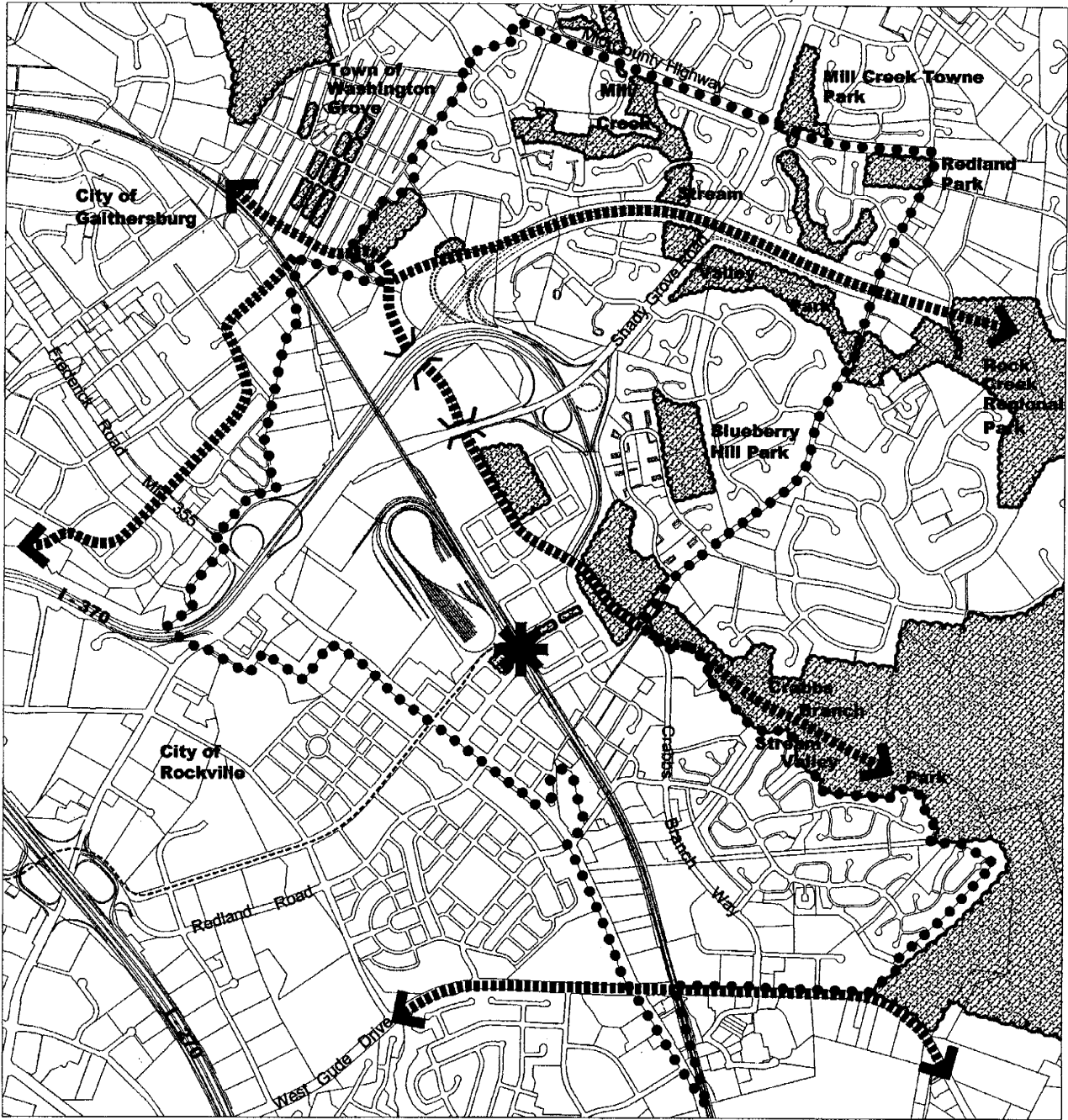


Park, Trail, and Open Space Concept



- ▬▬▬▬▬▬▬ Countywide Trails
- ▨ Public Park System
- ★ Urban Parks at Metro
- Shady Grove Sector Plan Boundary
- Corridor Cities Transitway



0 2200'

that traverses this portion of the county. The greenway is intended to link the Potomac and Patuxent Rivers and this Plan seeks to find local connections to this regional system.

Concept

This Plan retains existing parks and expands recreation opportunities by creating new neighborhood, local, and nature-oriented parks along Crabbs Branch Way within the Buffer Area. This linear network will also be connected to the cross-County trail that links to destinations beyond the planning area such as Upper Rock Creek Regional Park. In addition, a series of urban parks is proposed to provide needed open space within the Metro Neighborhoods (see Park, Trail and Open Space Concept).

The *Countywide Park and Trails Plan* and the *PROS Plan* both identify basic goals for the County's trail system, including making connections, offering variety, and balancing recreation, transportation, and environmental efforts. The planning area abuts the Crabbs Branch Stream Valley Park, which may have some trail potential. This Plan identifies path and trail opportunities throughout the planning area in the parks and through the communities with the goal of connecting neighborhoods to parks, shopping, and the Metro.

Recommendations (See Existing and Proposed Parks and Open Space)

Provide Recreational Opportunities in Existing Parks

- Site 1 - Preserve Blueberry Hill Park as a recreation park. Provide additional passive recreational facilities in the wooded portions including trails, picnic facilities, seating areas, and improved pathways to surrounding communities.
- Site 2 - Maintain the existing active recreational uses at Redland Road Local Park.

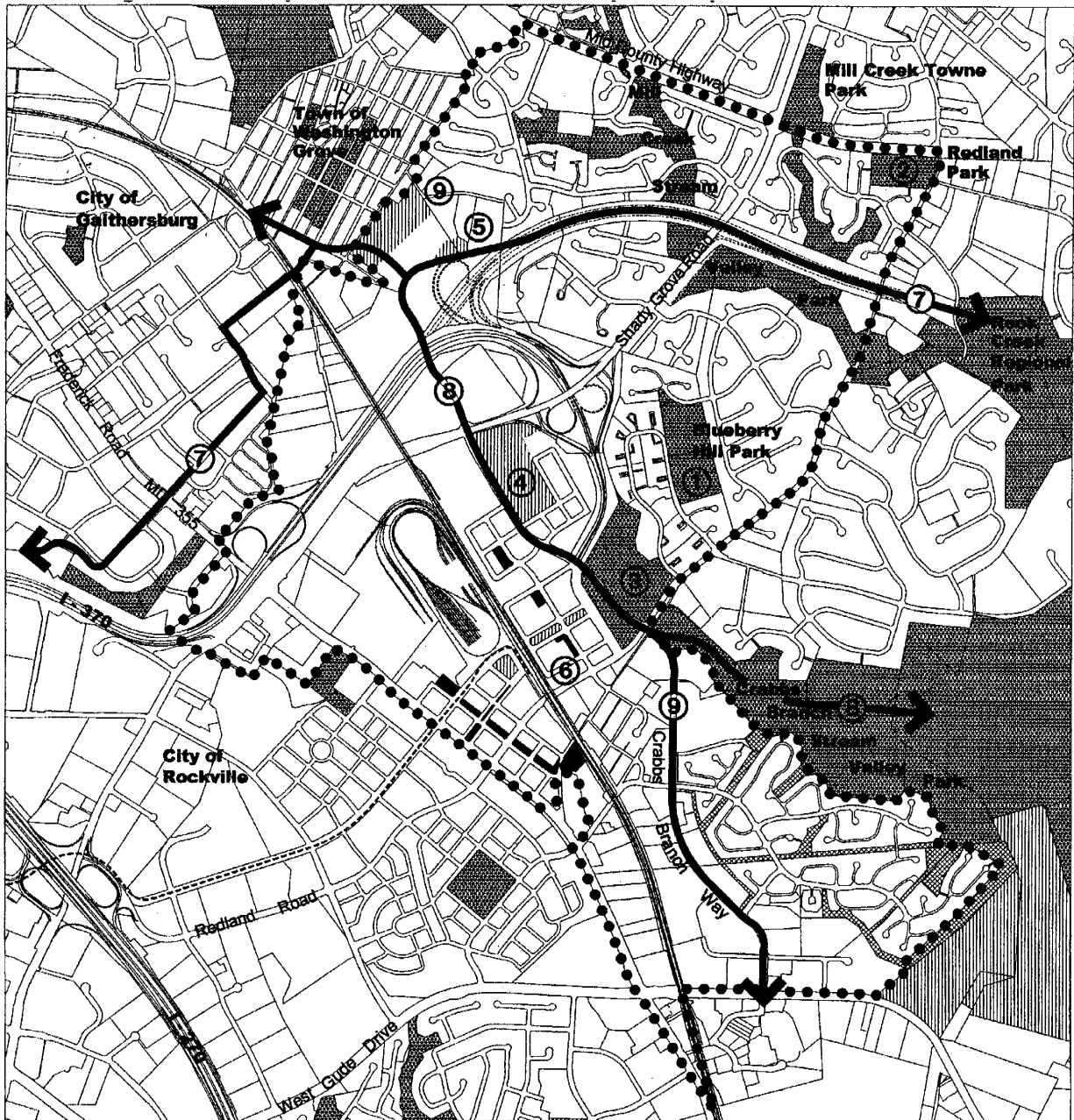
Provide Recreational Opportunities in New Parks


- Site 3 - Provide passive recreation at the stormwater management pond, including trails, interpretive material, seating and picnic facilities. Provide a high point viewing station and consider a fountain in the pond. Connect trails to the Metro station and to surrounding communities.
- Site 4 - Create a 20-acre local park in the Buffer Area, called Jeremiah Park after Derwood's founder. This park should offer active recreational uses including ballfields, such as football, soccer and lacrosse, tennis courts, and multi-age recreation as well as area for a potential library, aquatic center, or elementary school. If this site is not available for a local park, then an alternative site must be found.
- Site 5 - Create a neighborhood park north of the ICC in the Amity Drive area to provide nature-oriented recreation. Active recreation facilities will be located at the proposed elementary school.
- Site 6 - Create Town Square and Town Common parks in the Metro Neighborhoods that offer paved pathways, seating areas, special plantings, shade trees, and public art (See Urban Park Networks).
- Provide neighborhood recreation and public use space in each Metro Neighborhood to provide local recreation opportunities that supplement County parks. Facilities can range from simple seating areas and tot lots in the Promenades to basketball courts and rooftop swimming pools.

Provide Trail Corridors

- Trail 7 - Explore the potential for using sidewalks and a natural surface trail in the Mill Creek Stream Valley Park to provide an east-west greenway connection recommended in the *Countywide Park Trails Plan*.
- Trail 8 - Explore opportunities for a trail connection from Crabbs Branch Stream Valley Park to Rock Creek Park, or an alternative connection via Indianola Drive.
- Extend the bike route along Crabbs Branch Way through the proposed development at Casey at Mill Creek to connect with Washington Grove's bikeway system (see Proposed Bikeways).

Existing and Proposed Parks and Open Space



-  Existing Public Parks and Open Space
-  Existing Private Open Space
-  Proposed Public Parks and Open Space
-  Proposed Public Use Open Space
-  Countywide Trails
-  Shady Grove Sector Plan Boundary
-  Corridor Cities Transitway



Trail 9 - Provide bikeway access to the Rockville Bicycle Beltway that will eventually connect to Rock Creek Regional Park.

- Retrofit existing residential neighborhoods with pedestrian trail connections that will link communities with each other and with community destinations.
- Design the new residential communities with path and trail connections to park and transit facilities.
- Develop all local parks with internal trails to improve access to all users including handicapped users.

Protect historic, cultural, and archeological features

Site 10 - Protect as much of the 13-acre Ridge Road Meadow property as possible through the development review process, balancing site constraints and developer interests. It has been identified as a Class II Heritage Resource site in the *Legacy Open Space Functional Plan* and provides a historic setting and open space buffer for Washington Grove. It should offer passive recreational opportunities including trails and nature observation. As much as possible of the meadow should eventually be acquired through dedication.

Schools

Adequate public schools are a foundation of healthy communities. The Plan recognizes that schools also help define communities. In addition to student instruction, they offer community meeting rooms, outdoor recreation facilities, and host a variety of after-school programs. This Plan's role is to identify appropriate sites for schools needed to serve existing and proposed communities. Proposed residential development at the Metro station area and in surrounding areas will generate an increase in the student population that will require a new elementary school and a portion of a high school.

The increase in the student population created by development proposed in this Sector Plan, coupled with the projected increases in Rockville and Gaithersburg, cannot be absorbed into the existing clusters. Three high school clusters serve the planning area: Gaithersburg, Magruder, and Richard Montgomery. The three high schools are currently operating at capacity and are projected to continue to increase in enrollment, according to the MCPS ***FY2004 Educational Facilities Master Plan***.

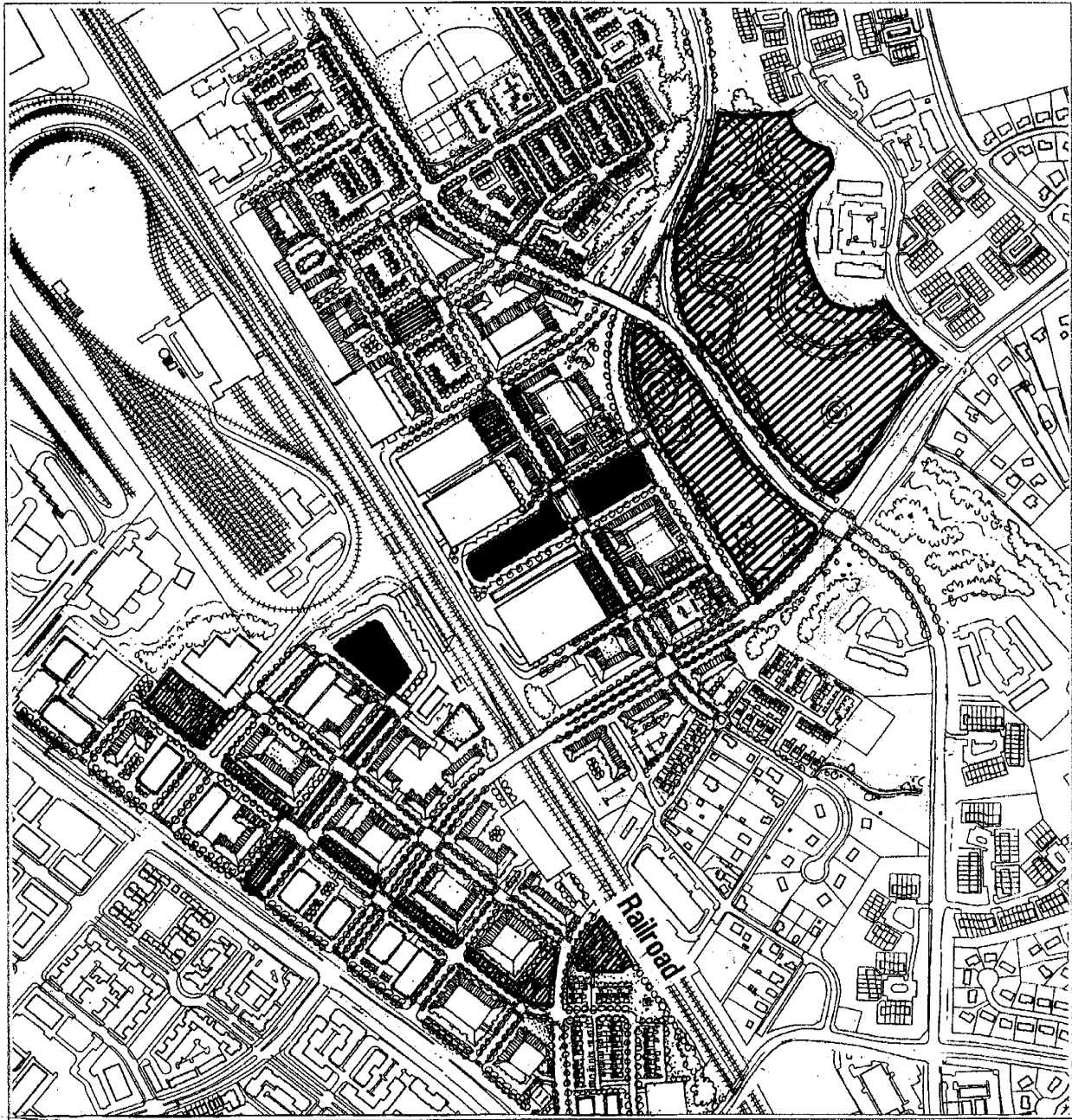
This Plan recommends one elementary school site to meet projected needs for the planning area. The site lies adjacent to the Mill Creek South community along Amity Drive just southeast of the Town of Washington Grove. The additional middle and high schools will need to be provided outside the planning area. Potential sites are available and will be identified by the *Gaithersburg Vicinity Master Plan*. This Plan recommends:




- Designating the Casey at Mill Creek South property for an elementary school.
- Designing the elementary school's layout to encourage walking as well as accommodate school buses and parking areas. Provide walkway connections from all sides of the surrounding community.
- Designing the school's architecture as a civic structure that enhances and complements the surrounding community.
- Recommending a new high school cluster to serve the growing residential areas in the County and municipalities, and alleviate school crowding.

County Service Park

The County Service Park provides a variety of services that meet needs beyond the planning area. Facilities include the M-NCPPC park maintenance, DPWT's Ride-On bus depot and general maintenance facilities, the Department of Liquor Control's distribution center, and the MCPS bus depot and maintenance facilities, along with its food and nutrition services.

Urban Park Network



-  Urban Park
-  Passive Nature Park
-  Public Use Park



NOT TO SCALE

Recreation Opportunities

Relocating these facilities is a significant challenge. They are centrally located with direct access to I-370 but within walking distance of the Metro station. Relocation will also require public sector commitment and private sector assistance in the form of partnerships, land exchange, and other innovative approaches. Relocating these facilities should not result in diminished or compromised county services. Relocation costs should be minimized using a variety of techniques such as private sector proposals to relocate services and exchange properties. This Plan recommends:

- Exploring the potential for gradually relocating sites for some of the facilities in the County Service Park to permit more appropriate mixed-use residential development adjacent to the Metro station.

Library Services

A new library in the planning area at the corner of Crabbs Branch Way and Shady Grove Road, adjacent to the proposed local park, would create an opportunity to share parking and increase convenience for residents. A library at this corner is within walking distance of the Metro and retail shopping at The Grove. The corner site offers an opportunity to provide a civic structure on a highly visible site, improving the overall character of the Shady Grove Road Corridor. This Plan recommends:

- Supporting a new library at the corner of Crabbs Branch Way and Shady Grove Road. Consider relocating the 40,000 square foot library now proposed for the Laytonia Recreational Park to the redeveloped school bus depot site where it would provide a community focal point and be accessible to more users via Metro.
- Designing a multi-level building with structured parking, to more efficiently use limited land and increase available parkland. A two-story library with a larger first floor, between 20,000 and 30,000 square feet, and a smaller second floor would provide design flexibility for the Library Department.

Aquatic Facility/Community Center

A County aquatic facility or community recreation center within the Metro Neighborhood area would serve the community by providing year round recreation. The site at the southwest corner of Crabbs Branch Way and Shady Grove Road would require relocating the Department of Liquor Control's Distribution Center, but also offers an opportunity to develop a highly visible civic building that contributes to the Shady Grove Road Corridor's overall character. This Plan recommends:

- Coordinating with the Department of Recreation to explore potential need and sites for a community center or aquatic center. Consider the Liquor Control Board's site as a potential location or the potential library site.
- Designing a multi-level building with structured parking to more efficiently use limited land.

Fire and Rescue

The Montgomery County Fire and Rescue Service (MCFRS) has determined that a future service station is desired in the Shady Grove and Gaithersburg and Vicinity planning areas. There are no fire stations between Station 3 in Rockville and Station 8 in Montgomery Village. MCFRS envisions a facility that would house fire, rescue, and Emergency Medical Service (EMS) units, the County Bomb Squad, and other specialized units.

The Casey property 3 provides an opportunity to locate a future MCFRS service station. A station at this location would provide easy access to MD 355, I-270, and Shady Grove Road, as well as the service areas of Rockville and Gaithersburg. The environmental constraints of this site further provide the opportunity to create a passive park while protecting the existing stream and wetlands. This Plan recommends:

- As an alternative to technology or research and development uses on this site, a public fire and rescue station, approximately six to seven acres, would be appropriate to serve the immediate and surrounding areas.

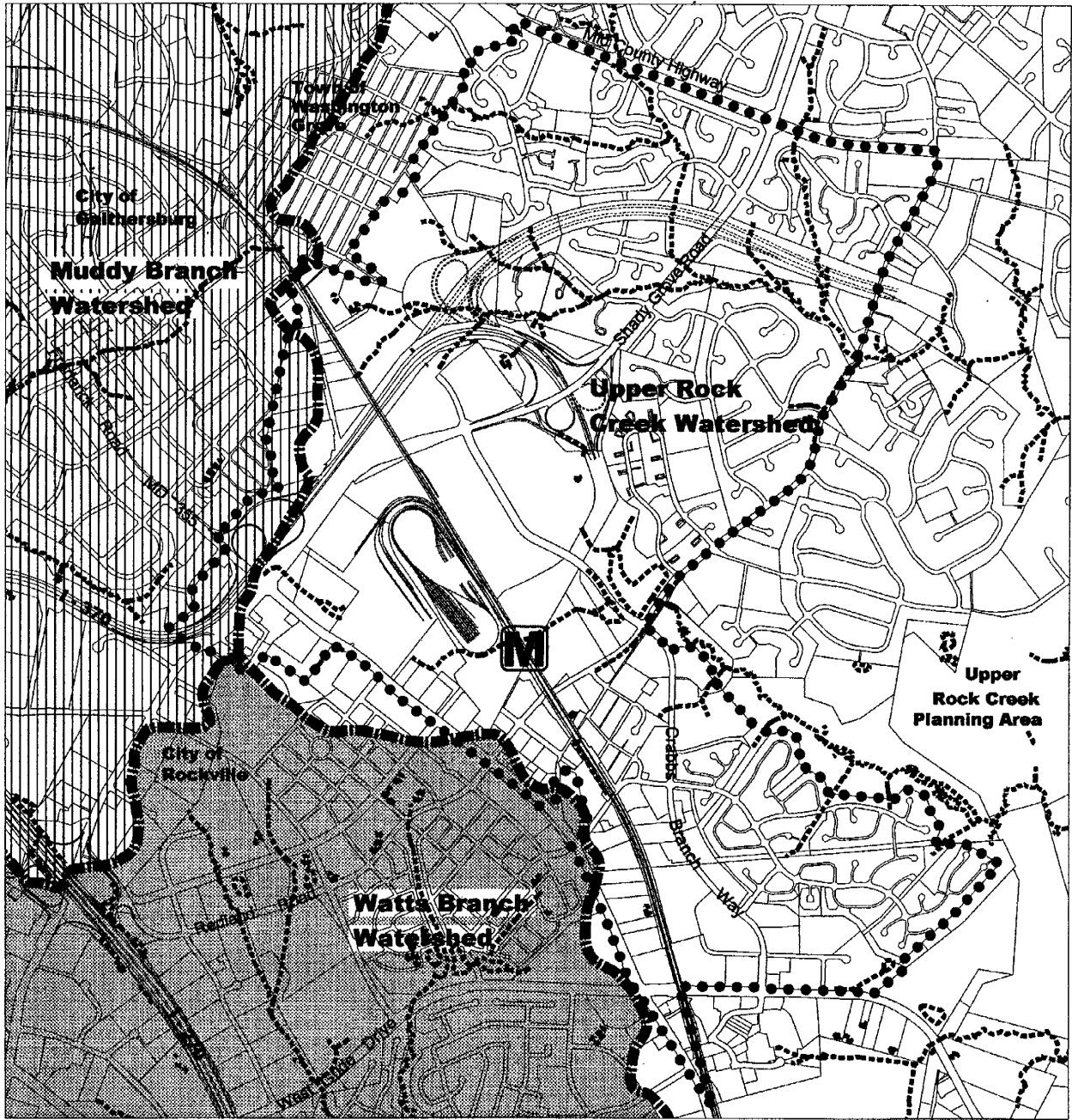
Senior Services and Day Care







As the planning area changes there will be an increased need for social services, especially child daycare. Services such as elderly day care, teen programs, child daycare, and recreation should be provided in convenient locations.

Currently, the planning area is served by three private child daycare facilities. One is located at the west side of the Metro station, one in The Grove shopping center, and one in the Oakmont Industrial Park. The need for such child daycare is also evidenced by the demand that the other daycare facilities experience in their waiting lists. This Plan recommends:

- Redeveloping the existing day care located on WMATA property into the new Metro West neighborhood.
- Providing a new day care facility located on WMATA property within the Metro East neighborhood.

Watersheds



-  Upper Rock Creek Watershed
-  Muddy Branch Watershed
-  Watts Branch Watershed
-  Watershed Boundaries
-  Shady Grove Sector Plan Boundary
-  Streams and Ponds



AREA WIDE ELEMENTS

ENVIRONMENTAL SYSTEMS

The planning area is located primarily in the northwestern headwaters of Rock Creek. Residentially developed in the east, the land remains gently rolling woodland with several stream valleys running through it. Earlier planning efforts have established a series of stream valley conservation parks primarily within the residential areas.

In the planning area's western portion, industrial and commercial land uses have significantly affected natural environment. The Sector Plan seeks to guide development of the Shady Grove Metro area as it changes from a light industrial to a mixed-use, transit-oriented community. This major land use change creates opportunities to improve the environmental setting while recognizing the transportation and overall environmental benefits of locating residential development within walking distance to the Metro.

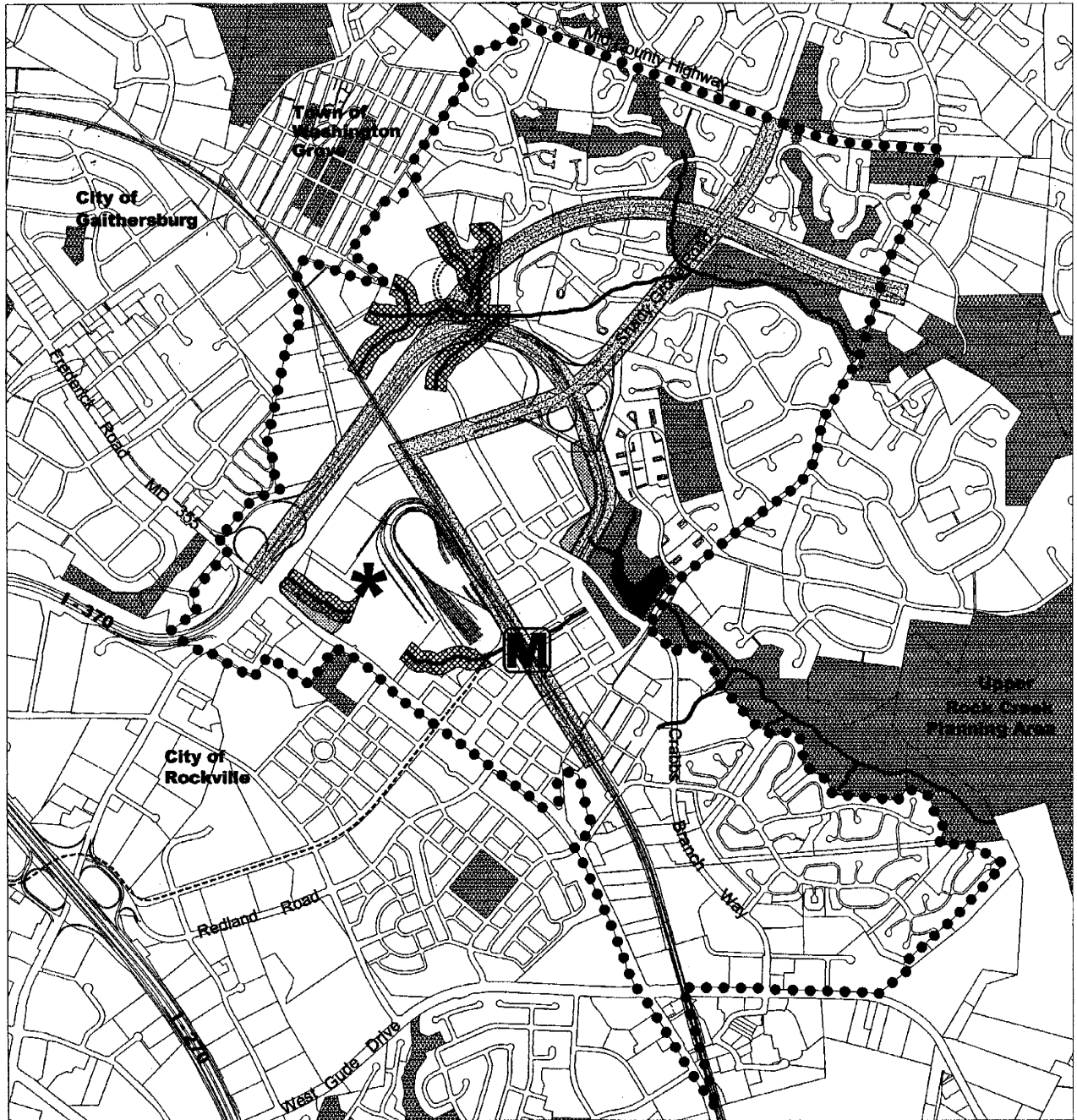
Objectives









- Create a green network of urban parks, recreation parks, linear promenades, and tree-lined streets within the mixed-use communities in the Metro station area to complement the network of natural areas.
- Retain existing green infrastructure and remaining forest cover, and expand the network of natural areas to improve water quality and habitat conditions.
- Protect remaining high quality wetlands and adjoining habitats and improve degraded wetlands by reducing impervious areas and increasing parkland within the Metro Neighborhoods.
- Improve water quality by protecting streams and wetlands and by implementing innovative environmental policies and practices.
- Recommend innovative solutions such as green roofs, green buildings and low-impact development (LID) technologies as well as collective off-site stormwater retrofit and stream restoration measures that enhance natural systems.
- Mitigate negative environmental impacts, such as noise created by transportation and industrial uses, on existing and future residential communities. Where possible, provide land uses and landscape features that shield residential uses from transportation and industrial noise impacts.
- Develop strategies to reduce air pollution and odors. Mitigate adverse environmental impacts on air quality.

Concept

Environmental quality is an important component of quality of life, but more so in intensively developed areas affected by the noise, air quality, temperature, and glare that can result from the built environment. This Plan seeks to create a greener community, protecting and restoring existing wetlands and stream valleys while expanding parklands and extensively landscaping the built environment. This plan strives to accommodate a mixed-use community while maintaining and improving the environmental integrity of the area's forest resources, water quality and stormwater quality management, and noise and air environments.

Environmental Protection and Restoration Concept



-  Noise Mitigation
 -  Environmental Buffers
 -  Forest Reserve
 -  Streams
 -  Parkland
 -  Odor Control Initiatives
 -  Shady Grove Sector Plan Boundary
 -  Corridor Cities Transitway
- Note: Buffers not to scale



Forest Conservation

The green infrastructure of the Crabbs Branch stream valley of Rock Creek has been significantly modified by development. The proposed mixed-use community with new parkland provides an opportunity to restore portions of the system to more natural conditions. Zoning requirements and urban forest conservation standards will create landscaping and tree planting opportunities in the planning area as part of the redevelopment process.

The County's Forest Conservation Law requires that forest and tree conservation be an integral part of all development projects. Forest conservation measures include avoiding or minimizing tree clearing and replacing removed trees. A major focus of the legislation is to retain or plant trees in priority environmental areas such as stream buffers. When this is not possible, required planting may be done off-site but preferably in the same watershed. Payment to a County fund for reforestation projects is acceptable in lieu of planting, as a last resort.

The Forest Conservation Law also requires that 15 percent of any development site be replanted in forest (an area 10,000 square feet or more and 50 feet or more wide, or an area planted at a density of 200 trees per acre). While waivers may be granted to allow tree cover to be used as forest on any site, this Plan recommends that requirements be fulfilled off-site in the Crabbs Branch watershed in forest reserve areas that will be set aside for this purpose. This Plan recommends:

- Integrating compliance with the Forest Conservation Law at the earliest stages of the development process.
- Enhancing the natural environment in Shady Grove by creating green open space as part of landscaping and forest conservation requirements.
- Encouraging the State Highway Administration to use some of their off-site planting requirements in the Shady Grove planning area, specifically in the I-370 right-of-way, and permit others to reforest this area as well.
- Designating forest reserve areas within the planning area to facilitate off-site reforestation requirements (see Environmental Protection and Restoration Areas). Forest reserve is recommended in three areas:
 - A significant forest buffer along the Metro access road when the park maintenance and school bus depot facilities are relocated. The need to achieve a significant buffer may be limited by the need to develop this area with housing units within walking distance of Metro.
 - The environmental buffer along each side of the stream on the Casey 3 site. If additional area is needed, expand the planting area to include the remainder of the property between the stream and MD 355.
 - The environmental buffer along each side of the stream immediately south of the Solid Waste Transfer Station. Retain as much additional forest as possible in the area adjoining the buffer while accommodating the need for a potential WMATA parking garage.

Water Quality and Stormwater Management

The planning area is located primarily in the Upper Rock Creek Watershed and straddles three subwatersheds. Land in the Upper Rock Creek Watershed is designated as Use IV, suitable for the support of a put-and-take trout population. While streams within the planning area do not support trout, downstream areas in Rock Creek Park do and the maintenance of the planning area's water quality is essential to keeping downstream conditions viable.

The stormwater management ponds on either side of Crabbs Branch Way at Needwood Road currently mitigate some impacts from upstream imperviousness and have adequate capacity for anticipated flood and erosion impacts from redevelopment of the Metro station area. Any new development or redevelopment will require improvements to water quality on each site as it develops, in conformance

with the County's stormwater management requirements. Low-impact development techniques would be useful in attaining improvements to water quality, and their application is encouraged.

Redevelopment of the planning area also presents opportunities for stream restoration work in the Metro station area. These efforts should be coordinated with the Montgomery County Department of Environmental Protection's recently completed *Rock Creek Watershed Feasibility Study* (2001). This Plan recommends:

- Reforesting the buffers along the Use IV tributary of Upper Rock Creek, on Casey Property 3.
- Protecting the stream buffer and retain as much additional forest as possible where this stream resurfaces east of the Solid Waste Transfer Station.
- When the park maintenance facility and MCPS bus depot are relocated to accommodate residential development, recreate the stream that formerly ran west of the existing Metro access roadway.
- Increasing landscaping wherever feasible, and encourage the use of low-impact development techniques, green roofs, parking lot planting, and other initiatives to address stormwater quality without occupying land needed for development.
- Designing the passive recreation area at the stormwater management ponds to preserve the ponds' and reforestation areas environmental functions. Work with the County Department of Environmental Protection.

Wetlands

There are about 40 acres of wetlands in and immediately adjacent to the planning area. Some are on privately owned land north of I-370, near the intersection of Shady Grove Road and MD 355, and within the ICC right-of-way. The remaining wetlands are in parkland at Crabbs Branch and Rock Creek. This Plan recommends:

- Protecting high quality wetlands by maintaining or managing the land and adjoining habitats as natural areas. Intrusions into these natural areas by man-made features, including paved paths or trails, should be avoided as much as possible.
- Wetlands and associated buffers on developable or re-developable properties, at a minimum as defined in the *Environmental Guidelines*, should be protected through the application of conservation easements or through public ownership as parkland.
- Do not use natural wetlands as controls for stormwater runoff from developed land.
- Compiling a detailed inventory of the planning area's degraded wetlands and identify opportunities for restoration and enhancement.
- Mitigating the unavoidable wetland impacts of development with programs such as publicly funded stream restoration projects, volunteer projects, or developer funded off-site improvements.

Noise

Excessive noise has a significant effect on the quality of life in any community, and particularly in Shady Grove, which has significant noise volumes from several sources. Shady Grove Road, MD 355, I-370, the CSX Railroad, Metro, and stop-and-go traffic contribute to noise, along with stationary noise sources such as Roberts Oxygen and the Solid Waste Transfer Station. The proposed ICC will be an additional significant noise source.

Montgomery County can mitigate and minimize the noise impact of both stationary and mobile noise sources. The noise ordinance regulates stationary sources such as heating and air conditioning units, construction activity, noise producing land uses, and neighborhood annoyances. The Planning Board uses master plan and regulatory review to implement noise reduction strategies and protect residential properties from mobile sources. Strategies to minimize transportation noise on new development include compatible land uses, buffers, external mitigation techniques, and internal mitigation.