

THE PLAN

PLAN VISION

Communities and neighborhoods are often described as fabrics, a weaving together of places, buildings, people and activities. In a successful community these elements come together as one. Kemp Mill is such a community.

Unlike many other suburban communities, Kemp Mill is a place where most residents can walk to goods, services and amenities. The commercial area is within a short walking distance of the highest density residential development: the high-rise apartments. There are sidewalks in most of the subdivisions so that almost every part of the master plan area can be reached on foot.

Large regional and stream valley parks surround the master plan area. There are numerous paved and unpaved trails within the stream valley parks where one can enjoy the forest and observe wildlife. Kemp Mill Urban Park is a Japanese-style urban park with contemplative sitting areas and a pond full of koi, the ornamental fish that attract much attention from children and adults alike. The neighborhood and local parks provide more active recreational opportunities. Playgrounds for young children and ball fields and courts are found in all the local and neighborhood parks. The housing stock is varied both in style and cost and many of the housing units are affordable. One can find a suitable home to match means and life-style. This characteristic promotes stability since it is possible to move within the area as personal needs change. The intent of this master plan is to insure the future sustainability of this community.

The *Kemp Mill Master Plan* acknowledges the established and stable nature of the neighborhoods that make up Kemp Mill. The Plan contains recommendations that reinforce the unique character of these neighborhoods. The Plan recognizes that a neighborhood commercial center should serve as a focal point or center for the surrounding residential neighborhoods. The goals and recommendations of this Plan reflect the concept of "Community and Center." The Plan reinforces the ordering of residential, commercial, instructional and public uses in ways that continue to create neighborhoods in which people can live, play and shop.

PLAN CONCEPT

The Community and Center land use concept for the Kemp Mill Master Plan has four components: Neighborhoods, Center, Open Spaces and Linkages.

Neighborhoods:

Neighborhoods range in size, density, character and age. Additions to any of the neighborhoods should reflect the character and density of the existing neighborhood.

Center:

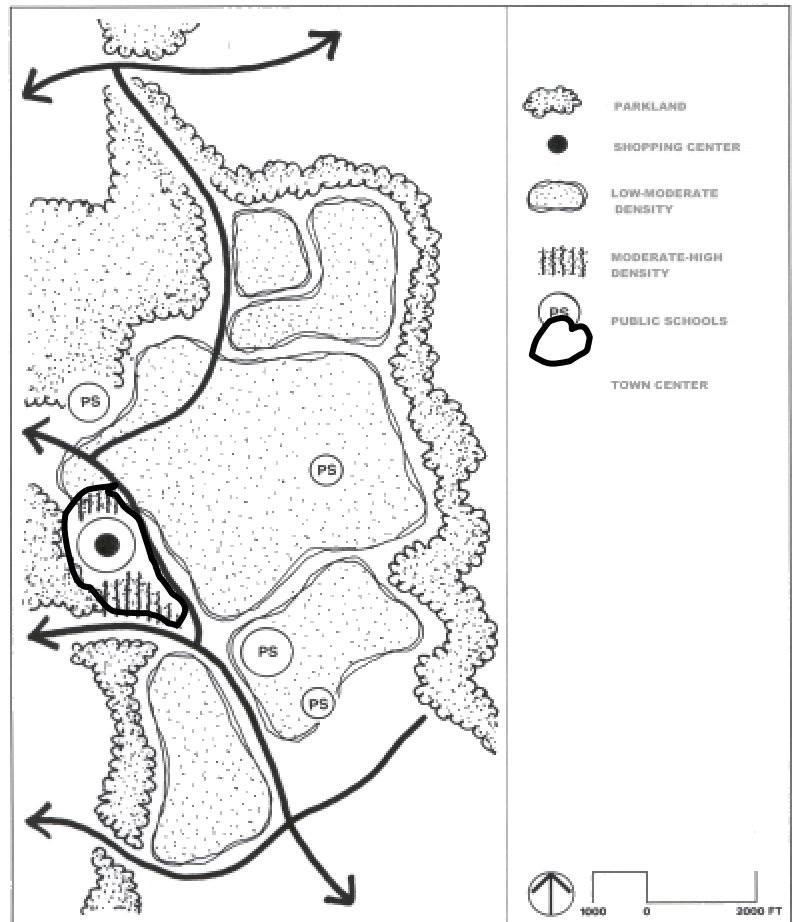
The Center provides local shopping and services. The Kemp Mill Urban Park provides an attractive entryway to the Center.

Open Spaces:

Open spaces surround the Kemp Mill Community.

Linkages:

Linkages connect bikeways, sidewalks, and paths for access between neighborhoods, local facilities and institutions, public facilities and the Town Center.



Plan Concept

LAND USE AND ZONING PLAN

GOAL: Implement the General Plan Refinement goal to “provide for land use patterns and land uses that offer ample opportunity for social interaction and promote a strong sense of community through public and private cooperation.”

COMMUNITY OF NEIGHBORHOODS

The 1967 Plan used neighborhoods to provide a basis for planning local facilities, particularly schools and parks. Figure 3 shows the neighborhoods of the 1967 Plan. The 1993 General Plan Refinement established goals, objectives and strategies to enhance community identity and design, such as: 1) reinforcing each community’s unique character; 2) developing attractive and functional centers; 3) preserving historic, scenic and cultural features; 4) locating public facilities where they can foster a sense of community; and 5) using innovative approaches and regulatory processes to create and maintain attractive and safe communities. The following section describes the neighborhoods in Kemp Mill. These neighborhoods, in conjunction with the goals of the General Plan Refinement and the Smart Growth Initiatives, form the building blocks of the Land Use and Zoning Plans.

Each of the neighborhoods has a distinct character formed by similarities in housing types and separated by local streets. To the north are Kemp Mill Forest and Springbrook Forest. Kemp Mill Forest was built in the 1980s under the cluster method and contains both single-family detached homes and townhouses. Springbrook Forest is one of the oldest neighborhoods and is characterized by very large lots, narrow streets and an abundance of large trees. The Kemp Mill neighborhood is located in the middle of the master plan area and dates to the 1950s and 1960s. The development pattern in this neighborhood is traditional suburban: 6,000 – 9,000 square foot lots with brick houses. Many streets have curbs, gutters and sidewalks. There is an elementary school in the interior and paved path connections to Northwest Branch Park. Sligo Woods, located south of University Boulevard, and Forest Knolls, located east of the Northwood Holding School, are also typical of the suburban development built in the 1950s: brick homes on 6,000-foot lots and a curvilinear street system. Many of the streets have sidewalks and there are paved pathways to the adjoining stream valley parks. On the west side of Arcola Avenue are two high-rise apartment buildings, University Towers and the Warwick Apartments, and a mid-rise apartment building that provides housing for the elderly, Arcola Towers. There is also a townhouse development and a swim club. Just north of the apartments is the Kemp Mill Shopping Center and the Kemp Mill Urban Park that are part of the Kemp Mill Town Center.

One of the problems facing a successful community, especially one that has been in existence for decades, is the concern that something will happen to change the community. Planners, as managers of physical change, try to anticipate where changes might occur. One of the indicators of change planners look for is where there may be development potential. Development potential is defined as unrealized development, or the amount of development that could occur under the current zoning and development regulations.

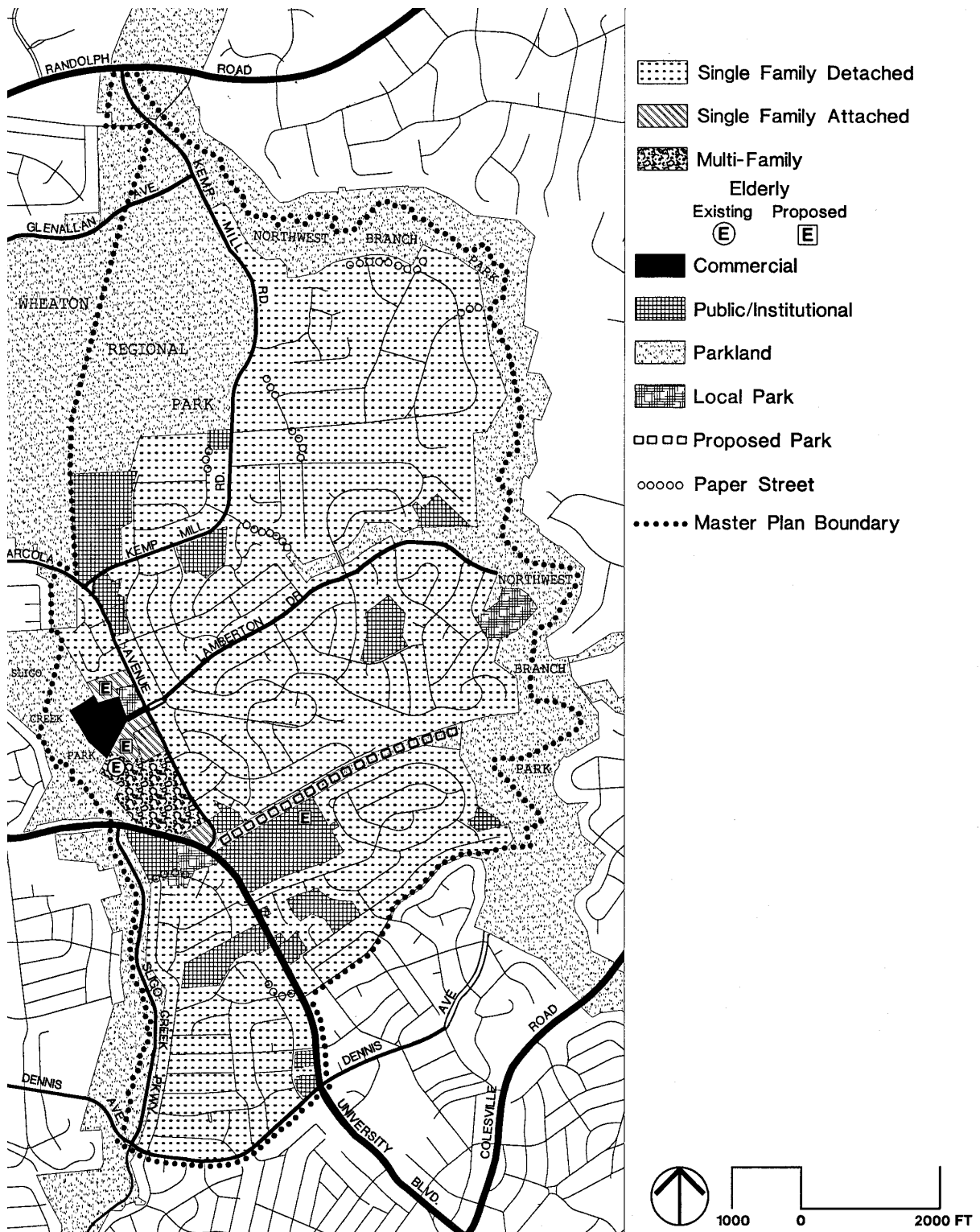
The impetus for development usually relates to the difference between the value of the land, the value of improvements, if any, and the potential for greater value if there were more improvements. Pressure for development is most likely to occur where zoning and land uses are not well matched. For example, the oldest subdivision in Kemp Mill was built prior to community sewer service. The lots were necessarily sized to accommodate septic fields and are in excess of the minimum requirement for the existing zoning. In order to discourage the re-subdivision of lots there must be a better match between zoning and existing lot patterns.

This mismatch exists in the Springbrook Forest subdivision where the lots are in excess of the minimum standards for the R-200 zoning. R-200 zoning requires 20,000 square feet per lot. Most of the lots in the subdivision are more than 40,000 square feet in size. Therefore, each lot could technically be subdivided into two lots under the current standards. Although the Subdivision Regulations (Chapter 49, County Code) governing re-subdivision may limit potential redevelopment, development pressures may occur in the future. This Plan recommends that the zoning within the subdivision be changed to RE-1 to match the existing pattern of one-acre lots. There are two lots that do not contain 40,000 square feet. Under the provisions of the zoning ordinance, the lots that have less than 40,000 square feet would be grandfathered, or exempted from the minimum lot size, since the lots pre-exist the proposed zoning.

An example of underused potential is the property located on the north side of the Kemp Mill Urban Park and the Kemp Mill Shopping Center. The property, identified in the land records as N134, Parcel A, contains 3.85 acres, a portion of which is currently used for a private school. The property is zoned R-60. At some time in the future, the owners may wish to expand the current use or sell the property. The property is located adjacent to the shopping center. The property may be suitable for higher residential density than the existing R-60 zone because it is convenient to services. The property may also be suitable for elderly housing since it is so close to services. The type of housing not well represented in the existing housing mix is townhouse development. This Plan recommends that should the property be considered for redevelopment, it would be suitable for residential townhouse development at a density of six units per acre. This density is comparable to the adjacent single-family homes that are zoned R-60. R-60 density, depending on the method of development, could generate between 4 and 5 units per acre. The maximum number of units that could be generated on the property at a density of 6 units per acre would be 23. The number of potential units is less than 50; therefore, the property is not subject to the Moderately Priced Dwelling Units (MPDU) ordinance and not eligible for bonus densities. This recommendation is not made to encourage redevelopment of the site, but to ensure that the zoning in this area is consistent, compatible and logical given existing development.

A second property, the Parkland Swim Club (identified on Tax Maps as Parcel 273) located on Arcola Avenue, may also redevelop in the future. The zoning on the 3.25-acre property is R-90. Higher density residential zones including townhouses and apartments surround the property. A higher density use, such as elderly housing or townhouses, is suitable for the site given the proximity to services. These uses would be compatible with adjacent development. Townhouse development would add a housing type underrepresented in the housing stock. This Plan recommends that the property be eligible for rezoning to the RT-6 zone. The total number of units on this site, if developed with townhouses at a density of 6 units

Figure 7: Land Use Plan



APPROVED AND ADOPTED KEMP MILL MASTER PLAN

Figure 8: 1967 Arcola Center

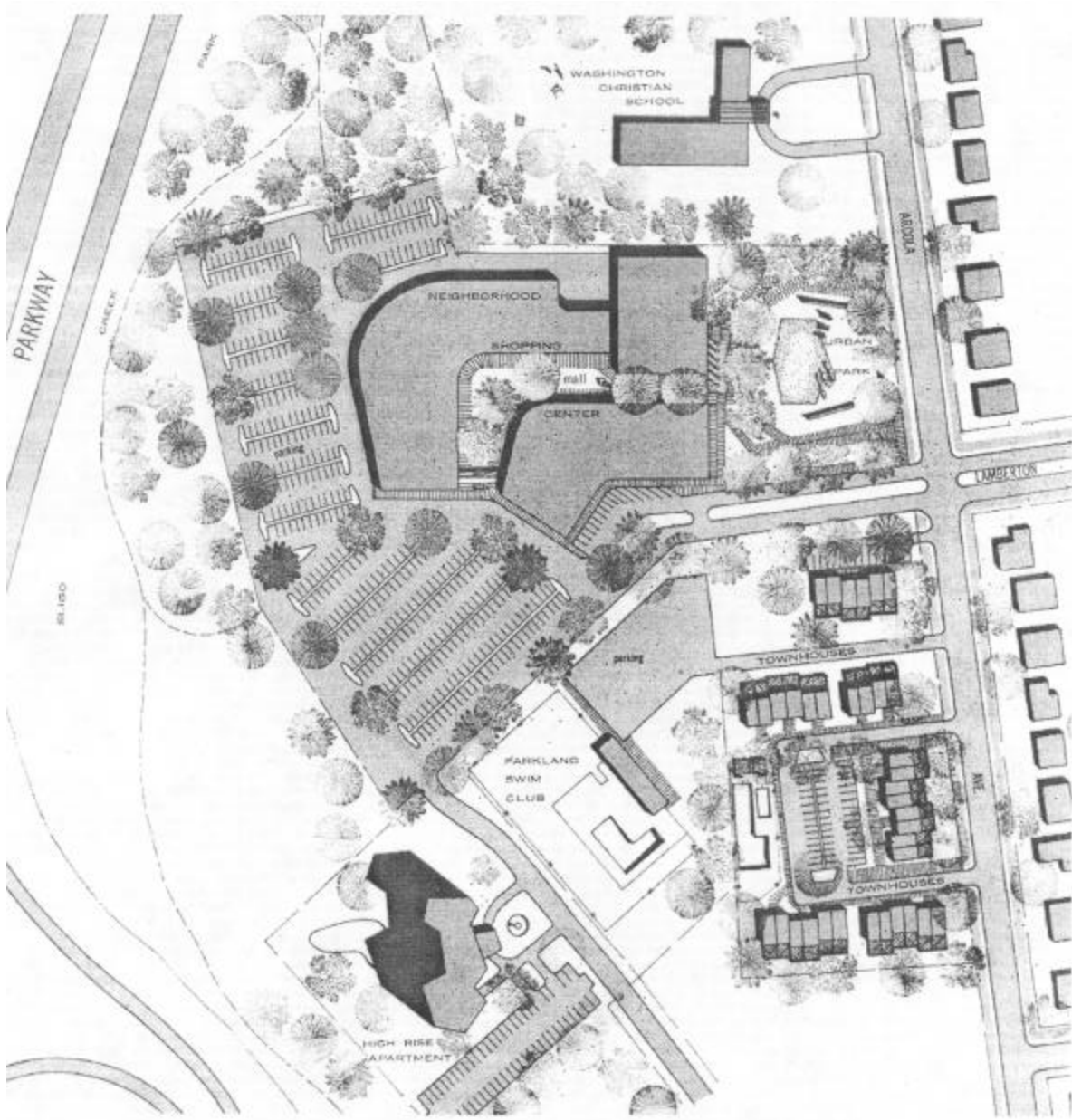
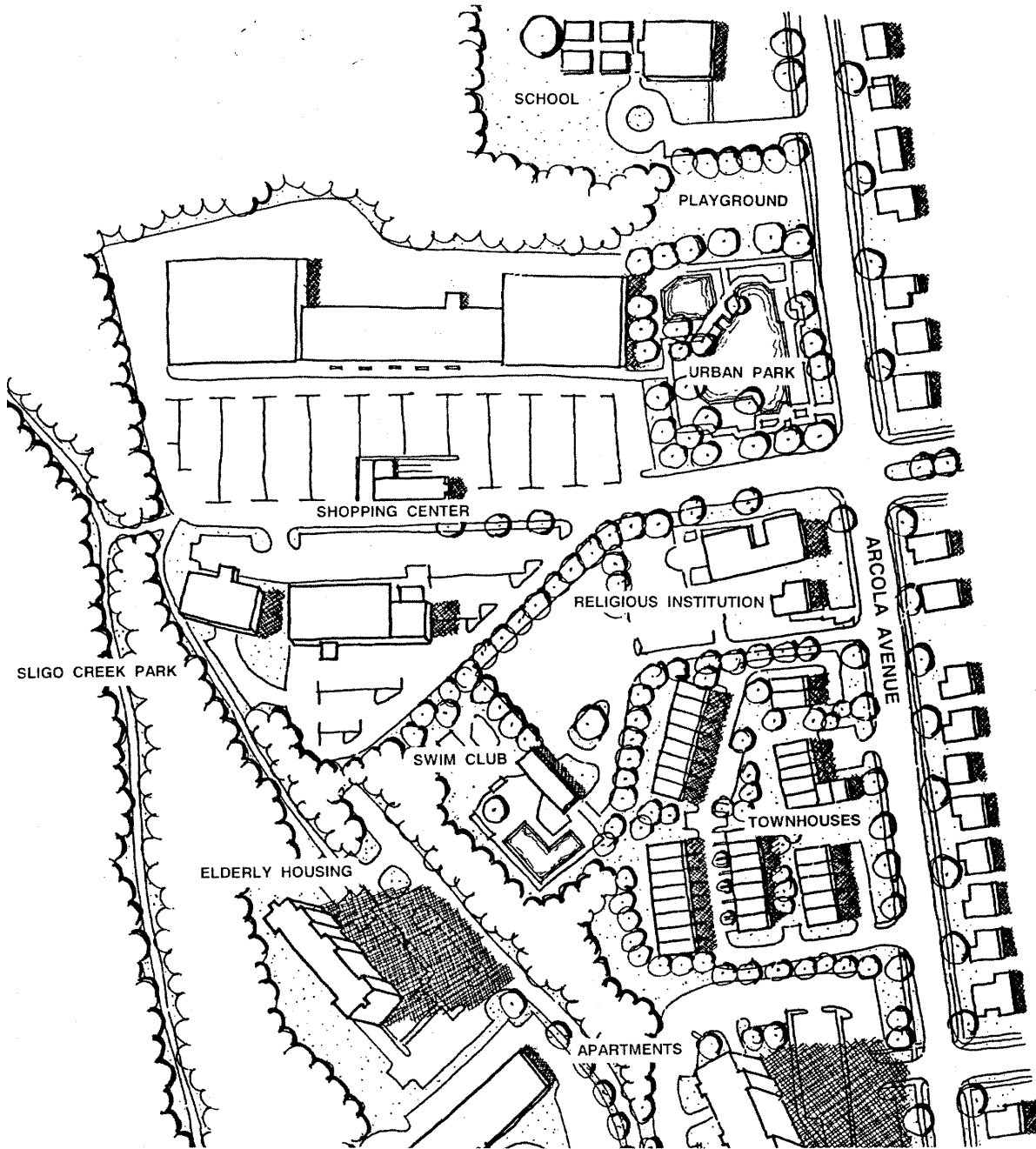


Figure 9: 2001 Kemp Mill Center



per acre, would be 20. If developed with townhouses totaling less than 50, the property would not be subject to the MPDU ordinance and not eligible for bonus densities. This recommendation is not intended to encourage redevelopment or to change the existing use of this site as a swim club. The purpose of this recommendation is to create a zoning pattern that is consistent and compatible.

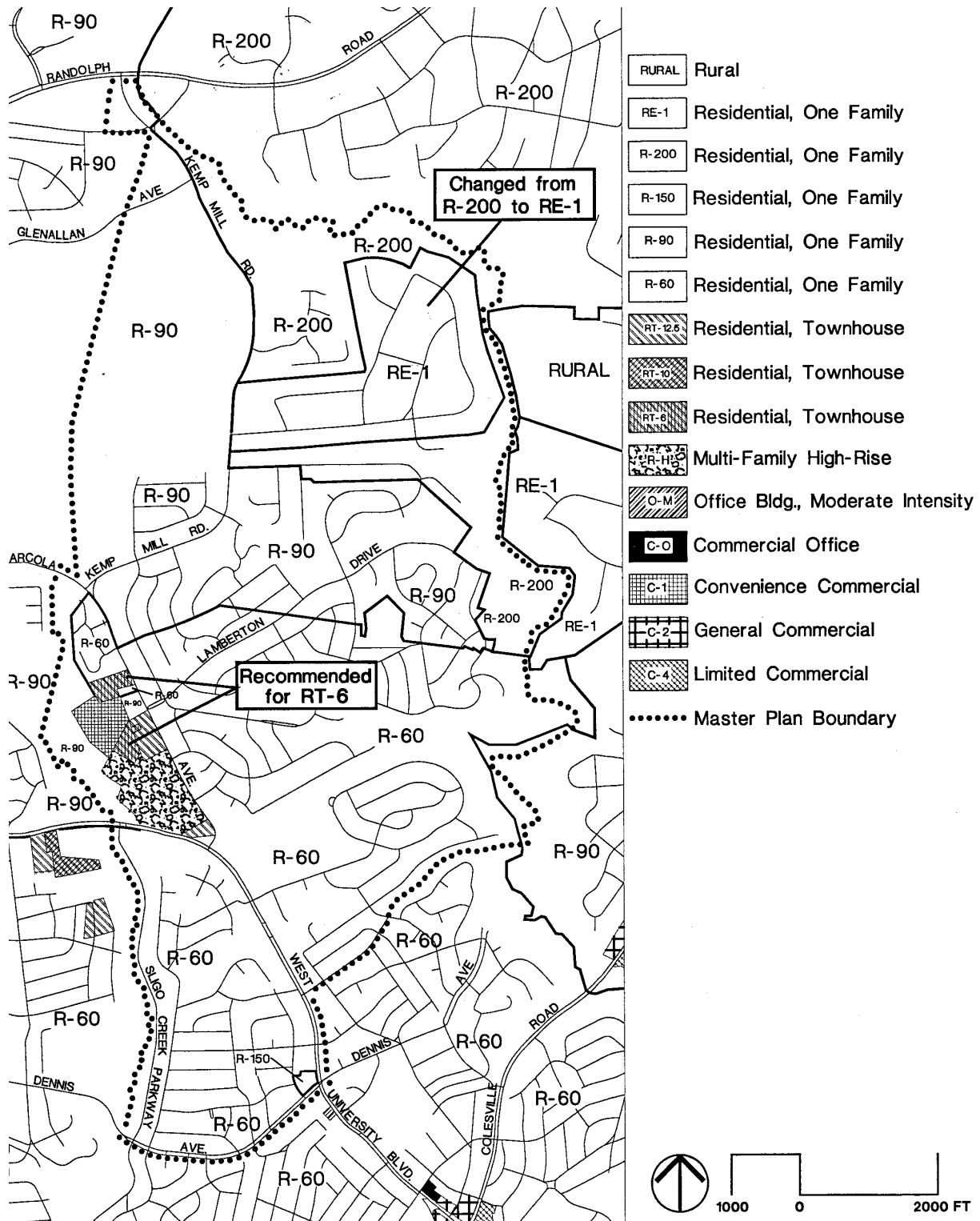
KEMP MILL TOWN CENTER

The commercial activities of the Kemp Mill Shopping Center, the public amenities of the Kemp Mill Urban Park, and the adjacent medium and high-density residential development of townhouses and apartments collectively function as a town center. The commercial development and the urban park were built in the 1960s and eventually will be refurbished or rebuilt at some time in the future. The adjacent residential developments have sidewalks that lead to the shopping center; the paved trail from Sligo Creek Park terminates in the same location. Upon reaching the shopping center, however, there are no paved sidewalks or paths that the pedestrian can safely walk on to reach the stores. When the shopping center redevelops or refurbishes through the development process, paved and safe access to the shopping center from the sidewalk for the apartments and elderly housing development and the paved trail in Sligo Creek should be provided.

Recommendations

- Rezone the Springbrook Forest Subdivision from R-200 to the RE-1 zone.
- Rezone Parcel N134 and Parcel 273 to RT-6 through a Local Map Amendment. For a detailed discussion of implementing the recommendation for townhouse zoning on these two properties, please see the Implementation Section.
- When redevelopment for the Kemp Mill Shopping Center occurs, it should include non-vehicular access through the parking lot from the sidewalk on Arcola Avenue to the trail in Sligo Creek Park. This access should be landscaped and separated from free flowing interior vehicular movements. Pedestrian access to the stores within the shopping center should be improved as well. For a detailed discussion of guiding redevelopment and the development process, please see the Implementation Section.

Figure 10: Zoning Plan



APPROVED AND ADOPTED KEMP MILL MASTER PLAN

TRANSPORTATION NETWORK

GOAL: Provide the residents of Kemp Mill a safe means of getting to facilities and services within their neighborhoods and community while improving regional access.

Kemp Mill is a stable, predominantly residential area with some commercial and institutional uses. Today, the Kemp Mill area is nearly fully developed and no major changes are expected in land use. This stable community is not anticipated to become a future generator of traffic requiring additional transportation capacity to accommodate growth. However, the growth in the surrounding communities will contribute to a slight increase in through traffic in Kemp Mill. The forecasted increase in traffic is not enough to warrant an expansion of roadways or intersections in the foreseeable future.

This plan includes a series of recommendations for safe and efficient use of all modes of transportation. Walking and biking are important forms of transportation in this community. Most residents tend to walk to local shopping centers, religious institutions or visit friends in the surrounding neighborhoods. Most local streets and highways are pedestrian friendly and provide good walkway connectivity. Recommendations in this plan are primarily aimed at improving safe pedestrian and bicycle access.

NETWORK ANALYSIS

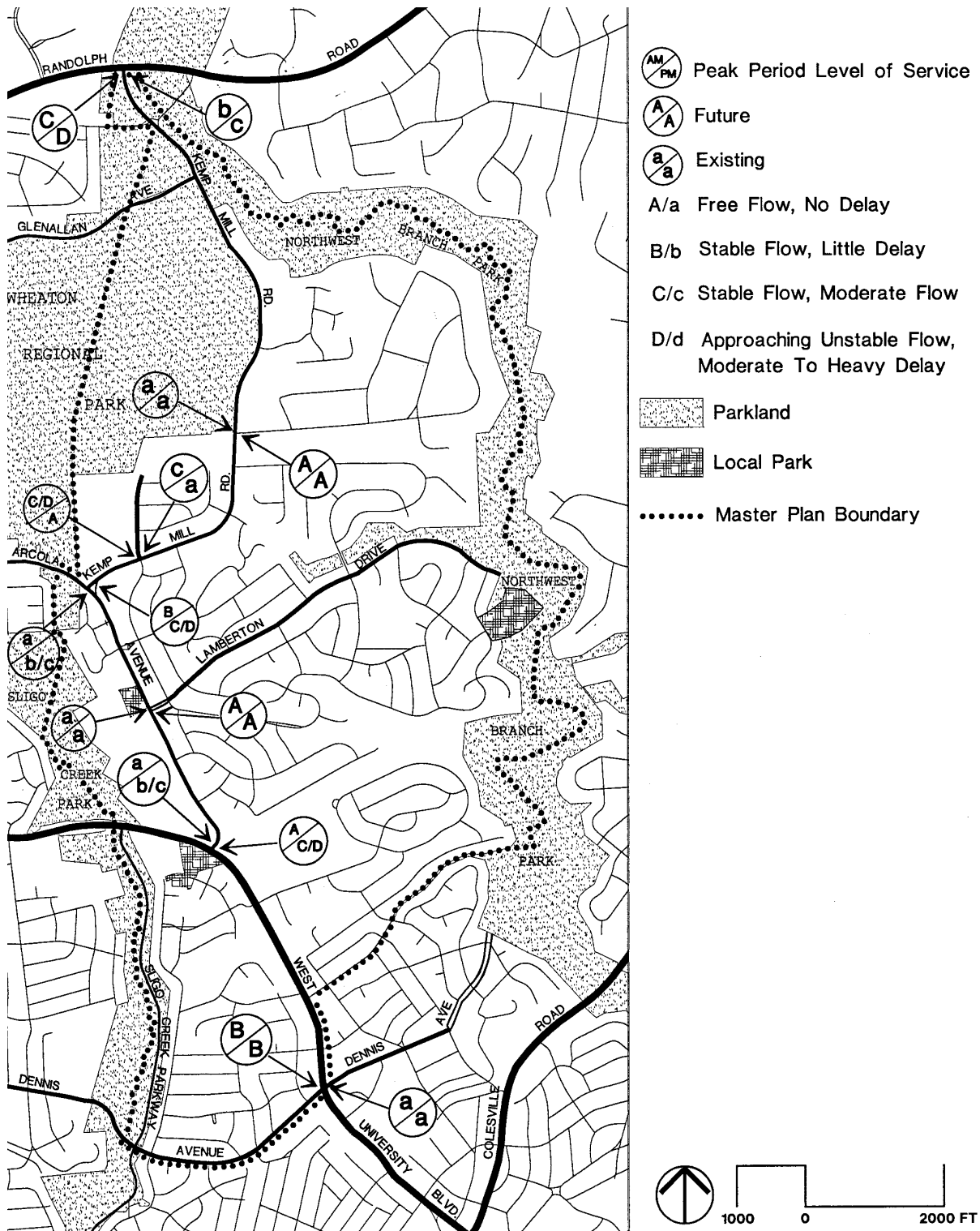
An evaluation of traffic in the Kemp Mill area suggests that although the traffic has increased in the past decade, it is still operating within an acceptable level of service for this area. All major intersections are currently operating within the established congestion standard of 1,650 Critical Lane Volume.

The network analysis included a review of forecasted conditions at two levels of analysis and an assessment of future travel conditions. First, the area-wide level of service was reviewed using a policy area transportation analysis methodology similar to that applied as part of the Annual Growth Policy analysis. Second, localized level of service was forecasted for several intersections in the plan area using the Critical Lane Volume technique typically applied during the Local Area Transportation Review process. At both levels of analysis, the roadway network in the Kemp Mill area was found to be adequate to support master plan objectives.

The Kemp Mill area is part of the Kensington-Wheaton Policy Area. The current average congestion index, a weighted ratio of average travel demand to roadway capacity, is 0.60 in the Kensington-Wheaton Policy Area. In the master plan build-out scenario, the average congestion index is expected to rise slightly to 0.64, still below the Annual Growth Policy standard of 0.69.

Seven intersections were analyzed to assess localized congestion levels. Intersection congestion levels are quantified using the Critical Lane Volume (CLV) analysis technique and then described using a graduated scale called Level of Service (LOS) that corresponds to the CLV

Figure 11: Existing and Future Peak Operating Conditions



APPROVED AND ADOPTED KEMP MILL MASTER PLAN

values. Like a school grading system, the LOS grades range from LOS A, indicating free flow conditions with minimal delays, to LOS F, indicating failing conditions with undesirable delays. All seven intersections currently operate at LOS A to LOS C during the morning and evening peak hours on a typical weekday. In the Master Plan build-out scenario, all are forecast to operate at LOS A to LOS D. Figure 11 indicates the existing and future operating conditions of key intersections.

STREET AND HIGHWAY PLAN

The Regional District Act (Article 28, Annotated Code of Maryland) is the governing legislation for planning and zoning in Montgomery and Prince George's Counties. The Act sets forth the requirements and process for approving and adopting a general plan, sector plans, business district plans, and functional plans, including the *Master Plan of Highways*. The *Master Plan of Highways* was last approved and adopted by both District Councils (Montgomery and Prince George's Counties) and the MNCPPC in 1955. Since then, amendments to the *Master Plan of Highways* in Montgomery County have been processed primarily through the amendment of local area master plans and sector plans that are approved and adopted by the Montgomery District Council and the M-NCPPC.

The Master Plan of Highways, therefore, is not a discrete document; rather it is the 1955 Plan as amended by every succeeding local area master plan or sector plan. In order to maintain continuity and integrity of the *Master Plan of Highways*, each master plan contains a Street and Highway Plan and documents changes to the Street and Highway Plan of the preceding local area master plan.

A master plan makes recommendations for three classes of roadways: major highways, arterial roads, and primary residential roads. Recommendations include a minimum right-of-way width, the number of lanes and provision of sidewalks. The three classes of roadways are defined as follows:

Major Highways are designed to carry longer-distance trips to and through the plan area and, therefore, provide fewer access points to adjacent land uses.

Arterial Roads connect to major highways and provide for more access points while moving traffic at lower speed. Typically, more than half of the traffic on an arterial is considered through traffic.

Primary Residential Roads function as collector-distributor roads, providing for access from neighborhoods and carrying some through traffic.

A master plan does not describe, nor are recommendations made, for tertiary and secondary roadways, which provide direct access to adjacent properties. Most of the roadways in the Kemp Mill area are designated secondary or tertiary residential roads.

Not all dedicated road rights-of-way are improved and are, therefore, called "paper streets." This Plan recommends improving some of these "paper streets" for pedestrian and bicyclist use.

APPROVED AND ADOPTED KEMP MILL MASTER PLAN

Table 2 indicates the classification, number of lanes, sidewalks and other relevant conditions. Figure 12 shows the location of the roadways.

Highways:

Two highways designated in the *1967 Kemp Mill-Four Corners and Vicinity Master Plan* were based on the *1955 Master Plan of Highways*. Because the expanse of time between the first local area master plan, the *1967 Kemp Mill-Four Corners and Vicinity Master Plan*, and this Master Plan has been long, these two highways are no longer relevant.

The Northern Parkway (F-4) was recommended in the 1967 Plan as a limited access highway connecting Washington, D.C. to the Outer Beltway via Sligo Creek Park along the western periphery of the Kemp Mill-Four Corners planning area boundary. The 1967 Plan shows an interchange for the highway at Arcola Avenue and Kemp Mill Road. The MNCPPC removed F-4 from the *Master Plan of Highways*, the *General Plan*, and the *1970 Aspen Hill Plan* by Resolution 71-5, February 10, 1971 (see the Appendix). This Plan reflects the removal of F-4 in Kemp Mill.

The Route 29 Spur (M-89) was recommended in the 1967 Plan as a major highway connecting University Boulevard to US 29 in the White Oak area across the Northwest Branch. A portion of M-89 within White Oak was removed in the *1981 Approved and Adopted Master Plan Eastern County Planning Area, Cloverly, Fairland, White Oak*. This Plan removes the remaining portion of M-89 from the Kemp Mill Plan. This right-of-way should be used for parkland, except to the extent it is needed for bikeway or pedestrian improvements. In addition, there should be an analysis to determine how to achieve a safe pedestrian connection between Breewood Local Park and this right-of-way.

University Boulevard (M-19) is a major highway serving the southern portion of the planning area. Arcola Avenue, Dennis Avenue, and some local streets gain access from University Boulevard. This is a major commuter road usually experiencing heavy travel during the morning and evening peak periods. Sidewalks are missing on the north side between Caddington Avenue and the master plan boundary and should be added.

Recommendations

- Reflect the removal of F-4, the Northern Parkway, and interchanges located within the Kemp Mill Master Plan area.
- Remove the highway designation for M-89 from the *Master Plan of Highways*.
- Determine how to achieve a safe pedestrian connection between Breewood Local Park and the former Route 29 Spur right-of-way.

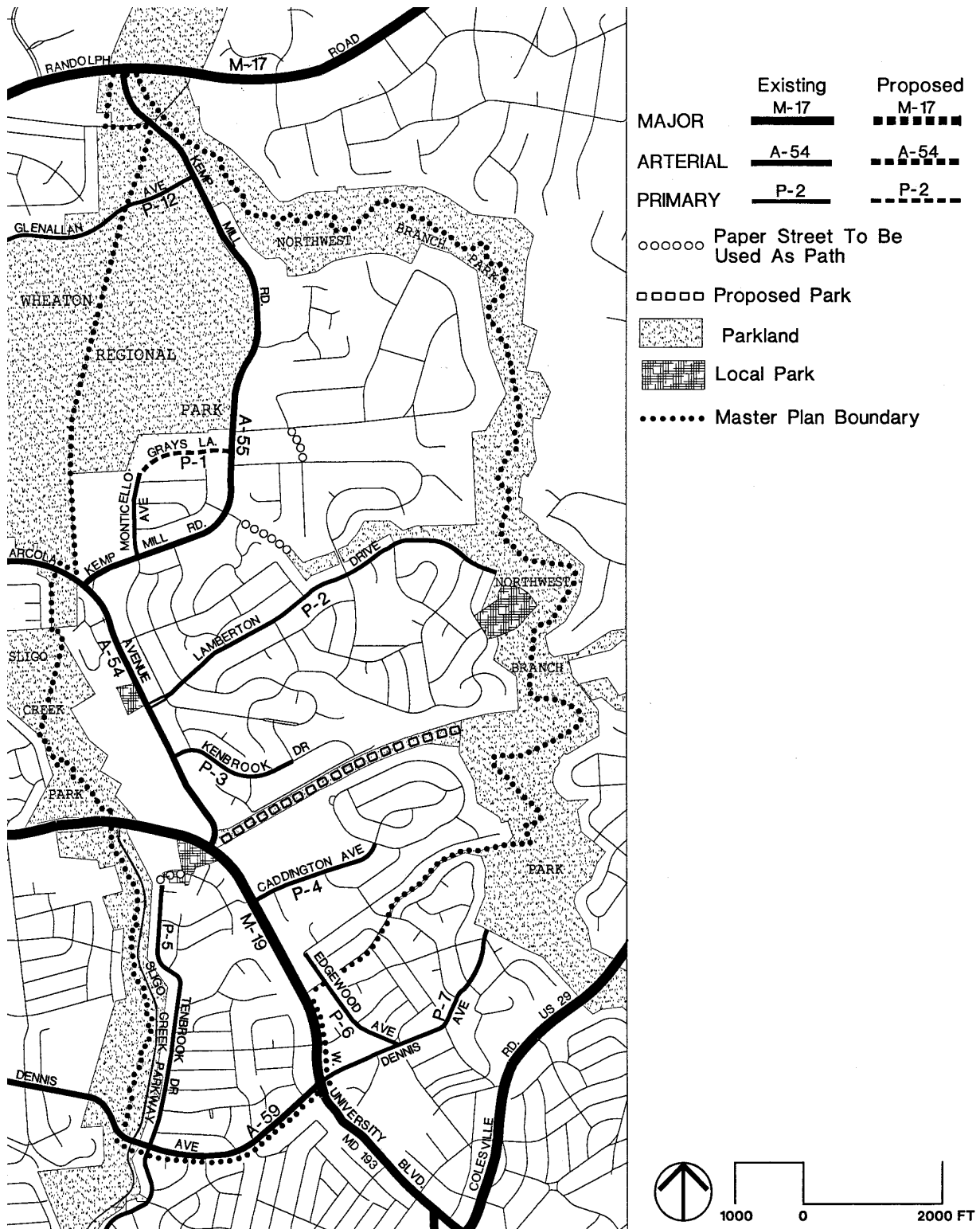
TABLE 2: Recommended Street and Highway Classifications

Master Plan #**	Name	Limit	Minimum ROW	Pavement Width Or No. Of Lanes*
Major Highways				
M-19	University Blvd. (MD 193)	Dennis Avenue to Sligo Creek Parkway	120'	6 lanes divided
Arterial Roads				
A-54	Arcola Avenue	University Boulevard to master plan boundary	80'	4 lanes
A-55	Kemp Mill Road	Arcola Avenue to Randolph Road	80'	2 lanes
A-59	Dennis Avenue	University Boulevard to Sligo Creek Parkway	80'	2 lanes
Primary Residential Streets				
P-1	Monticello Avenue and Grays Lane	Kemp Mill Road to Kemp Mill Road	70'	2 lanes
P-2	Lamberton Drive	Arcola Avenue to Claybrook Drive	70'	2 lanes
P-3	Kenbrook Drive	Arcola Avenue to Healy Street	70'	2 lanes
P-4	Caddington Avenue	University Boulevard to Loxford Terrace	70'	2 lanes
P-5	Tenbrook Drive	Dennis Avenue to Breewood Road	70'	2 lanes
P-6	Edgewood Avenue	Hannes Street to Eisner Street	70'	2 lanes
P-12	Glenallan Avenue	Glenfield Road to Kemp Mill Road	70'	2 lanes

* Secondary and tertiary streets are not designated on Master or Sector Plans.

** The number of planned through lanes for each segment, not including lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel.

Figure 12: Street and Highway Plan



APPROVED AND ADOPTED KEMP MILL MASTER PLAN

Arterial Roads

Arcola Avenue (A-54) is an east-west arterial road connecting Georgia Avenue in Wheaton to University Boulevard in the southern part of the Kemp Mill community. This road provides access west and south of Kemp Mill. There are sidewalks along its entire length. Between the planning boundary and Kemp Mill Road, Arcola Avenue is a two-lane road with on-street parking. South of Kemp Mill Road, Arcola Avenue is a four-lane road with limited use of the curb lane for on-street parking.

Kemp Mill Road (A-55) is a north-south arterial road connecting Randolph Road to Arcola Avenue. It provides access to the northern portion of the Kemp Mill community. All residential developments in this area use this road for travel inside and outside of the community. Commuters in other surrounding neighborhoods also use this road as a cut-through route to avoid congestion on parallel roads such as Georgia Avenue and New Hampshire Avenue. There are sidewalks and on street parking south of Stonington Road.

Dennis Avenue (A-59) is an east-west arterial road traversing the southern edge of the Kemp Mill community. It functions as a collector of traffic from residential streets to University Boulevard. There are sidewalks on both sides except the section between University Boulevard and Gilmoure Drive on the north side and between Proctor Street and the Sligo Creek Park trail on the south side.

Primary Residential Roads

Monticello Avenue-Grays Lane (P-1) is a primary residential street extending north from Kemp Mill Road. This road is recommended to connect with Grays Lane to form a loop road connecting with Kemp Mill Road in two locations. It is the primary access to E. Brooke Lee Middle School. There are sidewalks on both sides of the existing portion of the street.

Lamberton Drive (P-2) is a primary residential street extending east from Arcola Avenue. It traverses east west in the middle of Kemp Mill and collects traffic from local streets and distributes it on Arcola Avenue. There are sidewalks on both sides of the street just past Charleton Drive and on the south side only opposite the Northwest Branch park spur.

Kenbrook Drive (P-3) is a primary residential street extending east from Arcola Avenue to Healy Street. East of Healy Street, Kenbrook Drive is not a master-planned roadway. Sidewalks exist on both sides of the street.

Caddington Avenue (P-4) is a primary residential street extending east from University Boulevard to Loxford Terrace. It collects traffic from the southern portion of Kemp Mill residential developments and distributes it on University Boulevard. Sidewalks exist on both sides of the street.

Tenbrook Drive (P-5) is a primary residential street traversing north south along the western boundary of the planning area. It functions as a collector street for all neighborhoods on the west side of University Boulevard. Sidewalks are provided on both sides of the street.

Edgewood Avenue (P-6) is a primary north-south street extending from Hannes Street to the southern boundary of the planning area. This street has the same classification in the *Four Corners Master Plan*. There are sidewalks on both sides of the street.

TRANSIT

Public transit typically operates most efficiently in densely populated areas. Kemp Mill is developed as a predominantly single family residential area except for the apartments in the Kemp Mill Town Center. However, because of the proximity of Kemp Mill to several Red Line Metrorail stations, bus service connections to the regional mass transit system are well used.

Household survey data from 1997 indicates that 33% of residents in this area work in Washington, D.C. and another 23% work south of the Beltway in Montgomery County. Overall, 20% of residents use transit to go to work, compared to 13% percent countywide. The higher use of transit in this area may well be attributed to its proximity to Metrorail stations and good bus service connecting to those centers.

Several bus routes provide service coverage along all of the major highways and arterials in the plan area. These routes include five Ride-On routes and nine WMATA Metro routes that connect to the Metrorail stations at Glenmont and Wheaton.

SIDEWALKS

A comprehensive network of pedestrian walkways serves the Kemp Mill area. Some local streets do not have sidewalks due to insufficient right-of-way. This plan does not prescribe sidewalk construction in these cases, but rather confirms the current practice of allowing communities to decide on a case-by-case basis. The only recommended location for new sidewalks in the master plan is along University Boulevard.

BIKEWAYS

The *Master Plan of Bikeways* is a functional master plan that designates the locations and classes of bikeways throughout the county. There are three classes of bikeways. Class I is a separate off-street path or trail located on one side of the roadway. A Class I bikeway must be a minimum of eight feet wide and provides two-way bicycle traffic, which is why it can be located on one side of a roadway. A Class I bikeway can also function as a mixed-use path and be shared with pedestrians. A Class II bikeway is an on-street bike lane designated for the exclusive or semi-exclusive use of bicycles, is located on both sides of a roadway, and designated on the pavement by a five foot wide marking. A Class III bikeway is an on-street route shared by motor vehicles and bicycles and is designated by signage only. This master plan revises the *1978 Master Plan of Bikeways*.

Recommendations

- Provide sidewalks on the eastern side of University Boulevard between Caddington Avenue and the master plan area boundary. This section of University Boulevard should have sidewalks to ensure pedestrian safety and accessibility.
- Study the feasibility of the following paper streets for short and easy access between neighborhoods: Yeatman Parkway between Kemp Mill Road and Northwest Branch Park, Breewood Road to Sligo Creek Trail, Auth Lane between Stonington Road and Hermleigh Road.
- Designate bikeways along all major streets as shown in Table 3 and Figure 13 to provide a safe and efficient bikeway network.
- The bikeway along Arcola Avenue, PB-3, is designated Class I. The bikeway should be located on the west side to connect to trails in Sligo Creek and Wheaton Regional Parks. There should be a safe crossing between Sligo Creek Park and Wheaton Regional Park at the intersection of Arcola Avenue and Kemp Mill Road. This could be accomplished by a designated crossing at the Kemp Mill Road traffic signal and a traffic study will be needed to analyze conditions. If the decision is made to put the crossing at this location, then the bikeway should be located on both sides of the road to ensure continuous safe access to the bikeways in the adjacent parks, Sligo Creek and Wheaton Regional.
- Delete remaining portion of P-51, a proposed bikeway on Stonington Road, across the Northwest Branch to Springbrook Drive. The portion of the bikeway on the north side of Northwest Branch Park was removed in the *1997 White Oak Master Plan*.

DELETIONS FROM THE 1967 PLAN KEMP MILL- FOUR CORNERS AND VICINITY MASTER PLAN AND THE/1978 PLAN OF BIKEWAYS

Delete F-4, the Northern Parkway.

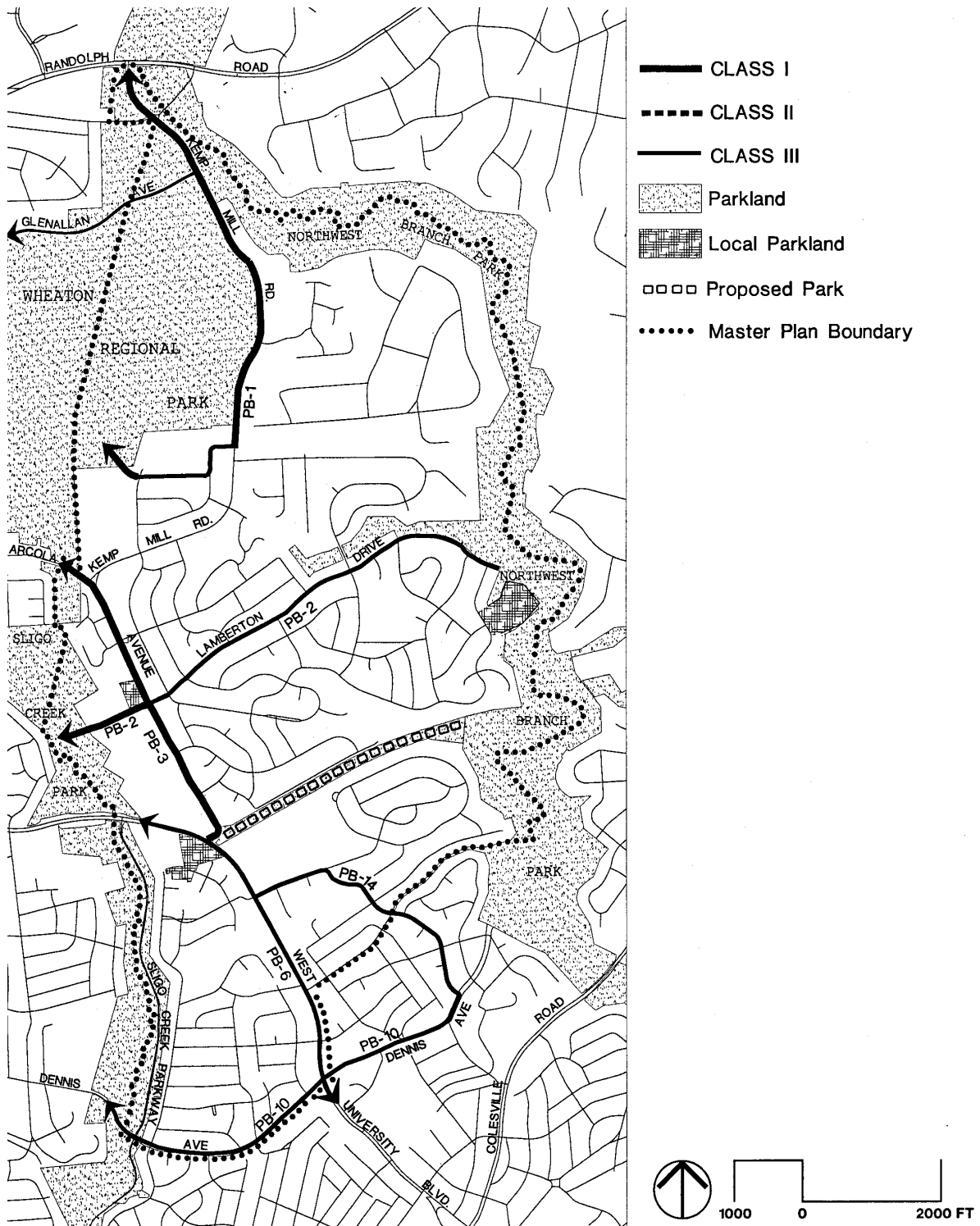
Delete highway designation of M-89, the Route 29 Spur.

Delete Bikeway Route P-51.

TABLE 3: Recommended Bikeway Network

Route #	Bikeway Connection	Notes
PB-1	Kemp Mill Road between master plan boundary and Grays Lane Grays Lane between Kemp Mill Road and Brentwood Lane, with interim use of the Clintwood Drive right-of-way and Brentwood Lane Wheaton Regional Park between E. Brooke Lee school and the existing path north of Arcola Avenue	Class I on the west side along the Wheaton Regional Park boundary Class III Class I
PB-2	West of Arcola Avenue opposite Lamberton Drive through the Kemp Mill shopping center to Sligo Creek Park Trail Lamberton Drive	Class I Class III
PB-3	Arcola Avenue between the western master plan boundary and University Boulevard	Class I on west side by widening sidewalks to eight feet
PB-6	University Boulevard between Dennis Avenue and Sligo Creek Park	Class III
PB-10	Dennis Avenue from University Blvd. to Sligo Creek Parkway	Class III
PB-14	Caddington Avenue between University Boulevard and Chiswell Lane Chiswell Lane between Caddington Avenue and Cavalier Drive Cavalier Drive between Chiswell Lane and the master plan boundary	Class III Class III Class III

Figure 13: Bikeway Plan



APPROVED AND ADOPTED KEMP MILL MASTER PLAN

ENVIRONMENTAL RESOURCES

GOAL: Protect and enhance natural resources for the enjoyment of residents and sustain a stable and healthy biological environment for native plant and animal populations.

Environmental resources are important indicators of overall quality of life. Residents in urban areas desire pleasant cool, green surroundings with adequate open space to lessen the impacts of noise, temperature and glare.

The Maryland Planning Act of 1992 supports protection of sensitive environmental areas and stewardship of the lands of the Chesapeake Bay. Sensitive areas include streams and stream buffers, 100-year floodplains, habitats of rare, threatened and endangered species, and steep slopes. Sensitive areas are protected from disturbance by development under the *Guidelines for Environmental Management of Development in Montgomery County*. All new commercial and subdivision development must comply with current county and state environmental requirements, including forest conservation, storm water management, sediment control, and development restrictions within streams, wetlands and floodplains. Most of the sensitive areas located within the study area boundaries are found within the Northwest Branch Stream Valley Park, Sligo Creek Stream Valley Park and Wheaton Regional Park. These three, forested parks also support high quality, maturing, mixed deciduous forests.

Within Kemp Mill, the primary environmental issues are air quality, noise, landscaping/forest conservation, community water and sewer, and water quality/storm water management. Kemp Mill was developed prior to current standards for landscaping, green space, forest conservation and storm water management. Today, there are few sites with development/redevelopment potential in the Kemp Mill area. Enhanced landscaping and green space, as well as managing storm water runoff to nearby streams will improve environmental conditions.

AIR QUALITY

The Washington metropolitan region, which includes all of Montgomery County, is currently classified as a “serious” non-attainment area under Federal air quality regulations with regard to ground-level ozone. Since 1990, the area has exceeded the one-hour ozone standard, on average, six days every summer. Federal air quality laws permit an average of only one “exceedance” per summer at a monitor location.

Ground-level ozone (O₃) is an invisible gas formed when two pollutants - volatile organic compounds (VOC) and nitrogen oxides (NO_x) - react in sunlight. The primary sources of these pollutants are utilities and other industries, motor vehicles, small gasoline powered engines, and small businesses that use solvents and cleaning solutions, paints, cleaners, and insecticides.

Once emitted, these pollutants can travel many miles before reacting to form ozone. On a typical summer day, over half of the pollutants that cause ozone in the Washington region come from sources outside the region. Some sources are in other states, hundreds of miles away. Likewise, sources in the Washington area emit pollutants that travel many miles and eventually affect ozone concentrations in other regions and states.

Recommendation

- Improve air quality by encouraging pedestrian, bicycle and transit access in existing development and by improving alternatives to automobile transportation.

NOISE

Noise, most simply defined, is unwanted sound. The major source of noise in the Kemp Mill area is roadway traffic. Roadway noise levels vary with traffic volume and speed, types of vehicles on the roadway and the type of roadway. There are few noise mitigation options where existing residential uses line the roadways.

In situations where driveway access is not along the major road, a fence or wall-type noise barrier could be constructed on private property, with the owners' cooperation, outside the public rights-of-way and public utility easements and along the contiguous roadway rights-of-way. However, acoustical treatment of an existing structure is often the most feasible option for affected homes and reduces interior noise levels by increasing the noise-reducing characteristics of the exterior facade, particularly windows and doors. Mitigation of noise impacts is addressed during the development review process of redeveloping or newly developing properties.

Recommendation

- Support noise compatible site design for new development and redevelopment within the noise impact areas along major roads (Dennis Avenue, University Boulevard, Kemp Mill Road, and Arcola Avenue).

FOREST CONSERVATION

Forest conservation helps retain the natural beauty of the community and protects dependent ecosystems. Trees cleanse water runoff and the air, provide shade to alleviate summer temperatures, and provide cover and food for a variety of wildlife. Since 1992, Montgomery County has required forest conservation under the Forest Conservation Law as part of the application process for land disturbance and development. Two large areas of forested stream valley parkland flank Kemp Mill: Sligo Creek and Northwest Branch parks. Urban forest and neighborhood street trees will enhance these forested areas. In addition, maintaining diversity of flora in the forested areas is equally important. The Parks Department has a volunteer program, Weed Warriors that works on maintaining biological diversity and controlling invasive species of flora.

Recommendations

- Enhance the natural environment in Kemp Mill by supporting shade tree planting projects for roadways, residential streets and parking lots.
- Protect diversity of botanical ecosystems through management of invasive flora.

COMMUNITY WATER AND SEWER

The Washington Suburban Sanitary Commission (WSSC) provides community water and sewer service within the master plan area. Water and sewer are classified as W-1 and S-1 respectively. These categories indicate that the entire master plan area is eligible for community water and sewer service. However, several lots within the Springbrook Forest subdivision still use well and septic systems. Connection to WSSC community water and sewer is available to these owners at the owner's expense. The provision of service to some areas will require new local main extensions, which property owners must also pay.

Two major trunk sewer lines serve Kemp Mill: Northwest Branch and Sligo Creek. The WSSC has projected that much of the trunk sewer along the length of the Northwest Branch within the master plan area will require relief due to excessive peak flows in approximately 2010. The County's Comprehensive Water Supply and Sewerage Systems Plan will address the future need to relieve this trunk sewer. The Sligo Creek trunk sewer has recently been upgraded and should not require relief in the foreseeable future. The water supply system is considered adequate to meet the demand of Kemp Mill.

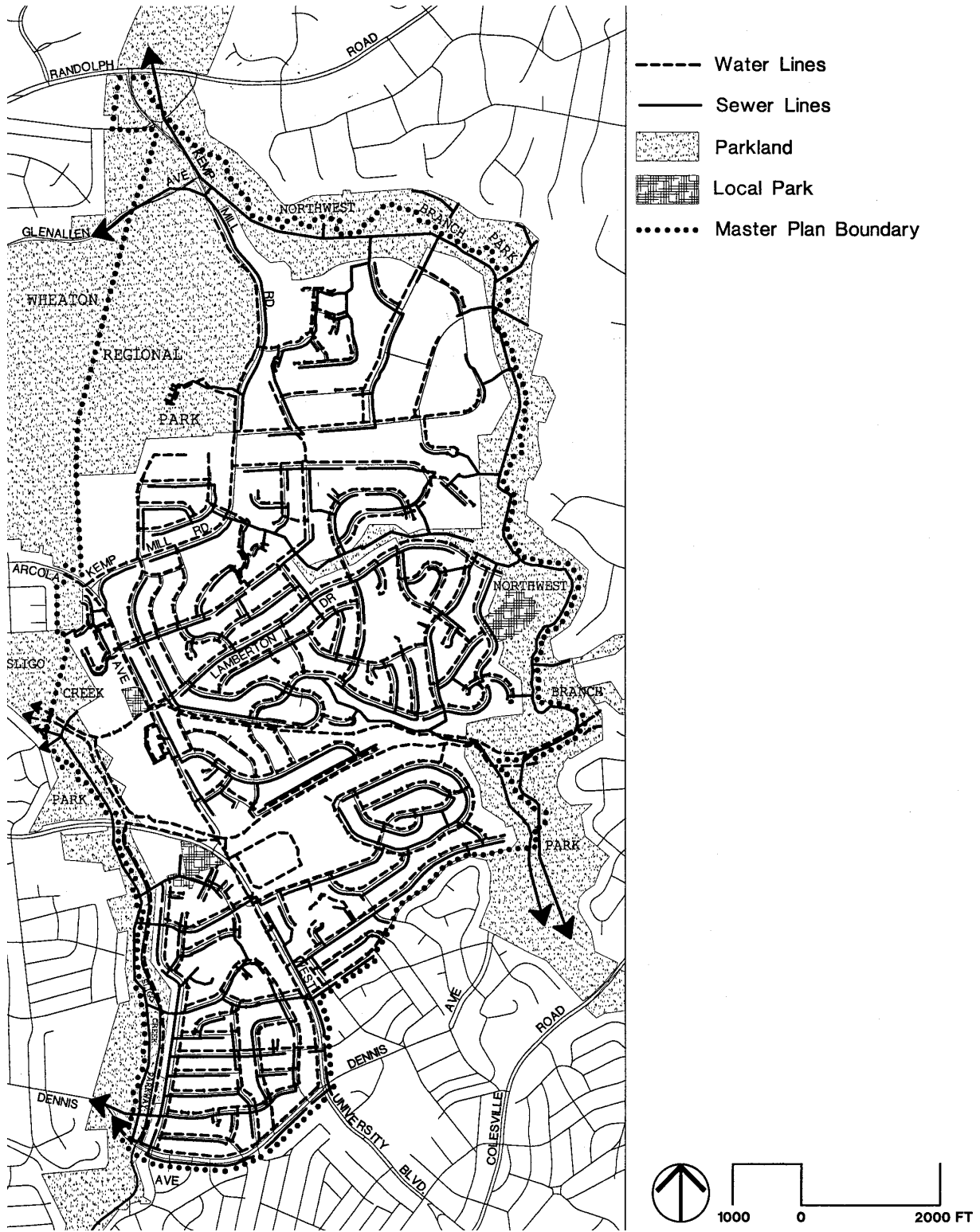
Recommendation

- Manage extension of community water and sewer service to individual lots in an environmentally sensitive manner.

STORM WATER MANAGEMENT

This master plan lies within two major watersheds of the Anacostia River: Northwest Branch and Sligo Creek. The state of Maryland classifies the Northwest Branch watershed as Use IV. A Use IV designation indicates that stream waters are capable of supporting adult trout for catch-and-release fishing. Sligo Creek Watershed is classified as Use I. A Use I designation is defined as suitable for water contact sports, fishing, and the propagation of fish and aquatic life.

Figure 14: Community Water and Sewer



APPROVED AND ADOPTED KEMP MILL MASTER PLAN

The Northwest Branch has five sub-watersheds and Sligo Creek has one sub-watershed within the master plan area. These six sub-watersheds are either wholly or partially in the Kemp Mill master plan area. The sub-watersheds range from fair to poor condition according to the *Countywide Stream Protection Strategy (CSPS)*. The CSPS has determined that three of the sub-watersheds of the Northwest Branch, the Middle Mainstem, Lambertson Drive and Lockridge Drive, are priority sub-watersheds based on the high levels of imperviousness, uncontrolled runoff and poor bank stability (Figure 15). Many streams in the master plan area have been placed underground. The Montgomery County Department of Environmental Protection (MCDEP), the M-NCPPC and the Army Corps of Engineers coordinate stream restoration projects in the priority sub-watersheds. The most recently approved restoration projects are the Northwood Tributary Stream Restoration and Phase II of the Anacostia Restoration Project in the Lambertson Drive tributary off Yeatman Parkway. The degraded conditions are due primarily to the effects of uncontrolled runoff from existing development built prior to the application of today's standards for environmental protection.

Stormwater management is an important environmental issue in Kemp Mill. The Montgomery County Department of Permitting Services (MCDPS) enforces current stormwater management regulations. Efforts are underway to reduce the impact of storm water in Sligo Creek and Northwest Branch through the Anacostia Watershed Restoration Program and the MCDEP capital improvements program. The recommendations below can improve water quality while simultaneously enhancing the aesthetic quality of Kemp Mill.

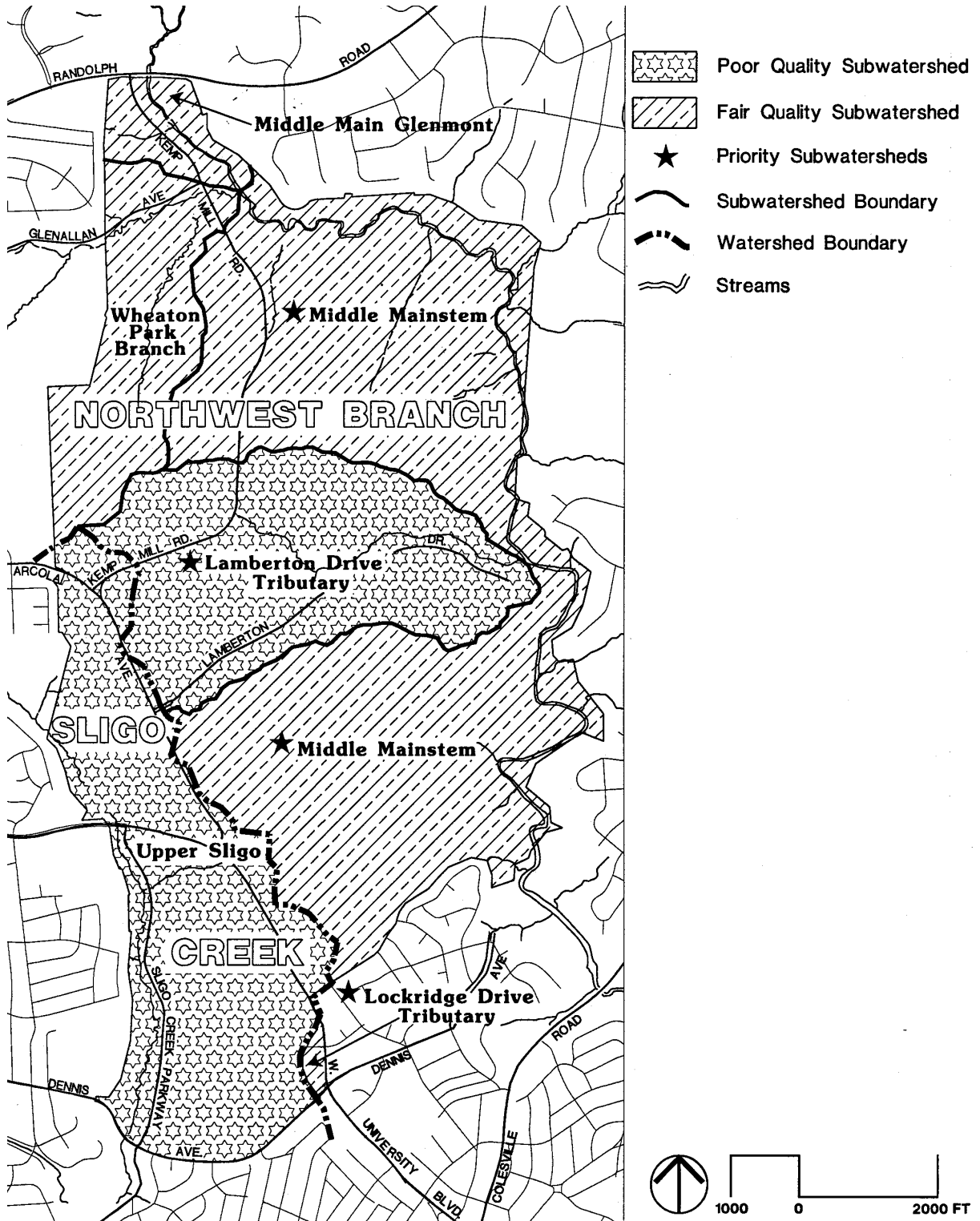
Montgomery County has a wetlands and watershed educational program called the Stream Striders. This program educates individuals regarding the importance of maintaining the integrity of the wetlands and stream buffers. Save-Our-Streams is a state wide volunteer organization that educates citizen volunteers and community organizations to clean, monitor and protect Maryland's waterways.

Recommendations

- Avoid paving or piping waterways and utilize environmentally sensitive methods to stabilize streams within the Northwest Branch and Sligo Creek watersheds.
- Promote the use of infiltration techniques for stormwater management within required open or green space.
- Improve permeability of surface parking areas by adding green space to increase infiltration.
- Expand voluntary pollution prevention programs within commercial zones.
- Continue to support and participation in the Anacostia Watershed Restoration Program and MCDEP efforts to provide stormwater management retrofits, stream valley restoration, and appropriate stormwater management facilities.
- Balance impacts to park resources from storm water retrofit/water quality improvement against overall environmental benefits.

- Review any future stormwater management proposals that affect parkland under the review hierarchy of avoidance, minimization, mitigation, and compensation for impacts to parkland, while supporting necessary actions to restore degraded aquatic habitats. Compensation is never appropriate in lieu of storm water management or stream valley restoration projects. If expected impacts from a proposed project could not be sufficiently avoided, minimized, and/or mitigated, the project should not be pursued.
- Support environmental education programs and develop additional initiatives that support environmental stewardship within the public, business and private sectors.

Figure 15: Water Quality and Priority Sub-watersheds



HISTORIC PRESERVATION

The Master Plan for Historic Preservation and the Historic Preservation Ordinance (Chapter 24A of the Montgomery County Code) are designed to protect and preserve Montgomery County's historic and architectural heritage. Placement on the Master Plan for Historic Preservation officially designates the property as a historic site or historic district and places it under the protective provisions and procedural requirements of the County's preservation ordinance. The status affects only the exterior historic appearance of the structure and the environmental setting. Owners of designated properties can qualify for a number of County and State preservation tax credits, as well as other financial aids and incentives, to assist with the maintenance and preservation of their properties.

There is only one property, the Gallagher House (32/4) at 10311 Gilmoure Drive, located within the Kemp Mill Master Plan area that was eligible for historic designation. The property was included in the Historic Resources review of the *Approved and Adopted 1996 Four Corners Master Plan*. The Plan removed the property from the *Locational Atlas and Index of Historic Sites in Montgomery County* because the property had been extensively altered and no longer reflected cultural or architectural events and themes in the history of Eastern Montgomery County.

COMMUNITY FACILITIES PLAN

GOAL: Provide sufficient public facilities to support the neighborhoods of Kemp Mill and provide linkages to access local facilities and institutions safely and efficiently.

Public facilities such as schools, libraries, community and recreation centers, and parks are an important component of any community. These facilities create and reinforce a sense of social cohesion. The Kemp Mill area, since it is geographically small, does not have many public facilities located within its boundaries. However, many facilities just outside the master plan boundaries are readily available to the community.

PARKS

Most of the homes in the master plan area are within walking distance of parkland. Three large parks surround the master plan area: Wheaton Regional, Sligo Creek and Northwest Branch.

Wheaton Regional provides the widest range of programmed activities including tennis, ice-skating, picnicking, roller hockey, a large playground, miniature train track and a carousel designed specifically for children. Sligo Creek and Northwest Branch are stream valley parks that have recreational facilities limited to small playgrounds and paved and unpaved trails. The local parks provide playgrounds, ball fields, tennis courts and basketball courts. A description of the parks in the Kemp Mill area is contained in Table 4.

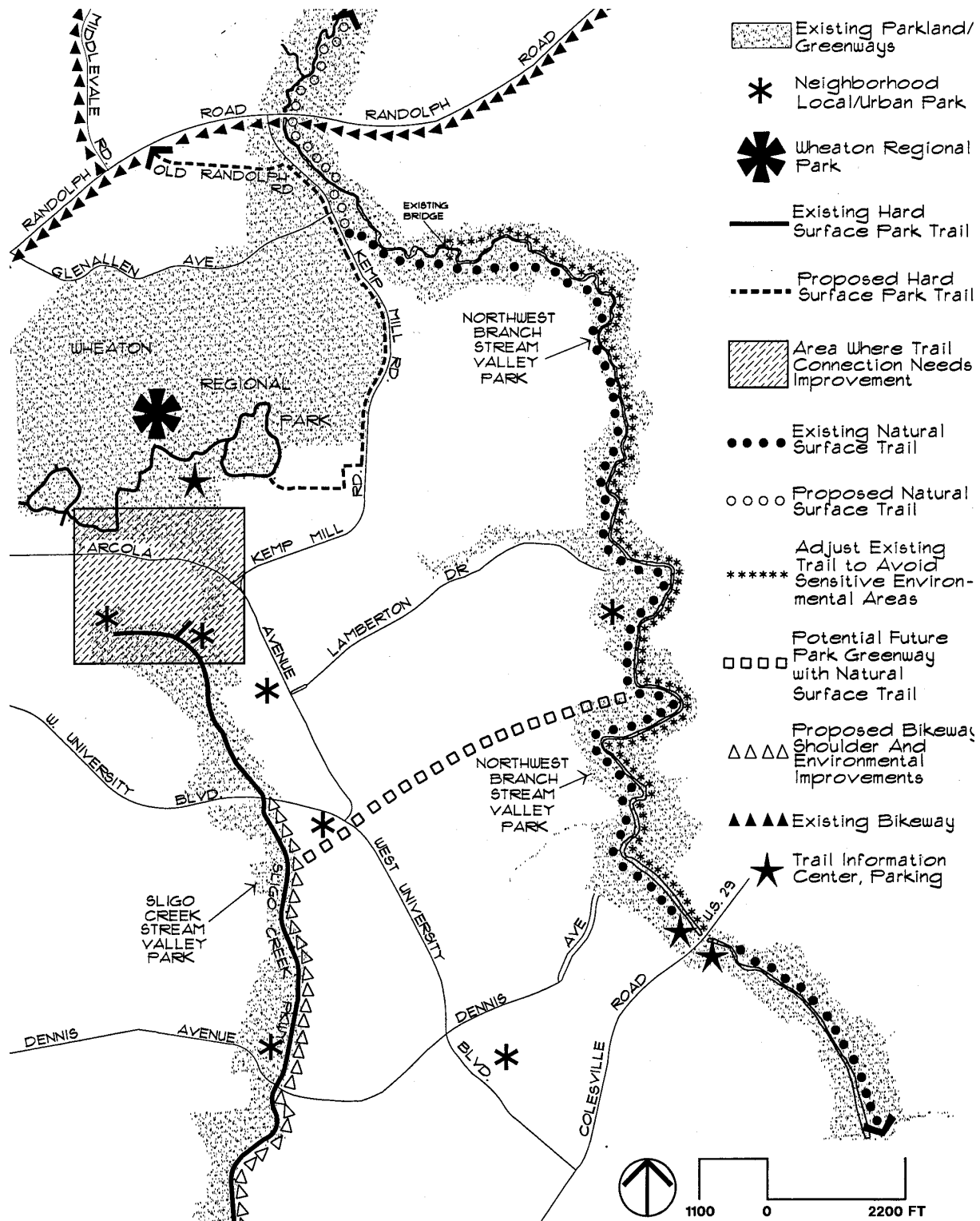
One of the most important recommendations in the master plan is to determine the need for additional parkland. The *Parks, Recreation and Open Space Plan (PROS)* is a countywide analysis of park needs and is a key determinant of when and where additional parkland is needed. According to the PROS Plan, the number of parks and recreational opportunities currently provided are adequate to meet future recreational needs. For this reason, this Plan does not recommend acquisition of additional parkland for local or neighborhood parks within Kemp Mill.

Acquisition of land for trail connections, however, is recommended. The SHA owns land that was originally intended for a highway connection between University Boulevard and Route 29 (see the Transportation Section). This right-of-way would provide a greenway connection between the Northwest Branch and Sligo Creek parks.

Recommendations

- Acquire SHA right-of-way from University Boulevard to Northwest Branch Park for parkland. This will provide a park connection between Sligo Creek and Northwest Branch Parks.
- Provide a safe connection between the trails in Sligo Creek and Wheaton Regional Park.

Figure 16: Park and Trail Concept Plan



APPROVED AND ADOPTED KEMP MILL MASTER PLAN

Future revitalization or refurbishing of park facilities should consider the demographic characteristics of the population.

TABLE 4: Public Parks in Kemp Mill

Name of Park	Current Development
<i>Community Use Parks</i>	
Kemp Mill Urban Park (2.68 acres)	Pond, gazebo, paths, playground, basketball court
Breewood Neighborhood Park (4.94 acres)	Undeveloped
Kemp Mill Estates Local Park (12 acres)	Small recreation building, playground, softball field, basketball court, 2 lighted tennis courts
<i>Stream Valley and Regional Parks</i>	
Sligo Creek Stream Valley Park	Hiker biker trail, playground, picnic areas, exercise course
Northwest Branch Stream Valley Park	Natural surface trails; old WSSC building
Wheaton Regional Park	Arboretum, nature center, picnic areas, playground, ice rink, 6 outdoor and 6 indoor tennis courts, 6 ball fields, carousel, miniature train, equestrian center

SLIGO CREEK, WHEATON AND NORTHWEST BRANCH PARK AND TRAIL PLAN

During the Kemp Mill planning process, the Park Planning Unit of the Countywide Planning Division developed a companion analysis and plan for the regional and stream valley parks surrounding the Kemp Mill area. Since these parks serve a larger area than the Kemp Mill community, this effort was done in conjunction with the master plan, but with its own broader public participation process. The plan was reviewed and approved by the Planning Board as a separate document (see Figure 16).

PUBLIC SCHOOLS

The Kemp Mill master plan area is part of the Kennedy High School Cluster. Schools within the boundaries of the master plan area are: E. Brooke Lee Middle School and Kemp Mill Elementary School (Kennedy Cluster), Forest Knolls Elementary School (Blair Cluster); and the Northwood High School, a holding school. Northwood High School is close to the Kemp Mill Town Center. If the school undergoes a non-school reuse, then consideration should be given at that time to co-locating senior housing on the site.

There are two publicly owned buildings that were once used for schools. Spring Mill Center, located on Kemp Mill Road, was an elementary school and is now being reused as a Board of Education Administrative Center. The McDonald Knolls Elementary School, located on Tenbrook Drive, is a closed school. The County is leasing the building to two private institutions, CHI (Centers for the Handicapped) and the Arc of Montgomery County, a day care provider.

OTHER COMMUNITY FACILITIES AND SERVICES

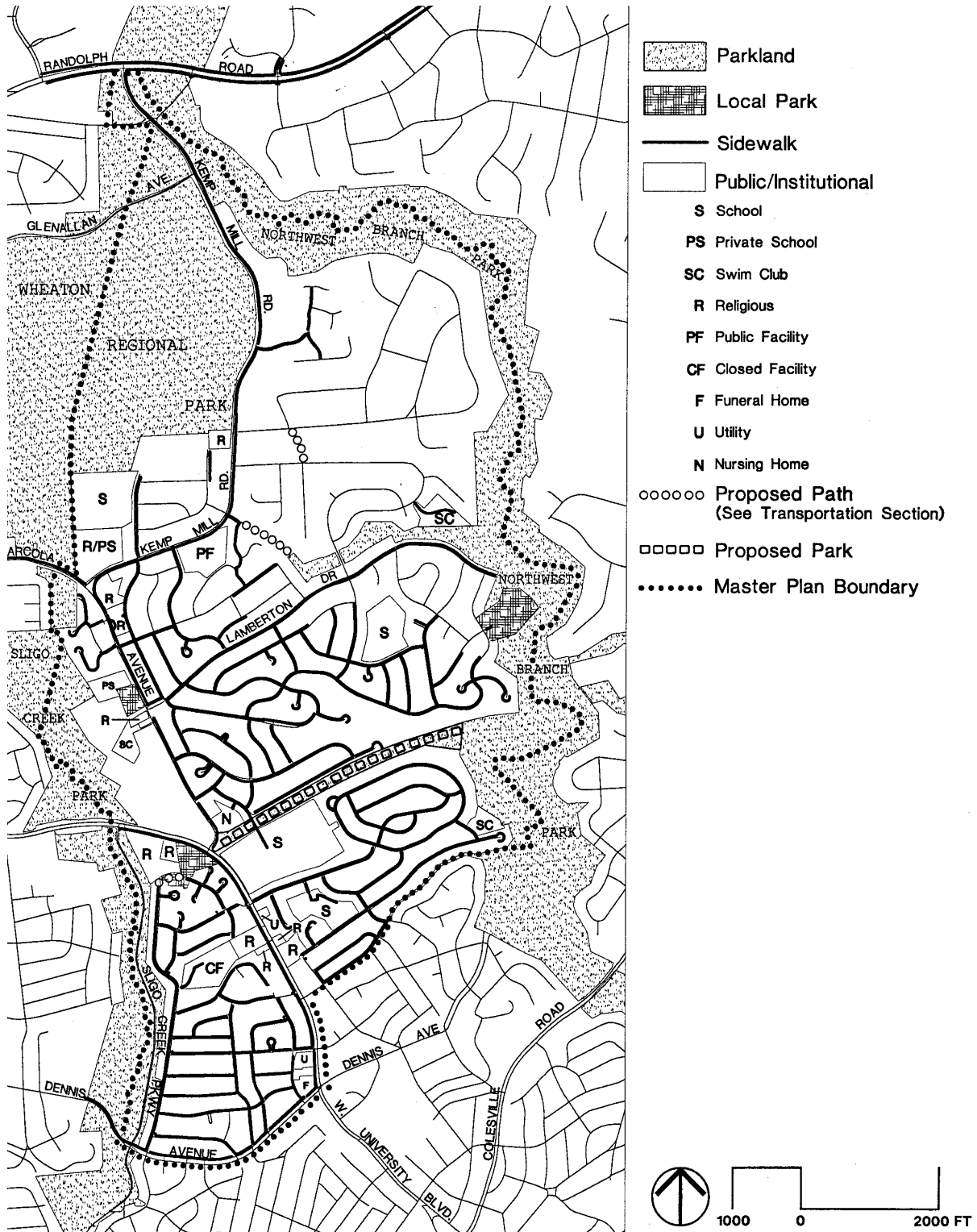
Kemp Mill is part of the Mid-County Service Area. There is a need within the Mid-County Service Area for a community recreation center to provide more recreational programming for residents in the Kensington-Wheaton and Kemp Mill master plan areas. The center could be located outside of the Kemp Mill master plan area, as long as it is accessible to Kemp Mill residents. Kemp Mill is within the service area of the Wheaton Regional Library District. The regional library for the district is located at Arcola and Georgia Avenue, approximately one mile west from the western boundary of Kemp Mill master plan area. The White Oak Library, located on New Hampshire Avenue just north of the US 29 interchange, is approximately 2.5 miles east of the master plan area boundary. The Kemp Mill master plan area is located within the Wheaton Police District and Fire and Rescue Service District 4.

LINKAGES: SIDEWALKS, PATHS AND CONNECTIONS TO COMMUNITY FACILITIES

As noted earlier, many residents routinely walk to services and amenities in the Kemp Mill area. Figure 17, Community Facilities and Linkage Plan, shows the existing sidewalks and paths and those unimproved public rights-of-way (paper streets) recommended in this master plan to review for possible improvements to improve access to community facilities. Over the years, residents have worn paths through some of the paper public rights-of-ways. These paths should be graded to reduce erosion and appropriate surface treatment considered (see also the Transportation Section).

Many of the existing trails within the surrounding parks extend to public streets and sidewalks within the master plan area. However, improvements, in particular, pedestrian access between the apartment buildings, Sligo Creek Park and the shopping center, would better serve the area residents. The recommended pedestrian links in combination with the Bikeway Plan and the Park Plan will provide non-vehicular access throughout much of the Kemp Mill Community.

Figure 17: Community Facilities and Linkages Plan



APPROVED AND ADOPTED KEMP MILL MASTER PLAN