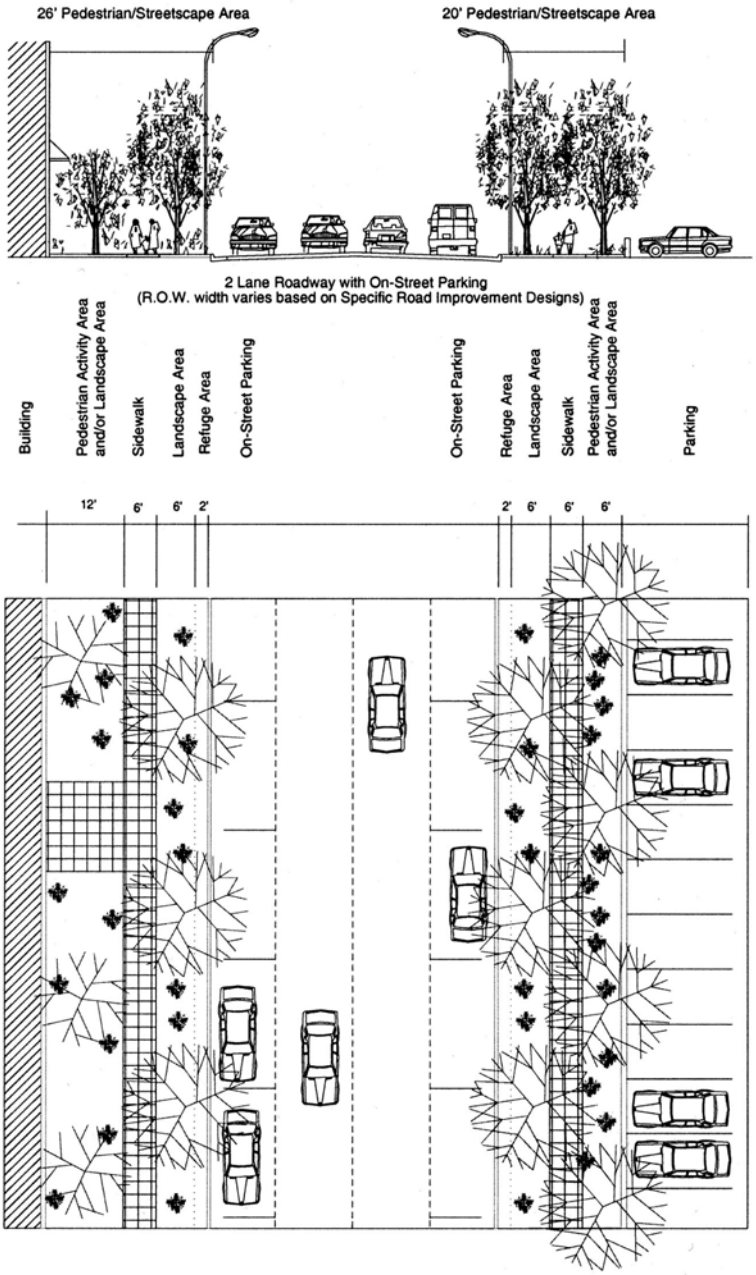
In addition to streetscape, siting of buildings, building materials and quality of design influence the pedestrian experience. The location of a building on a site should not create a barrier to pedestrians by interrupting the pedestrian circulation system. Also, a development's site design should avoid creating pedestrian barriers; for example landscaping should not block the paths through a property. In addition, any signage within a development should be coordinated in terms of scale, design, color, materials, and placement. Since the Merrifield Suburban Center is envisioned to have areas with an urban as well as a suburban character, the siting of buildings in relation to the pedestrian system will vary.

Building and Site Design Guidelines for Core Areas and Areas Adjacent to the Cores

The core areas (i.e., Transit Station and Town Center Areas) and the areas adjacent to the cores are planned for highest intensities and have the greatest potential for high volumes of pedestrian traffic. These areas are envisioned to become more pedestrian and transit-friendly through building and site designs that have a more urban character. The following guidelines are intended to provide guidance for achieving this character. See Figure 14 for illustrations of this more urban character.

- To encourage a more urban environment, buildings should be close to roadways after allowing for streetscape amenities such as street trees, sidewalks, plazas, street furniture and landscaping. Building setbacks will vary based on which streetscape is applicable. For boulevards such as Route 29, Route 50, and Gallows Road, buildings should, at a minimum, be setback 26 feet from the curb; however in order to provide for plazas, retail browse areas and other pedestrian amenities, buildings should generally be about 30 to 40 feet from the curb. For the Ring Road, Main Street and Cross Streets, buildings should generally be setback about 20 to 25 feet from the curb. These setbacks would achieve the goal of bringing new buildings closer to the roadway while providing for streetscape amenities. See the Streetscape Design Guidelines for landscaping guidance within the setback areas.

- To encourage the siting of buildings closer to the street, the allowable angles of bulk plane should be 20 degrees in order to encourage a more urban environment and pedestrian scale. (See Figure 14)

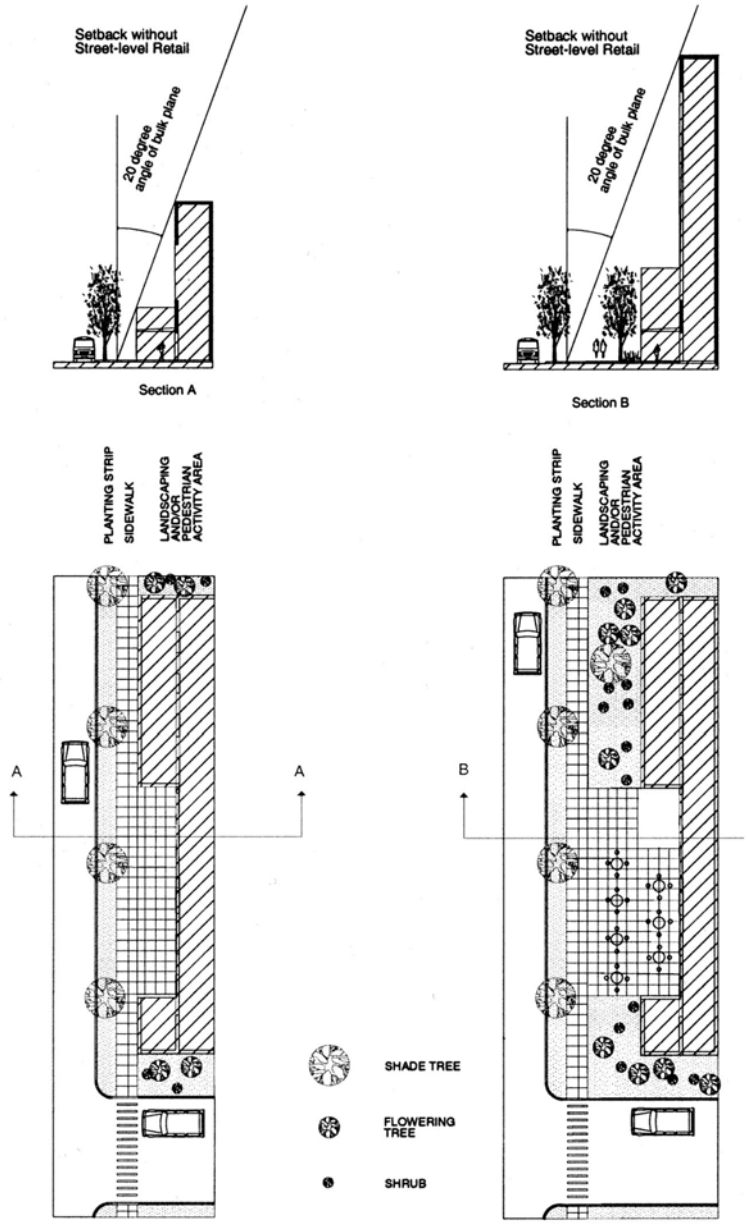


MERRIFIELD SUBURBAN CENTER

CROSS STREET STREETSCAPE CONCEPT

(Within the Town Center, the Cross Street Streetscape generally applies to roads that may provide access to parking and where there is no ground level retail. Outside of the Town Center, the Cross Street Streetscape applies to roads not otherwise designated as Boulevard, Ring Road or Main Street.)

FIGURE 13



MERRIFIELD SUBURBAN CENTER: BUILDING DESIGN CONCEPT FOR CORES AND THE AREAS ADJACENT TO THE CORE AREAS

(Dimensions will vary based on applicable streetscape treatment. See Streetscape section for applicable streetscape treatment.)

FIGURE 14

- Having buildings closer to the roadway means that most off-street parking will be located in structures to the side or back of the buildings or beneath buildings. These structures should be integrated with the building design in a manner that maximizes usable open space and pedestrian linkages.

- For retail development on Gallows Road and Route 29 only, limited surface parking may be allowed in the front; however, streetscaping should be provided consistent with the appropriate streetscape design guidelines, with additional shrubs and/or berms for screening the parking. Typically, surface parking in the front of the building should be limited to no more than two rows of parking. In some instances, due to site constraints or in order to achieve other urban design objectives such as additional open space or better pedestrian access, surface parking in front of the building may exceed the two rows of parking; however, substantial internal parking lot landscaping should be provided. In addition, pedestrian paths from the street to the retail uses should be articulated with landscaping and special paving treatment.

- Building facades should establish a pedestrian scale relationship to the street with architectural features such as variations of window or building details, texture, pattern, and color of materials. Public space furniture and entry accent features are encouraged as are arcades, awnings, or other building features that distinguish ground floor retail uses.

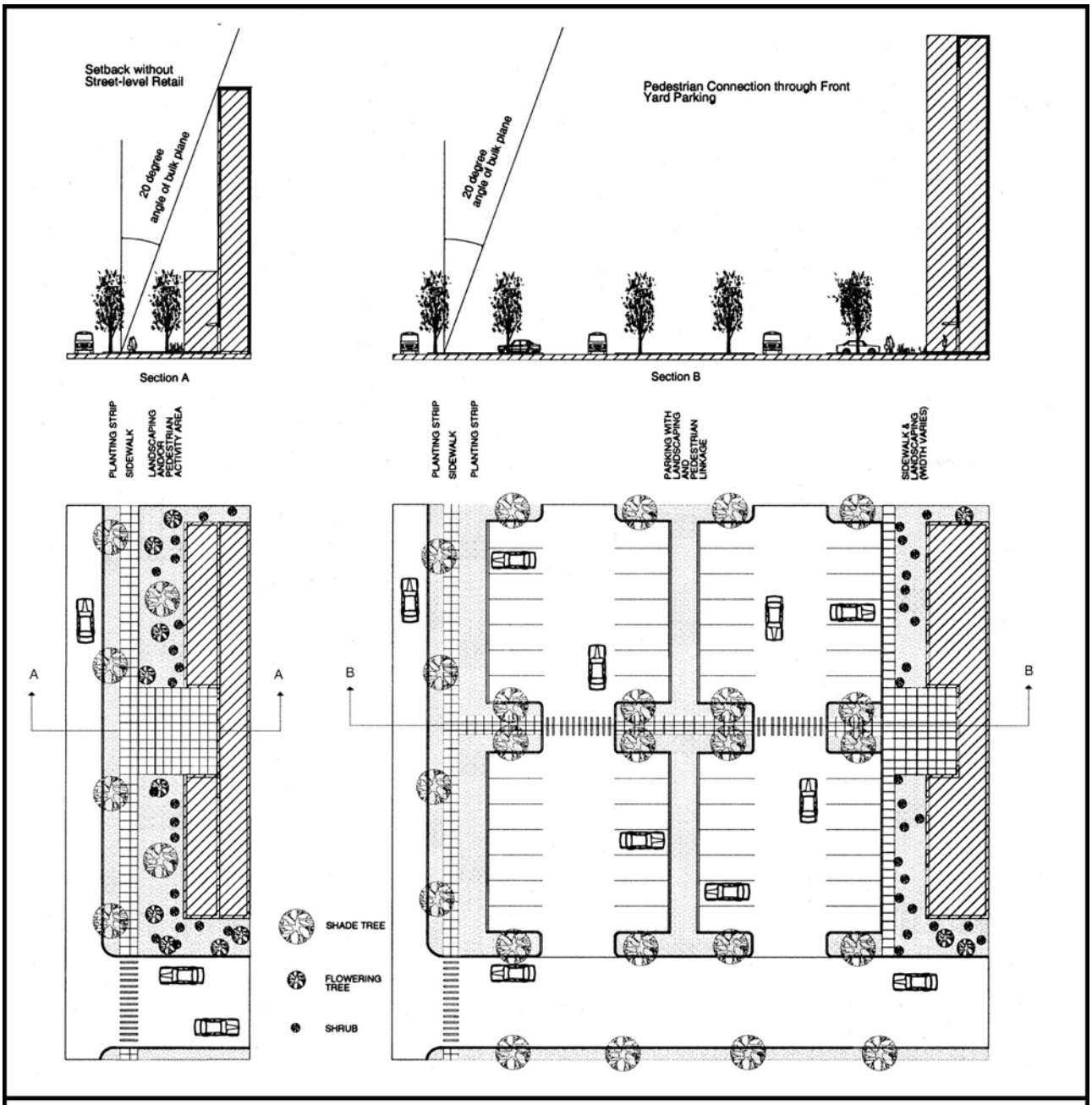
Building and Site Design Guidelines for the Remainder of the Merrifield Suburban Center

In the Land Use Concept, the majority of the Merrifield Suburban Center is designated as Non-Core and Edge Areas. These areas include retail, office, and residential uses that are generally more suburban in character. Much of the office development is in the form of suburban office parks that are designed with auto-orientation, requiring an auto trip for most activities and lunch-hour errands. The urban design challenge is to make these areas more accessible for people and to enhance the visual quality. The following guidelines, in addition to the previous streetscape section, are intended to help make these areas more pedestrian-friendly environments. See Figure 15 for illustrations on how development may vary in the more suburban portion of the Merrifield Suburban Center.

- Streetscape amenities such as street trees, sidewalks, plazas, street furniture, and landscaping should be provided. Building setbacks will vary based on which streetscape is applicable. For boulevards such as Route 29, Route 50 and Gallows Road, buildings should, at a minimum, be setback 26 feet from the curb; however, 30 to 40 feet from the curb is encouraged. For the Ring Road and Cross Streets, buildings should be 25 to 40 feet from the curb. Greater front yards may be appropriate when parking is located in the front of buildings.

- Even in these suburban areas, flexibility should be provided for encouraging buildings to be located close to the street. Therefore, the angle of bulk plane should be reduced when more usable open space and open space amenities are provided. Under this circumstance, the angles of bulk plane should be reduced to 20 degrees. (See Figure 15.)

- When structured parking is provided, it should be located at the back or side of buildings and not front on pedestrian areas. Surface parking may be located at the front of buildings but should have substantial interior landscaping as well as landscaping between the parking area and the sidewalk. Further, pedestrian paths from the street building entrances should be articulated with landscaping and special paving treatment.



MERRIFIELD SUBURBAN CENTER
BUILDING DESIGN CONCEPT FOR NON-CORE AREAS AND EDGE AREAS
(Note: dimensions will vary based on applicable streetscape treatment.
See Streetscape section for applicable streetscape tretment.

FIGURE 15

BUILDING HEIGHTS

Throughout the Merrifield Suburban Center, a variety of building heights and building articulation, as well as varied roof forms are encouraged to create an interesting skyline. Building heights adjacent to single-family residential neighborhoods, in general, are planned not to exceed 40 feet to provide an appropriate scale of development. Figure 16 shows the maximum building heights planned for the Merrifield Suburban Center. It should be noted, however, to achieve many of the maximum building heights, various conditions should be met as indicated within the sub-unit recommendations.

Building Height Guidelines

- One fundamental element of achieving maximum building heights should be the provision of usable open space that is in addition to providing the streetscape. This additional open space should include plazas, courtyards or other open space amenities as indicated under the Pedestrian and Open Space System section.

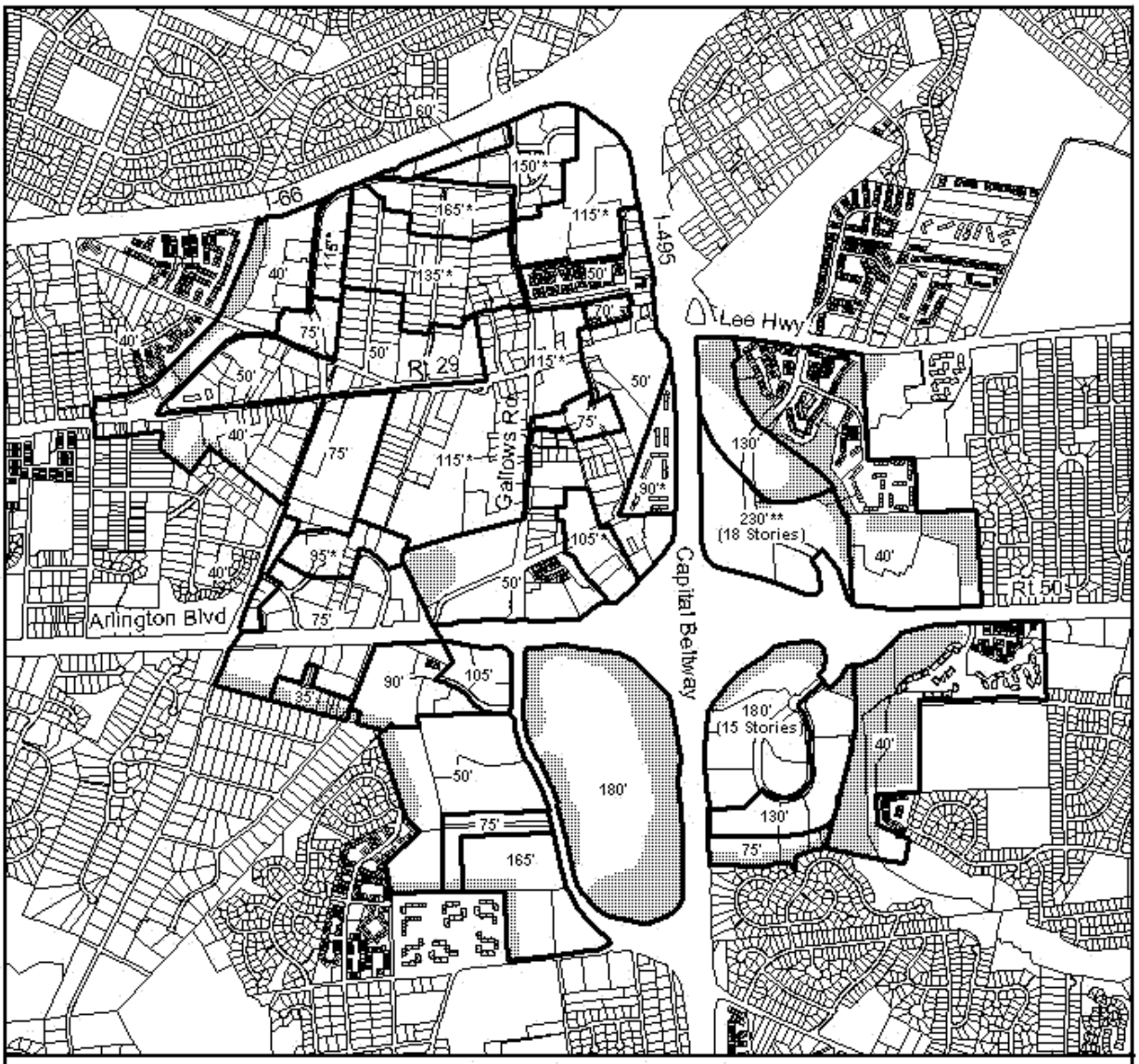
- Throughout the Merrifield Suburban Center, a variety of building heights, façade articulation, and rooflines are encouraged to enhance the Merrifield skyline. The transit station area and Fairview Park are intended to be visually prominent, with building heights outside these areas stepping down to the periphery of the Merrifield Suburban Center.

- To create a focal point within a land unit or sub-unit, building height should be one of the elements used to identify a special area, in addition to such elements as plazas, courtyards, building orientation, and/or landscaping.

- Parcels that are split by two height designations should have flexibility to have building height increases above the lower height designation when development proposals provide height transitions similar to those indicated on the Building Height Map (Figure 16) and provide a site design that is supportive of other urban design objectives.

- Within the Transit Station Area, the Town Center and adjacent sub-units, maximum building height can only be achieved when structured parking is placed under buildings (either below or above grade) in order to encourage a more urban environment and to increase the amount of usable open space. As indicated above, usable open space is defined as being in addition to providing the streetscape, and should include plazas, courtyards or other open space amenities as indicated under the Pedestrian and Open Space System section. Without placing parking under the building, maximum building height should be reduced by 20 to 30 feet. The areas subject to this height reduction are shown with an asterisk on Figure 16. (See sub-unit recommendations for specific height guidance).

- Building heights within the northern portion of Fairview Park (Sub-Unit I1) may be considered for heights up to 18 stories or approximately 230 feet, if a retail center is located adjacent to Fairview Lake. Without the provision of the retail center, maximum building height in Sub-Unit I1 is 15 stories. The area subject to this conditional height increase is shown with two asterisks on Figure 16 (See sub-unit recommendation for specific height guidance).



BUILDING HEIGHTS MAP
MERRIFIELD SUBURBAN CENTER

Note: Heights shown with an asterisk (*) indicate a maximum height allowed when parking structures are intergrated with buildings. Maximum building heights are reduced by 20 feet to 30 feet when parking is not integrated with the building. See specific sub-unit recommendations for additional guidance.

Note: Heights shown with two asterisks (**) indicate a maximum height if a retail center is located adjacent to Fairview Lake, the office buildings located in the western portion of Sub-Unit I1, may be considered for a Height increase of up to 18 stories or approximately 230 feet. See specific sub-unit recommendation for additional guidance.

FIGURE 16

TRANSPORTATION

The Merrifield Suburban Center is served by an extensive highway network, with regional access provided by I-66, I-495, Route 29, Route 50, as well as the Dunn Loring-Merrifield Transit Station. The following transportation recommendations are intended to help improve circulation within and around the Merrifield Suburban Center. The transportation recommendations are divided into four categories: Policy Recommendations, Roadway Improvements, Transit Facilities and Services, and Pedestrian and Bicycle Circulation.

POLICY RECOMMENDATIONS

Future land use should be balanced with supporting transportation infrastructure and services. In order to achieve that balance, Fairfax County has established a number of transportation policies that can be found in the County's Policy Plan. The following transportation policy recommendations offer additional guidance for development within the Merrifield Suburban Center:

Right-of-way Acquisition Policy – In order to achieve the Merrifield Suburban Center objectives, any development proposal should dedicate right-of-way for planned road improvements. In addition, VDOT should, in some instances, obtain right-of-way (ROW) from one side of the street rather than taking equal amounts of right-of-way from both sides. For example, the north side of Route 29, between Cedar Lane and Old Lee Highway, has relatively new development, whereas the development on the south side of Route 29 in this same area is significantly older. An equal taking from both sides of the road would significantly affect the viability of the uses on both sides of the road, whereas entire ROW takes from the south side of the road would allow the businesses on the north side to remain viable. Any excess property resulting from right-of-way acquisition should be used for linear parks and/or public facilities uses that do not need as much property depth as a retail use. In addition, surplus property from ROW acquisition may create opportunities to further the Merrifield Suburban Center objectives, such as adding the surplus land to an abutting property, when it facilitates desired redevelopment.

Mitigating Transportation Impacts of Development – All development proposals should provide adequate access, turn lanes, interparcel access and other measures needed that mitigate the traffic impacts of the proposed level of development. If the application cannot demonstrate that the impacts of the proposed development can be mitigated on the surrounding road system, development potential should be reduced to a level at which impacts can be mitigated within the current capacities of the surrounding road system or development should be phased to occur with capacity increases resulting from planned road improvements. If phased, development should be phased with appropriate transportation improvements, so that a balanced roadway network will occur in the long-term, with new development not exacerbating overall existing conditions in the short term. A phasing program may include on-site and off-site improvements, intersection, signalization and parking improvements as identified in the specific land unit guidance.

Access Management Policy – Curb cuts should be minimized through consolidation of street access and provision of interparcel access.

Parking Area Access and Location - Large surface and structured parking areas should be attractively integrated with the pedestrian network and accessible from side streets or exterior passageways between buildings or integrated into buildings.

Funding of Transportation Improvements and Services – Transportation facilities and services needed to support growth in the Merrifield Suburban Center include major road improvements such as those planned for Route 29 and Gallows Road, the intersection of Route 29/Gallows Road, and improvements to regional facilities such as I-66 and I-495. The traditional method of funding these transportation improvements is through Federal, State and County sources; however, some combination of public and private sector funding may be necessary to cover the costs associated with these improvements and to expedite implementation. Options for further consideration could include applications of a transportation tax district, a pro-rata project reimbursement approach, and an impact fee program. One or more of these options may be necessary to satisfactorily address the funding of transportation capital improvements for the Merrifield Suburban Center. Due to the complexity of issues involved, further detailed examination of these options is essential before a preferred approach is selected.

Transportation Demand Management (TDM) – The transportation goal in the County's Policy Plan is for a mode split of at least 15 percent of the commuters to Suburban Centers and Transit Station Areas to occur by means other than single occupancy vehicles (SOV). Non-SOV modes are generally referred to as HOV (high occupancy vehicle) and include, for example, mass transit, car and vanpools, and non-motorized transportation.

To help bring about an overall 15% or greater non-SOV trips, the non-SOV mode split should be tiered as shown on Figure 17. This figure shows the greatest level of non-SOV attainment on the Metro station property and in the area within a 5-minute walk of the Metro station. Applications for new development should demonstrate how transit use and other non-SOV commuting modes could be achieved for the site's prescribed mode split. Measures to achieve these goals will need to be identified and committed to by the applicant. These measures could include the creation of effective TDM programs at employment locations, such as the provision of shuttle service for internal circulation, as well as service to and from the Metro station. Other measures may include flexible or staggered work hours, transit pass subsidies, alternative parking arrangements, parking management programs, parking pricing, mixed-use development centers, and the provision of sidewalks and trails. Development should contribute to the establishment of new transit programs or facilities and/or to existing programs that may include contributions towards a shuttle service to serve Merrifield or other programs, which reduce peak-hour trips. If a development application does not provide TDMs designed to achieve the area's non-SOV goal for its office component, then the maximum office intensity should be reduced by an amount equal to the unachieved portion of the mode split, resulting in a 15% to 25% reduction in office development potential. TDM programs provided by new development should be monitored for effectiveness by the County. The monitoring process will require the provision of regular reports that document the effectiveness of the TDM programs in reducing SOV trips and traffic generation at the site, as well as provide documentation that the TDM measures are being adhered to.

FIGURE 17: NON-SOV MODE SPLIT BASED ON DISTANCE FROM THE TRANSIT STATION

Distance from Metro	Minimum Non-SOV Mode Split
At the Metro Station	**25**
1,320 feet (5 minute walk)	**25**
1,320 – 2,640 feet (5 – 10 minute walk)	**20**
2,640+ feet (Rest of Merrifield)	**15**

Transportation Systems Management (TSM) Programs - Transportation Systems Management is used to describe a full spectrum of actions that may be applied to improve the overall efficiency of the transportation network and may include TDM measures. These measures should make maximum use of the TSM opportunities afforded by proximity to the Metro Station. TSM programs usually consist of relatively low-cost alternatives to major capital expenditures, and may include parking management measures such as commuter lots, ridesharing programs, transit promotion, or operational improvements to the existing roadway system. TSM includes non-SOV use and other strategies associated with the operation of the street and transit systems. Some examples for the Merrifield Suburban Center might include traffic light synchronization or shuttle service that runs during the lunch-hour in addition to the AM and PM peaks, since congestion is an increasing issue during the midday period.

ROADWAY IMPROVEMENTS

The roadway and circulation plan for the Merrifield Suburban Center addresses three types of roadway improvements: Arterial Roadways, Interchanges, and Collectors/Local Streets. These improvements are shown on Figure 18 and are described below:

Arterial Roadways - Arterial roadways consist of freeways/expressways, other principal (or major) arterials, and minor arterials. On arterial roadway facilities, local access is subordinate to the primary function of carrying through traffic. Freeways and expressways are controlled access facilities provided for high-volume travel, with little or no access to abutting land. Other principal arterials provide some access to abutting land, although the primary function is to carry through traffic. Minor arterials are lower service roadways with partial control of access.

There are two interstate roads within the Merrifield Suburban Center: the Capital Beltway (I-495) and I-66. The County's Transportation Map shows I-495 planned for 8+ lanes and I-66 planned for 10 lanes.

There are four arterials within the Merrifield Suburban Center. Lee Highway (Route 29) and Arlington Boulevard (Route 50) are major arterial roadways; and Gallows Road and Prosperity Avenue are minor arterial roadways. For these arterials, roadway improvements are planned as follows:

- Lee Highway (Route 29): Lee Highway is planned for widening to 6 lanes within the Merrifield Suburban Center.

- Arlington Boulevard (Route 50): Arlington Boulevard is planned for improvement to a 6-lane roadway between Prosperity Avenue and I-495, which is substantially completed in the Merrifield Suburban Center.

- Gallows Road: Gallows Road is planned for widening to six lanes from Route 50 to Tysons Corner. To obtain smooth and efficient traffic flow, the number of access points should be minimized, especially for the section between I-66 and Lee Highway. When Gallows Road is being evaluated for widening, consideration should be given as to how rapid transit can be incorporated into this planned 6-lane roadway.

- Prosperity Avenue: Prosperity Avenue is planned for improvement to 4 lanes from Route 29 to Gallows Road.

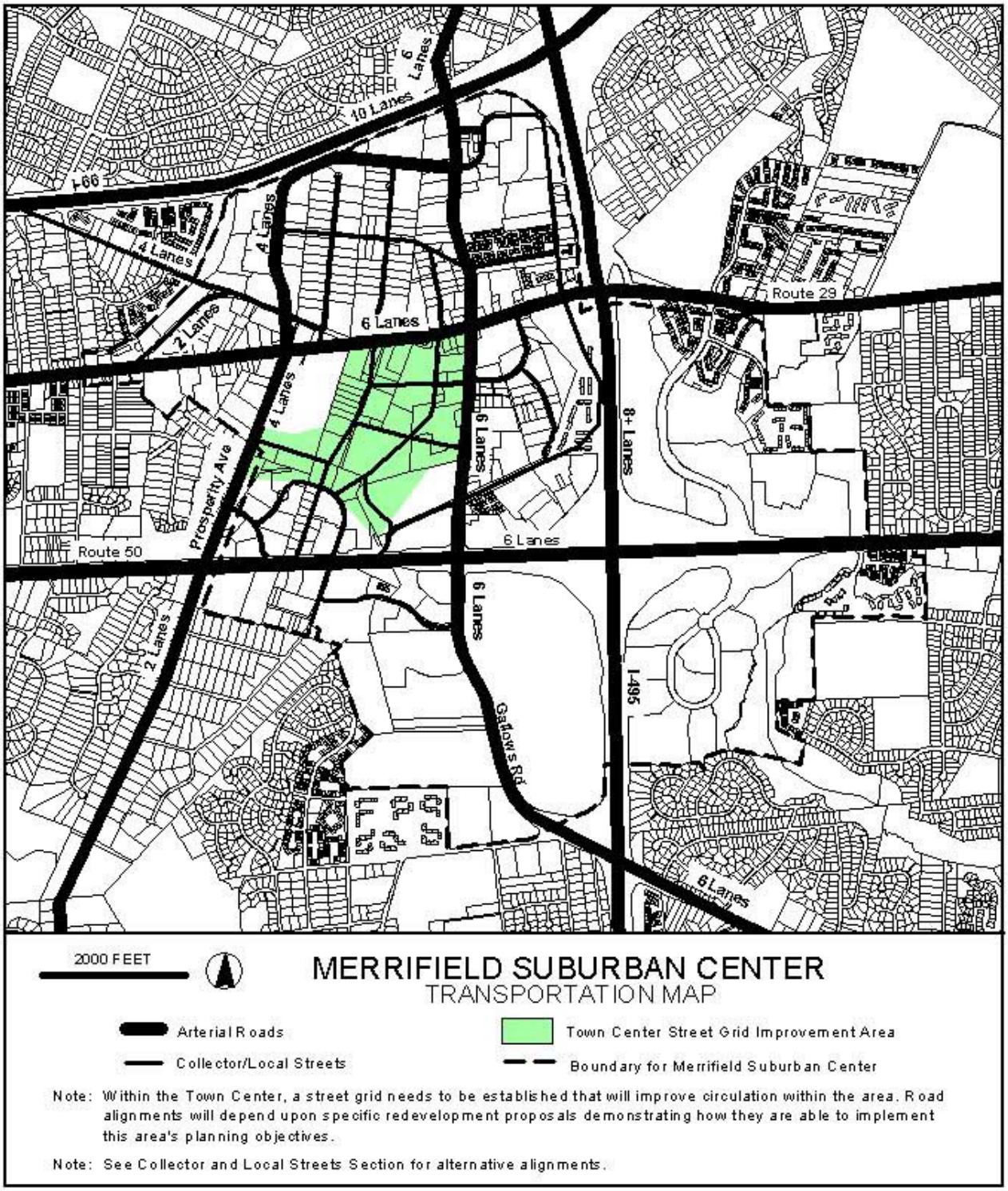

2000 FEET
MERRIFIELD SUBURBAN CENTER
TRANSPORTATION MAP
Arterial Roads
Collector/Local Streets
Town Center Street Grid Improvement Area
Boundary for Merrifield Suburban Center
Note: Within the Town Center, a street grid needs to be established that will improve circulation within the area. Road alignments will depend upon specific redevelopment proposals demonstrating how they are able to implement this area's planning objectives.
Note: See Collector and Local Streets Section for alternative alignments.
10 Lanes
6 Lanes
4 Lanes
2 Lanes
8+ Lanes
Route 29
Route 50
Prosperity Ave
Gallows Rd
I-495

FIGURE 18

Interchanges - The provision of an interchange has both land use and transportation planning implications. In terms of land use, caution must be exercised in reviewing development proposals in the immediate interchange area due to right-of-way implications. In terms of transportation planning, revised access patterns must be accommodated in the immediate area, since the interchange ramps cause grade changes and weaving/merging traffic conflicts. The amount of land needed, and the extent to which access must be re-oriented varies with the actual design of the interchange. Development or redevelopment of properties adjacent to future interchange improvements should recognize the need to reorient access in a manner consistent with the future interchange design.

There are three interchanges planned for improvements, which serve the Merrifield Suburban Center: I-66/I-495, Arlington Boulevard (Route 50)/I-495 and Gallows Road/I-495. In addition, there is one new interchange planned for the Route 29/Gallows Road intersection.

The Route 29/Gallows Road intersection is planned for improvement either as an at-grade intersection or as a grade-separated interchange. When this intersection is improved, it could have significant impact on the future town center vision for the Merrifield Suburban Center. In order for this transportation improvement to be an asset to the Merrifield Suburban Center, it should be designed with high consideration given to the following criteria:

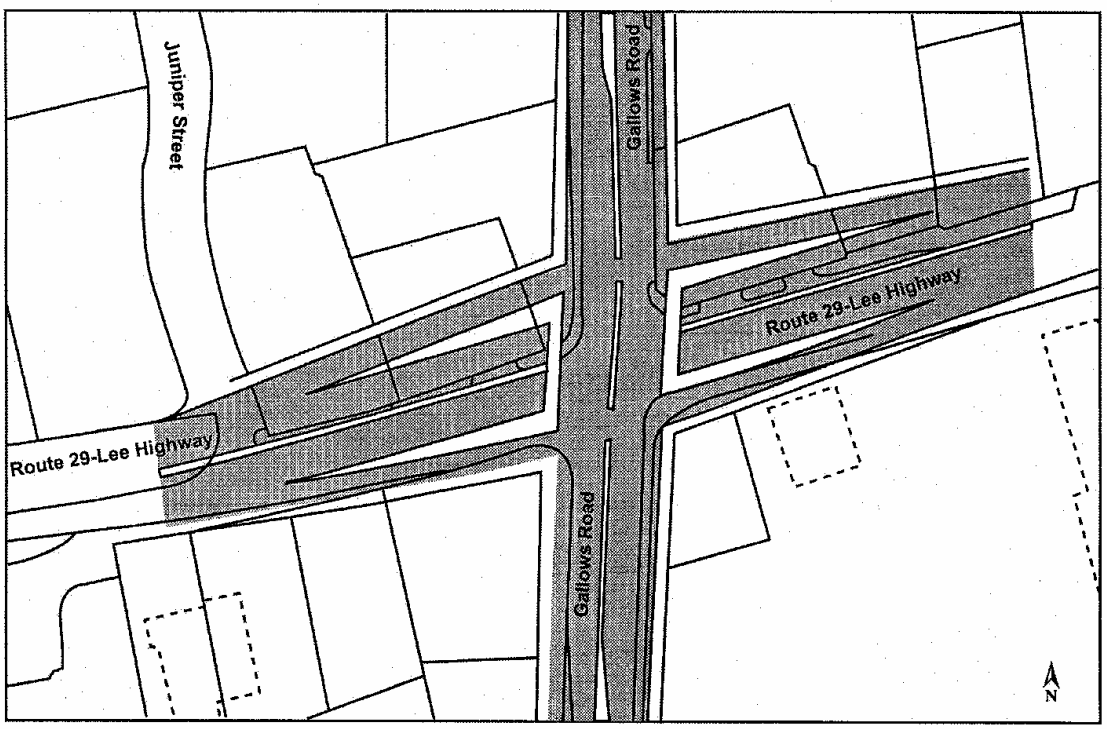
- The transportation improvement should be designed in a pedestrian and transit-friendly manner. If the intersection warrants a grade separation, the interchange should be designed to minimize additional right-of-way needed beyond what is needed for at-grade improvements.

- Since vehicular traffic may affect pedestrian safety, pedestrian improvements such as crosswalks, signals, and refuge islands and/or pedestrian bridges should be provided.

- If a grade-separated interchange is needed, then every effort should be made to obtain the ultimate right-of-way necessary for the grade-separated interchange during the development review process and during the land acquisition process for an intermediate at-grade improvement. This right-of-way may be acquired by purchase or through dedication at the time of rezoning for properties adjacent to this interchange. Acquiring right-of-way in advance for the interchange will help minimize uncertainty with respect to future right-of-way takings and facilitate progress on implementing the Merrifield Suburban Center Plan.

- If an interchange is warranted, it should be designed in a manner that minimizes impacts to Merrifield. One approach that may minimize impacts to Merrifield would be to design the interchange as a compact urban diamond with Gallows Road at grade and Route 29 below grade with retaining walls. This concept is illustrated in Figure 19. Regardless of whether the urban diamond concept or another design concept is to be implemented, its design should minimize impacts to the Merrifield Suburban Center and should ensure that pedestrian access to Route 29 and Gallows Road is provided in a safe manner.

Collectors/Local Streets - Collector roadways route traffic to and from local streets to the arterial road system. Collector roads generally are not intended to attract through trips, but instead provide for internal traffic circulation, including transit service. For the most part, collector and local street improvements will occur in conjunction with redevelopment activity. The following collector and local street improvements are planned to improve traffic circulation within the Merrifield Suburban Center (See Transportation Map, Figure 18.):



EXAMPLE OF POTENTIAL ROUTE 29/GALLOWS ROAD INTERCHANGE
Shows Lee Highway depressed below Gallows Road which remains at current grade.

FIGURE 19

- Dorr Avenue is planned to extend to Route 29 in a general alignment with a Merrifield Regional Post Office entrance. The post office facility's entrances may need to be consolidated or redesigned to improve circulation in the vicinity of the new signalized intersection where Dorr Avenue is extended to Route 29. If current entrances at the post office are not redesigned or reduced in number, some entrances on Route 29 may be limited to right in/right out only access.

- Hilltop Road is recommended for improvement to four-lanes between Old Lee Highway and Dorr Avenue. Hilltop Road should terminate at the Dorr Avenue extension, with the portion of Hilltop Road between the Dorr Avenue extension and Route 29 being abandoned.

- Merrifield Avenue is planned to become an East–West Connector Road by being extended to Prosperity Avenue on the west and to Gallows Road on the east to align with Providence Forest Drive.

- Hartland Road is planned to extend north to connect with Park Tower Drive, which will complete this portion of the "Loop Road." Hartland Road is recommended for improvement to a four-lane road, and is also recommended to extend south across Lee Highway, to connect with Gatehouse Road.

- Merrilee Drive could function as the "Main Street" for the Merrifield Suburban Center by linking the Metro Station and the planned "Town Center." In order for this to occur, Merrilee Drive is planned to extend north to intersect with Prosperity Avenue and the Dunn Loring-Merrifield Metro Station property, and to extend south across Route 29 and connect with Eskridge Road. The extension of Merrilee Drive to the south requires the realignment of Eskridge Road and Merrilee Drive.

- Eskridge Road is planned to extend south to connect with Williams Drive as well as to extend to the north to connect with Merrilee Drive as described above. The extension of Eskridge Road to the north requires the realignment of Eskridge Road and Merrilee Drive.

- Williams Drive, north of Route 50, is planned to connect with Prosperity Avenue, either with a connection to Hamaker Court [shown on Figure 18] or directly across to Prosperity Avenue [not shown].

- Strawberry Lane is planned for improvement and may be extended to Eskridge Road.

- The movie theater access road currently connects Route 29 and Strawberry Lane. In the future, this road may need to be improved to facilitate access within the Town Center and should be extended south to connect with Williams Drive and/or Gatehouse Road. This improvement will link the town center to Route 50. If the Gatehouse Road connection is to occur, this improvement will most likely run along the western edge of the Luther Jackson Intermediate School property and will need to be designed in such a way as to minimize impacts to the school. Any right-of-way needed from the school property should be replaced with additional land abutting the school to the north in a manner that allows for the continued viability of the school.

- The current configuration of the intersection of Route 50 and Williams Drive, where the service drive from the restaurant park intersects Williams Drive, should be redesigned to improve public safety.

- Additional cross streets should be provided in the Town Center and Transit Station Areas in order to facilitate a grid system that will improve circulation within these areas as well as adjacent areas. These cross streets should improve overall circulation and increase inter-parcel access, with specific locations determined as the area develops. In order to facilitate the provision of these improvements, it may be necessary to provide these circulation improvements as private streets with public access easements, which would be privately maintained. An example of a private street is the "Festival Street" in the Town Center, which is planned to be similar to Market Street in the Reston Town Center.

TRANSIT FACILITIES AND SERVICES

The Dunn Loring-Merrifield Transit Station currently serves the Merrifield Suburban Center, as well as Dunn Loring and the surrounding residential communities. Bus service connects the Dunn Loring-Merrifield Metro Station to the Joe Alexander Transportation Center (formerly known as the Franconia-Springfield Metro Station) and Tysons Corner, as well as providing service in the Merrifield Suburban Center. In addition, the Merrifield Area is currently served by twelve other bus routes (Spring 2001) that provide rush hour service to the Dunn Loring-Merrifield Transit Station, Fairfax Hospital, and Fairview Park. In order to facilitate this bus service, bus shelters should be provided in key locations. In addition, there are several shuttles provided by the private sector that bring employees to and from the transit station during the AM and PM peak-hours. In order to achieve a non-SOV mode split of 15% for the Merrifield Suburban Center, additional transit services/facilities will need to be provided such as a peak-hour shuttle bus service from residential areas as well as to the commercial and institutional developments within the Merrifield Suburban Center. In order to ensure that the mode split is met, the County should evaluate providing/coordinating a shuttle service in conjunction with the private sector. Finally, the provision of additional rail service to Merrifield over the long-term may be appropriate. Several concepts/alignments have been considered that would serve the I-495 Beltway Corridor and the Merrifield area. If rail is provided in Gallows Road within the Suburban Center, stations would be more urban in character and would not likely provide parking, corresponding with the planned higher intensity development.

PEDESTRIAN AND BICYCLE CIRCULATION

Pedestrian and bicycle travel constitutes other forms of circulation in the Merrifield Suburban Center, providing access between employment, commercial, and residential uses. Utilization of pedestrian and bicycle modes could provide benefits in reducing traffic congestion. The pedestrian and bicycle circulation systems should serve existing and future developments and allow adequate protection for pedestrian crossing at intersections. These systems should provide routes that are safe, convenient, and pleasurable to travel. Well-designed and clearly marked trails should be provided in the Merrifield Suburban Center. Since vehicular traffic may affect pedestrian safety, pedestrian improvements such as crosswalks, signals, overpasses and refuge islands should be provided. In addition, future office developments should be encouraged to provide bicycle racks and shower facilities. See Urban Design Section for additional pedestrian and open space guidance.

PUBLIC FACILITIES/INFRASTRUCTURE

The need for public facilities and services fluctuates as the demographics and development of an area change, as old facilities become obsolete, and as public expectations of service levels rise or decrease. However, in most cases, existing public facilities located in and around the Merrifield Suburban Center have adequate capacity to accommodate planned growth, although certain facilities will need expansions or modifications to continue providing adequate service. Public facilities that are identified as future needs in the Merrifield Suburban Center will require a 2232 Review public hearing before the County Planning Commission prior to being established, unless these are specifically identified in the Plan text. Those facilities, where a specific location for future construction has been identified in the Plan, may be considered a feature of the Comprehensive Plan upon review by the Director of Planning and Zoning and concurrence by the Planning Commission. If a "feature shown" determination is made, these projects may not require a 2232 Review public hearing. The existing and future public facilities and infrastructure in the Merrifield Suburban Center are described below.

FIRE AND RESCUE

The Merrifield Fire Station is the primary station that serves the Merrifield Suburban Center. This existing facility, along with four other stations (i.e., Dunn Loring, Jefferson, Guinea Road and Annandale) currently provide sufficient coverage to the area, and have adequate capacity to accommodate planned growth.

LIBRARY

The Thomas Jefferson Community Library and the Tysons-Pimmit Regional Library currently serve the Merrifield Suburban Center. Both libraries are planned for expansion to serve growth within this area of the County. These expansions will meet the County's library level of service standards with no additional facilities being anticipated. However, since the approach or need for library services may change, the Plan provides flexibility for a future library, as well as flexibility for other public facilities under the "Area-Wide Recommendations, Land Use Guidelines." Under these guidelines, a library may occur as an "Alternative Land Use within Mixed-Use Option Areas" or as an "Alternative Land Use within the Remainder of the Merrifield Suburban Center," provided the facility is compatible with the planned uses in terms of scale and character, as specified under the specific sub-unit recommendations.

PARKS AND RECREATION FACILITIES

Existing public park and recreation facilities are very limited in the Merrifield Suburban Center, with the Providence Recreation Center and the ball fields at Luther Jackson Intermediate School being the only facilities. Other nearby public park facilities that serve some of the park needs for the Suburban Center include Jefferson District Park and Pine Ridge School Site. Natural resource areas within and adjacent to the Merrifield Suburban Center include Holmes Run Stream Valley and Long Branch Stream Valley tributaries which are mostly preserved in private or public open space.

In order to meet park and recreation needs within the Merrifield Suburban Center, recreation facilities should be provided as part of new residential development with on-site facilities. Contributions should be made by both new residential and non-residential development for off-site public park facilities that serve the Merrifield Suburban Center. In addition, consideration should be given to creating public neighborhood parks within the suburban center as indicated under the Land Unit Recommendations section. Other open space amenities should be provided

as part of the pedestrian system by incorporating urban parks such as pocket parks, plazas and courtyards. These urban parks are limited in size and may include exercise stations and open areas with benches. See the Urban Design Section of the Area-Wide Recommendations for more guidance on open space amenities.

POLICE

The Mason and McLean District Police Substations provide police service within the Merrifield Suburban Center. As growth occurs within the areas covered by these substations, additional police facilities may be needed. In order to address the potential need, the Plan provides flexibility for future police facilities under the "Area-Wide Recommendations, Land Use Guidelines." Under these guidelines, a police facility may occur as an "Alternative Land Use within Mixed-Use Option Areas" or as an "Alternative Land Use within the Remainder of the Merrifield Suburban Center," provided the facility is compatible with the planned uses in terms of scale and character, as specified under the specific sub-unit recommendations.

SCHOOLS

There are several elementary schools that serve the Merrifield Suburban Center, which include Shrevewood, Fairhill, Pine Spring, Camelot, Graham Road, Mantua, Stenwood, and Westlawn. The intermediate schools that serve this area include Luther Jackson, Kilmer and Frost, and the high schools that serve this area include Marshall, Falls Church and Woodson. In order to address enrollment increases within the service areas of these schools, some of these schools are planned for expansion. The planned expansion of these school facilities is anticipated to be able to support the planned growth within the Merrifield Suburban Center.

SANITARY SEWER

The Merrifield Suburban Center includes two sewer sheds: the Cameron Run and Accotink Sewer Sheds. In order to implement the Plan, additional sewer capacity will be needed and will primarily be accommodated by replacing some sewer lines along Holmes Run in the Cameron Run Sewer Shed and along Long Branch (near Route 29) in the Accotink Sewer Shed. Many of these lines are currently planned for replacement due to age and size. As development occurs, additional lines may be identified for replacement in order to accommodate the planned growth.

WATER

The Fairfax County Water Authority provides water service to the area south of Route 50 and the City of Falls Church provides water service to the area north of Route 50. With planned infrastructure improvements, such as additional storage tanks and pumping stations, the planned growth within the Merrifield Suburban Center can be accommodated.

STORM WATER MANAGEMENT

The Merrifield Suburban Center is located within two drainage sheds: Accotink and Cameron Run. There are existing storm water management facilities in the Merrifield Suburban Center such as the regional ponds at Willow Oaks Corporate Park and at Fairview Park, as well as several dry ponds. As development (i.e., new development, redevelopment and building expansions) occurs in the Merrifield Suburban Center, storm water management and Best Management Practices (BMPs) will need not only to meet on-site requirements, but also to help alleviate existing downstream drainage issues that are identified during the development review process.