COMPREHENSIVE AMENDMENT
TO THE MASTER PLAN FOR GERMANTOWN
MONTGOMERY COUNTY, MARYLAND

Comprehensive Amendment
to the Master Plan for Germantown
Montgomery County, Maryland
being also an amendment
to the Clarksburg and Vicinity Master Plan
and to the General Plan for the Physical Development
of the Maryland-Washington Regional District

The Maryland-National Capital Park and Planning Commission
COMMISSIONERS
Philip R. Hogue, Chairman
Royce Hanson, Vice Chairman

MONTGOMERY COUNTY
Jack Alfandre
Thomas M. Anderson, Jr.
Esther P. Gelman
Helen Scharf

PRINCE GEORGE'S COUNTY
Ruth S. Brown
John W. Churchill
Robert A. Crawley
W. C. Dutton, Jr.

DEPARTMENT HEADS
John P. Hewitt, Executive Director

Robert H. Levan
General Counsel

F. Frank Rubini
Director of Parks and Recreation

C. Robert Green
Secretary-Treasurer

Richard E. Tustian
County Planning Director
Montgomery County

John F. Downs, Jr.
County Planning Director
Prince George's County

COMMISSION OFFICES
8787 Georgia Avenue
Silver Spring, Maryland 20907

6600 Kenilworth Avenue
Riverdale, Maryland 20840
CERTIFICATE OF APPROVAL AND ADOPTION

This Comprehensive Amendment to the Master Plan for Germantown
being an amendment to the General Plan for the Physical Development
of the Maryland-Washington Regional District
and to the Master Plan of Highways within Montgomery County
has been adopted
by The Maryland-National Capital Park and Planning Commission
by Resolution No. 74-1 of January 16, 1974
after a duly advertised Public Hearing held on March 12, 1973
pursuant to the provisions of Chapter 780, Laws of Maryland, 1959, as amended
and has been approved by the Montgomery County Council
sitting as the District Council
by Resolution No. 7-1567 on January 8, 1974

[Signatures]

Philip R. Hogue, Chairman
Royce Hanson, Vice Chairman
C. Robert Green, Secretary-Treasurer

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION
MONTGOMERY COUNTY PLANNING BOARD
8787 Georgia Avenue
Silver Spring, Maryland 20907

JANUARY 1974
This document contains text and supporting maps of the Comprehensive Amendment to the Master Plan for Germantown, Montgomery County, Maryland. The Comprehensive Amendment, amends and supersedes the Master Plan for Germantown, adopted by The Maryland-National Capital Park and Planning Commission on October 19, 1966. The Germantown Planning Area, bounded by Little Seneca and Great Seneca Creeks and their tributaries is bisected by Interstate Highway 70-S and Maryland State Route 118, the intersection of which is about four miles northwest of the City of Gaithersburg in the upper part of Montgomery County. The area includes 17 square miles of land, now largely in agricultural or woodland use but with some industrial and residential uses near Interstate 70-S. The present communities of Germantown, Middlebrook, and Neelsville are located in the area.

The Comprehensive Amendment effects a change in the earlier Plan in order to establish clearly defined village centers that will contain commercial and public facilities and be linked to surrounding areas by internal streets and pedestrian systems. Each village will provide a variety of housing types. This Comprehensive Amendment links the village centers to a town center, somewhat modified from that of the earlier Plan, which will include and provide for mixed uses and flexibility. This Amendment also recommends an internal bus system for installation in stages as growth occurs and new busways which can be converted in the future to rail transit service. Modifications to the road system include additional interchanges to Interstate 70-S and changes to reduce the amount of major roads, with greater emphasis on the internal orientation of arterial roads. The Amendment includes a series of staging policies to guide the zoning, subdivision, and capital improvements processes, in order to integrate private development with the provision of public facilities in a timely fashion. The Amendment recommends new regulatory measures and suggests that staff positions be designated to coordinate the public effort in implementing the Comprehensive Amendment.
FOREWORD

Embodying the findings of a detailed restudy of the 1967 Master Plan for Germantown, the Comprehensive Amendment, presented herein, for the revision and updating of the Germantown Master Plan encourages the development of a new corridor city in the Germantown area and defines the policies and techniques by which that goal can be achieved.

In response to a request from the Montgomery County Council for a thorough analysis of the viability of the 1967 Master Plan for Germantown as a guide to the development of a new corridor in the Interstate Highway 70-S corridor, the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission engaged a consultant to examine transportation, land use, conservation, and other important aspects of the Plan. The consultant’s recommendations, published in July, 1972, were considered at extensive public work sessions, conducted by the Planning Board with landowners, developers, and residents of the Germantown area, which culminated in the preparation of a Preliminary Comprehensive Amendment to the Master Plan.

The Planning Board has held a series of public work sessions on the draft, entitled A Corridor City, Preliminary Report: Comprehensive Amendment of the Germantown Master Plan, on which the Board held a formal public hearing March 12, 1973. The Board worked intensively on the questions posed and devoted special attention to the mechanisms through which the staging policy will be put into effect. The staging policy, as presented in Chapter 4, reflects new attitudes and policies on the part of the Planning Board, which seeks to carefully coordinate development in consonance with the provision of public facilities.

The Final Draft of the Comprehensive Amendment, dated October 1, 1973, was transmitted to the Montgomery Council Council for final approval on October 14, 1973. The County Council reviewed the Final Draft and held two work sessions on the Comprehensive Amendment. On January 8, 1974, the County Council adopted Resolution No. 7-1567, approving the Comprehensive Amendment as transmitted. The Maryland-National Capital Park and Planning Commission adopted the Comprehensive Amendment on January 16, 1974. This Comprehensive Amendment supercedes the Master Plan for Germantown which was issued in 1967.

Royce Hanson, Chairman
Montgomery County Planning Board
# TABLE OF CONTENTS

- Abstract ................................................................................................................. 4
- Foreword .................................................................................................................. 5
- Introduction ............................................................................................................. 11
- Chapter 1 — Summary .......................................................................................... 15
  - 1.1 Major Findings .............................................................................................. 15
  - 1.2 Recommended Amendments to the 1967 Master Plan ............................... 16
- Chapter 2 — Concepts ............................................................................................ 21
  - 2.1 Goals and Objectives .................................................................................... 21
  - 2.2 Village and Neighborhood Concepts ......................................................... 22
- Chapter 3 — Land Use Elements ......................................................................... 26
  - 3.1 Open Space, Conservation, Recreation, and Storm Water Management ... 26
  - 3.2 Circulation ....................................................................................................... 33
  - 3.3 Community Facilities ..................................................................................... 41
  - 3.4 Village Descriptions ...................................................................................... 43
  - 3.5 Commercial Land Use ................................................................................... 49
  - 3.6 The Town Center ............................................................................................ 51
  - 3.7 Employment Areas ......................................................................................... 55
  - 3.8 Montgomery College .................................................................................... 57
- Chapter 4 — Development Program ...................................................................... 61
  - 4.1 Recommended Policies to Stage Development ............................................. 61
  - 4.2 Policies for Zoning .......................................................................................... 71
  - 4.3 Policies for the Review of Subdivisions ......................................................... 71
  - 4.4 Housing Policy ................................................................................................ 74
  - 4.5 Policy for Public Participation and Review .................................................... 74
- Appendices .............................................................................................................. 77
  - A. The Planning Context ........................................................................................ 79
  - B. Density Issues .................................................................................................... 89
  - C. Environmental Considerations ......................................................................... 90
  - D. Statistical Tables ............................................................................................... 92
  - E. Capital Improvements Program ....................................................................... 96
  - F. Street and Highway Classifications .................................................................. 100
  - G. Resolutions ....................................................................................................... 105
EXHIBITS

1. Location Map ................................................................. 10
2. Planning Area ................................................................. 14
3. Village Identification ...................................................... 20
4. Soil Suitability – Building Constraints ............................. 28
5. Wooded Areas ................................................................. 30
6. Senaca Watershed Study ................................................. 32
7. Major Highway System .................................................. 34
8. Recommended Typical Cross Sections .............................. 36
11. Churchill Village – Land Use ........................................... 42
12. Gunners Lake Village – Land Use .................................... 44
13. Middlebrook Village – Land Use ..................................... 46
14. Neelsville Village – Land Use .......................................... 48
15. Clopper Village – Land Use ............................................... 50
16. Kingsview Village – Land Use .......................................... 52
17. Town Center Area – Land Use .......................................... 54
18. Town Center Area – Zoning ............................................. 56
19. Proposed Montgomery College Location ....................... 58
20. Development Sequence Map ............................................ 60
21. Storm Water Staging ....................................................... 62
22. Highway Development Staging ....................................... 64
23. School Staging ................................................................. 66
24. An Amendment to the Ten Year Sewer and Water Program for the Germantown Area .................................................. 68
25. Sewer Staging ................................................................. 70
26. Water Staging ................................................................. 72
27. Loadings on Present Interchange based on Ultimate Development of 1967 Plan ...................................................... 80
28. Existing Re-Zoning (1972) ............................................... 82
INTRODUCTION

The Germantown Planning Area (Planning Area 19), located in Montgomery County, Maryland, some 25 miles northwest of Washington, D.C., along Interstate Highway 70-S, contains some 10,915 acres within a three-by-five-mile area. It is bisected by Interstate 70-S and is bounded by the Great and Little Seneca Creeks and their tributaries (see Exhibits 1 and 2).

This Comprehensive Amendment to the Master Plan for Germantown makes significant proposals designed to implement the corridor city concept, integrating existing with future development. These proposals include a reallocation of permitted land use, new staging devices, better coordination in the location and construction of public facilities, new approaches in conservation of natural resources, establishment of a taxing district, and modifications to the Zoning and Subdivision Ordinances. A number of these proposals require adoption of new legislation at the local or State level. The extent to which the goals for this corridor city are achieved will be determined by the ability of the County to create the necessary tools and to coordinate the complex series of interrelated actions proposed by this plan.

The Germantown Corridor City is planned to produce a strong, viable economic base and to offer a wide range of housing and employment opportunities for a diverse population in an aesthetic environment, providing a complete range of facilities, services, and amenities.

If properly respected in the design and development of this new community, the unique natural setting can, and will, greatly enhance the quality of community life. To receive the maximum potential from these important natural assets, the community must insist upon the proper conservation and use of these assets to the benefit of its residents and the County as a whole.

The comprehensive development of a corridor city is a complex undertaking. In the case of Germantown, this involves, not only a development process extending over twenty years or more, but also the coordination of actions undertaken by a large number of private developers and public officials and agencies. In Germantown, unlike most new towns privately developed thus far in the United States, it is not possible to carry out a single, coherent private development under unified direction for the entire area of Germantown. This emphasizes the need for special public commitment and focus upon the coordination of private development with public improvement policies.

To achieve the goals set forth in the proposed Plan Amendment, the County Government, the Montgomery County Planning Board, and other public agencies involved must continually monitor the course of development. Positive, continuing guidance must be offered over an extended period of time. To maintain viability and currency, the Master Plan must be reexamined, reevaluated, and updated periodically.

Germantown, if it is to succeed as a corridor city, cannot be treated simply as just another suburban section of the County. This is the County's last large area in the Interstate 70-S corridor in which there remains the opportunity to create a large-scale, high-quality, complete, new community. Germantown's future is a vital component of the future of the entire County, for over the next 15 to 20 years one out of every six new residents of the County will come to live in the Germantown area.
1.1 MAJOR FINDINGS

1.11 DEFICIENCIES IN THE 1967 MASTER PLAN FOR GERMANTOWN

The Montgomery County Planning Board and staff's analyses and work session discussions have brought to light a number of deficiencies in the 1967 Master Plan. These deficiencies are grouped into six major classifications.

**Deficiencies in Transportation Facilities**

The single interchange on I-70-S is found to be inadequate to serve the projected volume of traffic generated by the 1967 Master Plan. On the other hand, the extent of mileage of major roads within the planning area is far in excess of that required for communities of comparable area and population.

Studies conducted by the staff and by consultants show a need to develop facilities for modes of transportation other than the private automobile to serve the requirements of Germantown (see Section 3.22 and Appendix A).

**More Commercial Acreage Identified than Market Can Absorb**

Analyses by the consultants and staff indicate that the 247 acres identified in the 1967 Master Plan for town center commercial use are greatly in excess of the 120 to 135 acres that will be absorbed by the market over the 20-year development period (see Section 3.5 and Appendix A).

**Inadequacy of Staging Programs and Lack of Control or Guidance of Development Patterns**

The need for staging development over a period of time is recognized in the 1967 Master Plan but is not spelled out (see Section 4.2).

The lack of mechanism for the control or guidance of development patterns in the Germantown area is a serious deficiency of the 1967 Master Plan (see Section 4.5).

**Lack of Community Focus**

The several separate neighborhoods identified in the 1967 Master Plan have no real links to one another to integrate them into a "community" under the town/village/neighborhood concept (see Section 2.2).

**Lack of Concern for Environmental Quality**

The development densities allocated in the 1967 Master Plan lack proper concern for the protection and conservation of soils, slopes, and stream valleys (see Sections 3.1 and 4.32).

**Inconsistency of Dwelling Unit Yield between Land Use Plan and the Recommended Zoning Plan in the 1967 Master Plan**

The 1967 Land Use Plan provides for an estimated population of 95,000 people. The proposed transportation system and other service facilities are intended to serve this number of residents; however, the 1967 recommended Zoning Plan permits a yield in excess of 150,000 people (see Appendix B).

1.12 MAJOR DEVELOPMENTS SINCE ADOPTION OF THE 1967 MASTER PLAN

Since the Master Plan for Germantown was adopted in 1967, significant major developments have affected the area. These include:

**Considerable New Development Under Way**

Since 1970, 590 dwelling units have been constructed; subdivision approval has been given for an additional 5,400 dwelling units; and zoning has been granted for 15,000 more dwelling units. These 21,000 units will yield an estimated 62,000 persons if developed. Furthermore, zoning amendment applications are pending for 7,600 additional dwelling units, with a potential yield of 25,000 more people.

**Diversity of Dwelling Unit Type Lacking**

Most new residential construction in the area has been in town-house development, rather than in the higher density apartment uses anticipated in the 1967 Master Plan. The result is less diversity of housing type than that intended in the Master Plan.

**Seneca Creek Watershed Study**

The recent Seneca Creek Watershed Study proposes the creation of three major flood control locations within the planning area and has increased public awareness of the need for flood control measures, including storm water retention and siltation control.

**Population Projections Lower for Montgomery County than Master Plan Projections**

Recent projections by The Maryland-National Capital Park and Planning Commission indicate a reduction in the population growth rate. This im-
plies a reduced demand for housing in the County and a slower growth over a longer development period for Germantown.

Change in Site for Third Campus for Montgomery College

The County has recognized the need for a third campus for Montgomery College, to be located in the Germantown area. The presently proposed site is east of I-70-S and west of Maryland Route 355, between realigned Maryland Route 118 and re-aligned Middlebrook Road (see Section 3.8).

Office Developments in Areas Proposed for Industrial Park Use

Major office development is under way in several segments of land proposed for industrial park use. The effect of this development will be to increase the traffic generated from these sectors and to dilute the intensity of development in the town center area.

Delay in the Provision of Rapid Rail Transit Service to Germantown

The 1967 Master Plan assumed the extension of rapid rail transit service from Washington, D.C., through the I-70-S corridor to Germantown within the near future. It now appears that this service will not be available in that period. The effect will be to cause further overloading of the road network and to increase the need for alternative transportation modes and facilities (see Section 3.26).

Location for Proposed County Hospital Center

The 1967 Master Plan identifies a site for a County Hospital Center in Germantown, but the County Government has since decided to undertake a Comprehensive Health Study prior to selection of a site for the up-County.

New Communities Assistance

New possibilities for Federal financial assistance are offered under the New Communities Development Act of 1968 (Title IV) and the New Communities Development Act of 1970 (Title VII), the latter of which extends such aid to publicly sponsored new communities.

Cluster Provisions

Since 1967, the Montgomery County Zoning Ordinance has been amended to permit the clustering of residential units within certain zones. Because clustering tends to increase population yield per acre, this provision, while desirable in itself, compounds the problem of the discrepancy which already exists between the population anticipated in the 1967 Land Use Plan and the population yield potential from development under the proposed zoning densities.

1.2 RECOMMENDED AMENDMENTS TO THE 1967 MASTER PLAN

1.21 GOALS AND OBJECTIVES

The goals and objectives embodied in this Comprehensive Amendment supplement those of the 1967 Plan. The Master Plan is amended to reflect this broader scope. These goals are spelled out in detail in Chapter 2. Closely related to the achievement of these goals are the new criteria that have been developed for calculating proposed densities of development. Appendix B details these criteria.

1.22 ESTABLISHMENT OF LAND USE PLAN, BASED ON HIERARCHIES AND NETWORKS

The 1967 Land Use Plan proposes a concentric pattern of densities, in which a single area of highest intensity uses is located generally at the center of the planning area, with rings of differing densities diminishing toward the peripheries. The amendment modifies that pattern to allow for what is known as a hierarchical pattern, in which several distinct, yet closely related, units of differing scale, each with a nucleus of higher intensity use, are linked together in a coherent whole by a network of transportation and open space and by community involvement.

The new corridor city of Germantown will be composed of six separate and identifiable villages, each with its own schools and its own commercial community nucleus. Each village, in turn, will include several identifiable, smaller scale neighborhoods, each offering convenience commercial services and appropriate educational and community facilities to serve its population.

The several villages will be linked together; and the separate neighborhoods, connected to their respective village centers by circulation networks (roads, mass transit, pedestrian and bicycle paths) and by a system of parks and open spaces.
(See Sections 2.2, 3.11, and 3.2 and the maps and diagrams shown in Chapter 3.)

1.23 PRESERVATION AND PROTECTION OF THE NATURAL ENVIRONMENT

The Comprehensive Amendment further details and refines the 1967 Plan’s identification of conservation areas within the planning area which includes a major State park, as well as M-NCPPC stream valley conservation areas and several M-NCPPC local parks. This Amendment endorses the recommendations of the Seneca Creek Watershed Study for improved storm-water and sediment controls and proposes a policy, through which to protect the steep, natural slopes in the area (see Sections 3.1 and 4.32 and Appendix C).

1.24 MASS TRANSIT FACILITIES

Three modes of mass transit are envisioned for Germantown:

- Improved commuter rail service along the Baltimore and Ohio Railroad right-of-way.
- New commuter bus service to and from Germantown along the I-70-S corridor.
- An internal bus system linking activity centers within Germantown (see Section 3.2).

1.25 POLICIES FOR PLAN IMPLEMENTATION

A major defect of the 1967 Master Plan is its lack of concrete proposals for implementation of the Plan objectives. This Amendment recommends several policies that should be adopted and consistently enforced to achieve the goals established for the new Germantown Corridor City. These policies, discussed in detail in Chapter 4, include:

Staging of Development Sequence

This Amendment provides a program for staging development through the coordinated phasing of publicly financed capital improvements with grants of zoning and approval of subdivisions. The Montgomery County Planning Board will conduct an annual formal review of development activities in Germantown and, based on this review, will make recommendations for the County Capital Improvements Program and the Comprehensive 10-Year Water and Sewerage Plan (see Sections 4.1, 4.2, 4.3, and 4.5).

Amendment of Zoning and Subdivision Ordinances

Two recent Council actions have effected important modifications in the zoning and subdivision processes. The Planned Development Zone permits the filing of applications for development which allow design and dwelling unit flexibility in better harmony with the land conditions. Another recent action, an amendment to the Montgomery County Subdivision Regulations, insures the adequacy of public facilities prior to the actual subdivision of land and commencing of development. These two actions supply important development guides for the County (see Sections 4.33 and 4.34).

Protection of Steep Slopes

The Montgomery County Planning Board has strengthened controls over development on natural slopes of 15 percent or greater (see Section 4.32).

Provision of Pedestrian and Bicycle Ways

The Planning Board shall encourage provision of a network of pedestrian and bicycle ways throughout the planning area (see Section 4.34).

Increasing of Opportunities for Joint Use of Facilities

The Planning Board shall use its review authority over private development proposals under the subdivision and/or site plan review processes and over public facilities plans to assure the maximum possible opportunity for shared use of facilities between the public and private sectors and among various public agencies (see Section 4.35).

Assurance of Quality Design

The Planning Board shall continue its established policy of encouraging quality design (see Section 4.36).

Staging Through the Subdivision Process

The Planning Board shall require, through the subdivision process, the submission of a staging plan for the proposed development as part of the application for approval of a preliminary subdivision plan (see Section 4.33).
Provide Variety of Housing Costs

The Planning Board shall encourage the provision of a variety of dwelling unit types, tenures, and costs. The Plan, therefore, shows several areas where publicly sponsored low- and moderate-income housing and housing for the elderly are appropriate (see Section 4.4).

Special Taxing District

A Special Taxing District should be created for the Germantown area to provide for the development and operation of necessary services and facilities (see Section 4.54).

Assure Local Citizen Participation

A Germantown Advisory Council should be established to work with the Germantown development coordinator (see Section 4.54).

Utilization of Possible State and Federal Aid Programs

The Germantown development coordinator should explore potential State and Federal financial aids and should assist in preparing grant requests (see Section 4.54).
CONCEPTS

2.1 GOALS AND OBJECTIVES

The aims of this Amendment to the 1967 Master Plan are complex and far-reaching. Although the goals and objectives are discussed here under the category headings of “environmental and physical,” “community and social,” “economic and fiscal,” and “implementation,” they are necessarily and essentially interrelated.

2.11 ENVIRONMENTAL AND PHYSICAL GOALS AND OBJECTIVES

To provide the opportunity for people to live and work in the same community

Provide a broad range of housing types at various economic levels.
Provide an economically viable employment sector, readily accessible to residents of the planning area and the region.
Provide an adequate base of employment opportunities for all skill levels.
Insure economic stability of the area by providing a diversified economic base.

To provide housing diversification, with housing types available for a full range of income and age levels

Promote development of a varied mix of housing types that can accommodate families of varying age and income levels and can allow opportunities for the individual family and its members to continue living in the area, as their needs and tastes change.
Provide a ratio of low- and moderate-cost housing units in each residential area.

To protect and preserve the area’s unique natural and environmental resources

Emphasize the planning area’s natural and environmental features, particularly stream valleys, as prime determinants of physical form and intensity of land use.
Assess and control the ecological impact of development so as to preserve natural features and ecological balance.

To insure convenience, accessibility, and flexibility with regard to circulation systems

Develop quality internal and external public transit systems to reduce the need for, and dependence upon, the private automobile.
Develop automobile transportation network in coordination with existing regional circulation network.
Provide for an independent pedestrian system, with the separation of auto and pedestrian routes where feasible.
Locate schools, shops, and playgrounds within reasonable walking distance of all residences and provide safe, convenient pedestrian access to all facilities.

To assure the provision of adequate community facilities at all stages of development

Stage residential development through a variety of public actions so that such development occurs where adequate supporting community facilities are available.
Locate community facilities at sites appropriate for their use in relation to population distribution.
Encourage joint use of public and private facilities.
Offer balance and broad choice in commercial facilities and services.

To consider all elements of the environment, in terms of the effects of each on physical and emotional health and welfare

2.12 COMMUNITY AND SOCIAL GOALS AND OBJECTIVES

To provide for community identity

Employ a neighborhood/village/town concept for balanced residential development.
Develop a network of villages, and identifiable neighborhoods within villages, of a physical size and population appropriate to encourage neighborhood identity and to allow opportunities for citizen activity.
Assure desirable and convenient physical relationships between residential, commercial, and public land use areas, at both the neighborhood and village levels.
Use the “village” as the primary physical planning unit for the staging plan to coordinate residential development with the provision of adequate community facilities and services.

To encourage social contacts and community activities through development of the village and neighborhood structure and, thus, to overcome the lack of cohesiveness of scattered residential districts existing or being built at this time

Encourage the function of village and neighbor-
hood groups, to further a sense of community involvement and to enable residents to participate in decision-making processes.

Provide varied opportunities for use of leisure time.

Locate community services so as to provide convenient access from all residences.

To provide variety and opportunities for choice

Provide a choice of urban, suburban, or semirural living environments.

Provide a full range of year-round recreational and leisure opportunities.

To allow opportunities for use of new technologies and innovations in social services and to accommodate future needs and technologies

To provide amenities and services that are extensive and of high quality

2.13 ECONOMIC AND FISCAL GOALS AND OBJECTIVES

To assure maintenance of economic quality and stability by providing a diversified economic base

Offer balance and broad choice in commercial facilities and services.

Provide employment opportunities at readily accessible locations.

Provide an adequate base of employment opportunities for all skill levels.

Use careful planning and controls on development and performance to assure the efficient, beneficial, and stable development of employment opportunities.

Encourage the development of the town core as a community activity center where a wide range of service is available.

Provide a sufficient market for a variety of convenience retail and service commercial facilities.

Minimize adverse economic competition between commercial activity areas through spacing and by differentiation of the goods, services, and activities offered, according to the sizes and locations of areas to be served.

To provide for the most economic and efficient expenditures of public funds for capital improvements and social services

Schedule the provision of community facilities and services according to a well-conceived development plan, and monitor the pace of development so that staging plans can be modified to reflect changing needs.

Encourage shared use of facilities, both public and private.

To provide comprehensive planning criteria for land development

Create and employ a realistic set of ordinances, designed to assure coordinated development.

Coordinate open space and park acquisition and development programs so that they are in balance with the pace and direction of development of the corridor city.

2.14 IMPLEMENTATION GOALS AND OBJECTIVES

To provide mechanisms to assure fulfillment of the rich potential envisioned for the development of Germantown

Monitor the continuing development of Germantown, in terms of ecological impact, circulation system impact, sewer and water impact, development types and mixes, economic heterogeneity, employment level and diversification, and economic stability.

Encourage fulfillment of stated goals and objectives by providing necessary services and facilities and appropriate incentives and controls.

Conduct periodic Master Plan reviews, to measure achievements against goals and objectives and to assess the findings of the monitoring activity and the potential of new programs and developing technologies.

2.2 THE VILLAGE AND NEIGHBORHOOD CONCEPTS

The design of a new community offers a major opportunity to create an environment and an atmosphere that will encourage and enhance the variety and quality of life in the community. Physical layout and scale of roads, paths, open space, and buildings do affect the ways in which people live and the degree of ease (or inconvenience) in which they can maintain contacts with one another. Each phase in the growth of a community should offer, not only a satisfying physical setting, but also an environment that facilitates social contact and community life. For these reasons, the Land Use Plan indicates
a town/village/neighborhood hierarchy, with the neighborhood as the basic physical and social unit in the development of Germantown. A neighborhood of 4,000 to 5,000 persons living within easy reach of local school, recreation, and community facilities can offer its residents many opportunities for satisfying educational, social, and civic activities. This scale of community, however, cannot provide all the essential and desired activities and opportunities. If the larger community is to function as a cohesive unit, residents must be able to meet and interact in larger scales of community, such as the village and town.

Development of the village, and its activity centers and pedestrian systems, as an intermediate level between the smaller neighborhood and larger town can encourage creation of the physical, social, and political structures needed to achieve the goals for the corridor city. The linking of several neighborhoods into a single village and of several villages into a community can forestall many of the problems and conflicts associated with fragmented small-scale developments. Such organization permits residents to feel that they are part of an identifiable community in an environment built to human scale. The six villages are Churchill, Gunners Lake, Middlebrook, Clopper, Neelsville, and Kingsview, as shown in Exhibit 3.

Classified in the Germantown corridor city will serve a population of 4,000 to 5,000 each, while villages will average approximately 18,000 to 20,000 people. Each village is intended to accommodate varying densities of residential development—single family, town house, garden apartment, and high rise—which provide for choice and encourage the creation of diversified communities. Varieties, in such factors as topography, existing development and commitments, land area, configuration, capacity of road network, total population, and school standards, require flexibility in applying the neighborhood and village concepts. This flexibility allows for a wider range of choice of housing types and social situations and community identifications within the neighborhood/village/town framework.
LAND USE ELEMENTS
3.1 OPEN SPACE, CONSERVATION, RECREATION, AND STORM-WATER MANAGEMENT

The open space system of Germantown is designed to meet several needs:

Conservation of natural environment

Creation of a framework within which development can occur, at densities suited to topography and other natural characteristics

Provision of adequate, well-located playgrounds and recreation facilities, as well as a system of pedestrian and bicycle pathways

3.11 THE STREAM VALLEY AND PUBLIC PARK SYSTEM

The Land Use Plan indicates a complete perimeter greenbelt park, bordering the entire Germantown Planning Area, along the valleys of the Great Seneca and Little Seneca Creeks and their tributaries. Most of the approximately 685 acres of park land currently in public ownership lies within these two stream valleys. The Plan proposes a total of 2,730 acres of park land, mostly within these stream valley perimeters (see Open Space, Circulation, and Historic Sites Plan). On the southeastern side, some 709 acres of the Seneca State Park will form the planning area boundary. The remaining stream valley parks will be acquired by The Maryland-National Capital Park and Planning Commission by purchase or public grant or easement. The entire greenbelt is intended for recreational use.

Large portions of these park areas will be retained in their natural state. Certain segments, some within the boundaries of the planning area and others immediately outside, will be designated for development with varied recreational facilities. The greenbelt areas offer attractive possibilities for hiker-biker trails. A 36-hole, regulation golf course will be developed in the South Germantown greenbelt area, and a year-round swimming center should be considered for this area.

Additional open space areas (outside the public park system) can be preserved through the use of scenic easements. Such an easement is recommended to insure maintenance of a working farm in the Clopper Village (see Section 3.45).

3.12 RESPONSE TO THE PHYSICAL ENVIRONMENT

One of the most important issues in planning for physical development is not where to build, but where not to build. To assure the protection of Germantown’s steep, wooded slopes and valleys, this Plan recommends that development on natural slopes of 15 percent or greater be controlled (see Section 4.32).

Recognition of interdependence among the natural environmental factors of the area is basic to an understanding of how any change of the landscape in one aspect affects a number of others. Removal of existing vegetation from a steep slope, for example, increases rainfall runoff which, in turn, contributes to rapid erosion, loss of topsoil, and increased stream sedimentation. Accordingly, a detailed soils listing, with a corresponding soil and slope map for the planning area, is included here because such information is significant in determining areas suitable for development (see Exhibit 4). These data have been of particular importance in the development of design criteria for the proposed Land Use Plan and for regulating subdivision review in Germantown. Soils, slope, and topography are key factors in determining the pattern of development and allowable densities.

Elevation of the planning area varies from less than 275 feet in the stream valleys of both Little and Great Seneca Creeks to more than 830 feet on the central ridge at the northern end of the planning area. The Soil Suitability—Building Constraints map (Exhibit 4) shows the general configuration of the land and clearly identifies the finger-like penetrations of the stream valley network.

The existing tree cover in the planning area, one of the site’s primary natural amenities, has been used as a primary design determinant in the Land Use Plan (see Exhibit 5). Although only scattered areas of mature forest vegetation now exist, the entire site was once a forest of natural hardwoods, including white and red oak, yellow poplar, locust, hickory, and black walnut. Mature forest areas are now found primarily in rough or steep areas or where land has been too eroded for cultivation, generally in the poorly drained soils of the floodplain and stream areas.

In most cases existing tree stands clearly indicate those areas that farmers have not claimed for agricultural use because of severe slopes, erosion-prone soils, or a combination of these factors. These wooded areas should be left undisturbed by development. They are valuable for their contributions to
erosion control and soil stabilization, their recreation potential, and as an environment to sustain wildlife.

3.13 CONSERVATION AREAS AND GREENWAYS

A system of private greenways and conservation areas is identified which should be dedicated to homeowners’ associations or other community groups. These conservation areas can aid in controlling storm-water runoff and can be utilized to provide pleasant, functional settings for pedestrian and bicycle paths.

3.14 STORM-WATER MANAGEMENT

Introduction

The Plan proposes a balanced system of storm-water management, including three large Soil Conservation Service lakes, on- and off-site detention devices, and smaller sub-basin devices. The most basic requirement for proper storm-water management and flood control, however, is the correct allocation of land use densities on specific land parcels.

The 1972 Seneca Creek Watershed Study, conducted by the Soil Conservation Service under joint sponsorship of the Montgomery County Council, Montgomery County Soil Conservation District, and The Maryland-National Capital Park and Planning Commission, outlines the basic system of storm-water management (see Exhibit 6). The chief problem cited in this plan is “... indiscriminate expansion of urbanization in the watershed which, not only contributes to the primary problems in the watershed, but is also encroaching on land badly needed for recreational uses.”

The Soil Conservation Service proposes comprehensive long-range facilities for sediment storage, flood control, and recreation. These objectives, accepted as guidelines for the development of the proposed Land Use Plan, include:

- Reduction of erosion, sediment, and flood-water damage through necessary land treatment and control measures.
- Proper use of land throughout the watershed area.
- Preservation and protection of existing fish and wildlife resources and habitats.
- Provision of recreational areas or facilities for area population.

Three Proposed Lakes

Two of the three lakes proposed by the Soil Conservation Service have been endorsed by several of the agencies reviewing the proposal. These are Lake No. 3 on Little Seneca Creek and Lake No. 9 on Gunners Branch above the Baltimore and Ohio Railroad right-of-way. Recent discussions indicate that Lake No. 9 may be built by private developers, in connection with the development of surrounding properties.

At a November 6, 1972, meeting, the developers (Stanley Martin Communities, Incorporated) and staff members of the County Government, Montgomery County Soil Conservation Service, and the Montgomery County Planning Board reviewed details of a possible arrangement for construction of Lake No. 9 by the developers, while providing for County control of the Storm-Water Management System. These are reflected in a November 21, 1972, memorandum from the Director of the Montgomery County Office of Planning and Capital Programming to the Deputy Chief Administrative Officer.

With respect to a third lake, Lake No. 6 on the Great Seneca Creek, the cosponsors have agreed that a thorough analysis should be made of alternate methods to achieve the necessary flood control standards. Some flood control measure is required for the sub-basin area draining into proposed Lake No. 6. Pending further study, however, a lake of the proportions and configuration as first proposed for this area does not seem appropriate.

Other Storm-Water Control Measures

Additional measures must be developed to protect the area of Little Seneca Creek downstream from Lake No. 3, where three tributaries drain the Kingsview Village area. Since the Seneca Creek Watershed Study was prepared before increased development was proposed for Kingsview Village, the Study did not make specific recommendations for this area. Discussions with the Soil Conservation Service and the staff of the County Executive have indicated that some treatment measures for the tributaries to Little Seneca should be provided.

Provisions for the management of storm water in tributaries draining the Kingsview area into Little Seneca Creek will be developed during The Maryland-National Capital Park and Planning Commission’s Storm-Water Management Study. This Study, along with the Montgomery County Department of Environmental Protection’s study of storm-water facilities, may indicate that erosion and storm-water control devices are required for each of the six villages in Germantown and for each stage of development. Because of the increased density recommended for Kingsview and in view of the fact that Little Seneca Creek is an officially stocked trout stream in Montgomery County, this village area merits special attention, with regard to sedimentation control and storm-water management.
Soil Suitability - Building Constraints

LEGEND
- Slight Constraints
- Moderate Constraints
- Severe Constraints
SOILS SUITABILITY – BUILDING CONSTRAINTS

I. SLIGHT CONSTRAINTS: GOOD-TO-FAIR SOILS, WITH MODERATE SLOPES

- ChC Chester silt loam, 8-15 percent slope
- GhC Glenelg silt loam, 8-15 percent slope
- GmB Glenville silt loam, 8-15 percent slope
- McC Manor channery silt loam, 8-15 percent slope
- MdC Manor silt loam, 8-15 percent slope
- MmC Montalto silt loam, 8-15 percent slope
- NsC Neshaminy silty clay loam, 8-15 percent slope
- ChB Chester silt loam, 3-8 percent slope
- EeB Elioak silt loam, 3-8 percent slope
- EkB Elioak silty clay loam, 3-8 percent slope
- GcB Glenelg channery silt loam, 3-8 percent slope
- GhB Glenelg silt loam, 3-8 percent slope
- MbC Manor channery silt loam, 3-8 percent slope
- MdB Manor silt loam, 3-8 percent slope
- MmB Montalto silt loam, 3-8 percent slope
- NeB Neshaminy silt loam, 3-8 percent slope
- NsB Neshaminy silty clay loam, 3-8 percent slope

II. MODERATE CONSTRAINTS: FAIR-TO-POOR SOILS, WITH STEEP SLOPES

- CkA Chewacla silt loam, 0-3 percent slope
- CtA Congaree silt loam, 0-3 percent slope
- IdB Iredell silt loam, 3-8 percent slope
- McD Manor channery silt loam, 15-25 percent slope
- MdD Manor silt loam, 15-25 percent slope

III. SEVERE CONSTRAINTS: POOR-TO-VERY-POOR SOILS, VERY STEEP SLOPES OR FLOODPLAIN AREAS

- MeE Manor soils, 25-40 percent slope
- MeE Manor channery silt loam, 25-45 percent slope
- WhA Wehadkee silt loam, 0-3 percent slope
- WoA Worsham silt loam, 0-8 percent slope
- GiE Glenelg soils, 25-45 percent slope
- MeF Manor soils, 45-65 percent slope
- StE Stony land, Manor materials, 14-45 percent slope

SOURCE: Soil Survey, Montgomery County, Maryland, published by U.S.D.A.
3.15 ACTIVE OPEN SPACE AND RECREATION AREAS

Two recommended standards of the National Recreation and Parks Association have been applied, wherever feasible, to the ultimate configuration of the Germantown planning area, as defined in the Comprehensive Amendment to the Master Plan for Germantown. The first is a demographic standard of 2.5 acres of local park land, intensively developed for active recreation, for each 1,000 people. The second is a geographic standard, providing local park land within one-half mile proximity to all portions of the urbanized area. The resultant local park land recommendations are summarized in Appendix D, Table 6.

Neighborhood recreation facilities will be provided at local parks or park-school sites distributed among the villages in the planning area. There are 22 such parks, averaging approximately 10 acres each, indicated on the Land Use Plan to serve individual neighborhoods.

Facilities usually furnished in local parks include community recreation buildings or shelters; athletic fields; lighted, paved multi-use courts; lighted tennis courts; and playground equipment. Such facilities may vary from site to site, depending on specific topographic features and drainage patterns.

A system of hiker-biker trails will be provided throughout the planning area. Special purpose facilities, such as golf courses, swimming pools, and ice skating facilities, will also be provided.

3.16 HISTORIC SITES AND AREAS OF HISTORICAL SIGNIFICANCE

The small, rural center of Germantown is located at the intersection of Maryland Route 118 and the Metropolitan Branch of the Baltimore and Ohio Railroad. The town is a mix of many old and some newer houses, with an elementary school, post office, bank, nursing home, and the old commuter railroad station.

Records of Germantown date back to the early years of the County. As early as 1732, a survey was recorded for the area where the present town now stands. The original settlement, later known as "Old Germantown," was located a mile to the south, at the intersection of the Darnestown Road (now Maryland Route 118) and Clopper Road. The town was settled by German immigrants sometime after 1835 and eventually acquired a post office. After the railroad was opened in 1873, settlement began to center around the station; and Old Germantown eventually disappeared.

Two other centers of historic interest are Middlebrook and Neelsville, both on the Old Frederick Road, now Maryland Route 355. Middlebrook was settled before 1830 and was originally called "Step-town." Neelsville was the site of an old tavern and a Presbyterian church.

The most important historic site in the area is the Waters House, located just north of Aircraft Drive near the Fairchild-Hiller complex. The land was originally granted to William Waters in 1752; and, from its construction and building materials, the house almost certainly dates back to 1800 or earlier. Though it has suffered vandalism, the house remains structurally sound and could be authentically restored. Several avenues of restoration are possible and should be pursued in conjunction with the development of Churchill Village. Some possible uses for this structure include its conversion into a recreational building, administrative offices for the homeowners’ association, religious facility, restaurant, or other similar public or semipublic use.

The locations of historic sites are shown on the Open Space, Circulation, and Historic Sites Plan. These historic sites in and adjacent to the planning area include:

CHURCHILL VILLAGE

Victorian Farmhouse (north side of Waters Road in Germantown)—This white-painted, classic house, though presently abandoned, is still in good structural condition and could be restored.

GUNNERS LAKE VILLAGE

Log House (on Middlebrook Road, just south of the Atomic Energy Commission building)—Probably of mid-19th Century construction, this building has been sheathed. It is presently in use as a dwelling.

Waring Viaduct—This fine three-arch, stone viaduct, built in 1906, carries the Baltimore and Ohio Railroad 70 feet above Great Seneca Creek.

NEELSVILLE VILLAGE

Neelsville Presbyterian Church (at the intersection of Maryland Route 118 and Maryland Route 355)—This fine, old, frame church was built in 1877, replacing an earlier church on this site. It is still in use.

CLOPPER VILLAGE

Baltimore and Ohio Railroad Station (located adjacent to Maryland Route 118 and the B & O Railroad)—This classic "Railroad Gothic" station, typi-
Seneca Watershed Study

Proposed Impoundments
cal of the once numerous small-town stations, was built in 1891.

Cemetery (north side of Clopper Road, near Gunners Branch)—This old cemetery plot dates back to the early years of settlement in the area. The developers of the tract have expressed the intent to preserve and restore the site.

Clopper Mill (Clopper Road and Great Seneca Creek)—The ruins of this mill date back to 1834. It was built by Francis Clopper, of “The Woodlands.”

Dunn Log House (on Clopper Road, just south of the Maryland Route 118 intersection)—Perhaps the only remaining relic of the original settlement, this chinked-log structure dates from the 1830-1840 period. It presently serves as a wing of a more recent house, still in use.

School House (just south of the Dunn Log House)—Though no positive identification has yet been made, this small, frame building seems to date from the late 19th Century and is characteristic of many one-room schoolhouses.

KINGSVIEW VILLAGE

King Barn (at the intersection of Maryland Route 118 and Riffle Ford Road)—This classic stone-and-frame barn, circa 1850-1860, is still in good repair.

GREENBELT AREA

The Woodlands (south of Clopper Road and east of Seneca Creek)—Site of the Clopper family house which has since burned. The area is now part of the State park.

Indian Shelter (along Seneca Creek north of Maryland Route 355)—This rocky area was used by Indians prior to settlement of the area.

Strider Smokehouse (south of Clopper Road in the State park area)—A now rare example of a chinked-log smokehouse, dating back to the early 19th Century.

3.2 CIRCULATION

3.21 RECOMMENDED SYSTEM

As a new corridor city, Germantown has an opportunity to develop a totally balanced transportation system, incorporating a mix of automobile, pedestrian, and public mass transit modes, each playing a role in the functions of the community. Such a plan is consistent with the goals and objectives of the Comprehensive Transportation Plan for Montgomery County, currently being prepared by the Montgomery County Planning Board.

3.22 INTERSTATE AND MAJOR ROAD SYSTEMS

Introduction

A major road system of approximately thirty-five miles of divided highway is planned to meet the basic requirements for vehicle travel among villages within the planning area and to provide access to the remainder of the metropolitan region (see Exhibit 7). These roads will be constructed as four-lane facilities initially, with rights-of-way reserved for ultimate expansion to six or eight lanes, depending on need. Such an approach helps to stage road development to match the growth of Germantown and to minimize initial capital expenditures. In no area, is it anticipated that roadway width will exceed eight lanes.

The road network has been amended from a “loop” system to a “ladder” system. Land use densities have been reallocated to balance the loads on this road network.

Access from Germantown to other parts of the metropolitan area will be provided by way of a number of routes, including the Eastern and Western Arterials, Maryland Route 355, Interstate 70-S, and Clopper Road to the north and the south and Maryland Route 118 and Maryland Route 27 to the east and west. These roads will require upgrading in capacity in order to carry the vehicular traffic generated by Germantown.

Exhibit 8 depicts the recommended road widths for the proposed road system. A staging plan, proposed in Chapter 4, relates to the road network improvement schedule (see Exhibit 21).

Road Widening

This Amendment proposes that Interstate 70-S be expanded to an eight-lane facility north to its interchange with M-27. This is consistent with previous proposals made by the Maryland State Highway Administration. It is proposed that the other roadways to the south be upgraded to six-lane, divided facilities, with the exception of Clopper Road which should be upgraded to a four-lane, divided facility (see Exhibit 7).

Interchange Improvements

This Comprehensive Amendment recommends two new, full interchanges on I-70-S and the abandonment of the existing interchange, to handle the ultimate development. Because of the undesirable weaving and merging movements that would otherwise result, two new interchanges are recommended, one at Middlebrook Road and the other at M-27 relocated, together with the abandonment of the
Major Highway System
The existing interchange at Maryland Route 118. These recommendations are contingent upon the proposed widening of I-70-S to eight lanes and development of other components of the total transportation system, as described below. According to the State Highway Administration, these two interchanges should be built simultaneously with the widening of I-70-S and with the abandonment of the existing interchange at Maryland Route 118. Prototype ramps are shown on the Plan. The designs of these ramps must be approved by State and Federal authorities, prior to construction.

The Western Arterial is proposed to be built as a six-lane, controlled major highway. Care should be taken by the County and the City of Gaithersburg not to increase the densities of uses along the service area of this road, since projected flows along this arterial already show high volumes during peak hours. Additionally, traffic studies along the I-70-S corridor should be undertaken to ascertain the total system requirements and relationships along I-70-S and the other road linkages.

The County must recognize that Germantown—indeed the whole development corridor along I-70-S—requires that the Outer Beltway be built, so that both through traffic and other traffic not related to the District of Columbia may be distributed properly.

The highway network of the Maryland State Department of Transportation for the County requires that through traffic be maintained from the Damascus area to the southern part of Montgomery County. In this regard, highway M-27 should be designated a State highway as an extension of Maryland Route 27 to its intersection with realigned Maryland Route 118. At such time as M-27 is completed, realigned Maryland Route 118 east of its intersection with M-27 should be redesignated as a County highway.

Traffic Studies

Traffic studies have been conducted by Montgomery County Planning Board staff and consultants for the Germantown area. One study was made in order to test the effect of “capacity” development in Germantown on the proposed internal road and external transit system.

The p.m. peak-hour gravity model of this study assumes certain conditions:

1. Ultimate development of 120,000 people in six villages.
2. Establishment of 82 road links and points.
3. High employment concentrations along the I-70-S corridor.
4. Location of the Germantown campus of Montgomery College in the Middlebrook area.
5. Twenty-five percent of the workers employed in Germantown will live in Germantown.
6. Twenty percent of the external trips on I-70-S will use the extended transit system; ten percent will travel on Clopper Road, south; and five percent, on Maryland Route 355, south.
7. No peak-hour internal transit system will be available.

The results of this test are shown on Exhibit 9. Given the above assumptions, the study suggests that:

1. The road system is badly overloaded at capacity development; further increases in the size of Germantown development beyond that recommended in this Master Plan should not be allowed.
2. An internal bus system must be developed.
3. Employers should be encouraged to stagger working hours so as to spread out the evening trip movements from their offices.
4. Eight-lane rights-of-way should be obtained along Maryland Route 118 from Middlebrook Road to Maryland Route 355; along Maryland Route 355 from Middlebrook Road to Maryland Route 118; and along Middlebrook Road from Maryland Route 118 to Maryland Route 355.
5. All major roads must be built to specification as shown on Exhibit 8.

Later, as an input to the development of the staging program for Germantown, a separate study was initiated to determine the highway loadings at the end of Stage Two, as initially delineated, in order to determine the effects of expected short-term growth on existing road programming. The following list of assumptions and alternatives was submitted to a consultant for analysis:

1. First two stages of population development and distribution, as initially delineated in the Preliminary Draft proposal.
2. No new roads, except the construction of:
   a. Western Arterial as a four-lane, divided highway;
   b. Maryland Route 118 to six lanes from Middlebrook Road east to Maryland Route 355 and two lanes from Middlebrook Road west to Clopper Road.
3. External bus system in operation, but no separate right-of-way.
4. Outer Beltway not in existence.
5. Projected through traffic would increase only slightly during the decade.
6. Employment:
   a. Century XXI, either 5,000 or 10,000 employees;
   b. Fairchild-Hiller, 750 employees;
   c. Atomic Energy Commission, 2,000 employees.
RECOMMENDED TYPICAL CROSS SECTIONS

LIMITED ACCESS FREeway

CONTROLLED MAJOR HIGHWAY

MAJOR HIGHWAY

ARTERIAL HIGHWAY (URBAN)

ARTERIAL HIGHWAY (RURAL)

PRIMARY RESIDENTIAL (URBAN)

PRIMARY RESIDENTIAL (RURAL)
7. Town center commercial: No significant commercial development.
8. Community College would be located in Middlebrook, with approximately 2,500 students.

As a result of this study, revisions were made to the staged highway improvement program. Based on this study, any growth beyond Stage One residential and commercial development and an employment base of 5,000 employees will overload the highway system. The most important figures are related to the existing Maryland Route 118/I-70-S interchange:

Stage One and Two, with 10,000 employees at Century XXI — Existing east-south ramp will exceed its capacity, with a volume of 2,316 cars per peak hour.

Stages One and Two, with 5,000 employees at Century XXI — The north-west ramp exceeds its capacity, with 1,953 cars per peak hour. (The east-south ramp is reduced to 1,622 cars per peak hour.)

This study reinforces the necessity for monitoring growth and obtaining additional interchanges and is the basis for modifications in the residential staging and highway plans.

Additional highway studies among the various jurisdictions in the I-70-S corridor should be undertaken to coordinate traffic information.

3.23 INTERNAL ROAD SYSTEM

Along with the major road system described above, the Plan proposes a system of internal roads, comprised of Arterial Roads, Business District Streets, Industrial Streets, and Primary Roads. Arterial Roads handle traffic between villages. Business District Streets carry traffic within or adjacent to areas of commercial activity. Industrial Streets handle traffic adjacent to and within areas of industrial activity. Primary Roads carry traffic within neighborhoods. (See notes on Zoning and Highway Plan.) Residential units should not be allowed direct access onto arterial roads; rather, the system of local or primary roadways should service residential areas and provide access to Arterial Roads. The alignments of Primary Roads are shown on the Zoning and Highway Plan only for illustrative purposes. At the time of subdivision review, alternative primary road alignments and intersections may be permitted to allow for flexibility of design.

3.24 PARKING

Parking standards will conform to the Montgomery County Code. In high-density residential areas, parking should be clustered to minimize parking areas, reduce automobile travel, and avoid potential hazards to children at play and to pedestrians.

Facilities in activity centers should be located to take advantage of the potential for the time-shared use of parking areas. This concept appears particularly applicable to the town center and village centers, where the peak-hour parking requirements of different uses fall at different times of the day for different activities (e.g., library and shopping center). Judicious location of varied uses can increase the vitality of different activities, while reducing the overall need for parking facilities.

3.25 PEDESTRIAN AND GREENWAY SYSTEMS

As major and arterial highways are developed, provision should be made for pedestrian crossings, either over or under roadways. The Open Space, Circulation, and Historical Sites Plan illustrates the recommended locations for such crossings and for the major pedestrian and bicycle routes within the planning area. The County Government has recommended that all State highway projects include either sidewalks or bicycle trails.

In addition, a system of pedestrian pathways should be developed to allow safe off-street movement from homes to village centers, schools, and other neighborhood facilities. These pathways should provide for bike riding, as well as walking. Much of the pathway system can be built within the network of parks and greenways, both of which link neighborhood and village units, and should be acquired primarily through dedication in the subdivision process.

To the extent possible, neighborhoods and groupings of neighborhoods will be organized so as to minimize the need for pedestrians to cross heavily traveled roadways between residential areas and activity centers. In addition, community facilities will be grouped where possible to simplify pedestrian access. For example, a swimming pool and tennis courts can logically be located adjacent to a school site. The pedestrian system serving one will serve all. Grade-separated crossings will be provided where heavily utilized pedestrian and bicycle routes cross major roadways.

Certain difficulties may arise in developing a pedestrian system. These may involve the registration of legal agreements with many property owners, in order to acquire long, narrow strips of property for rights-of-way and avoid paying the inordinately high costs for certain parcels needed to complete a
Initial Traffic Study

Highway Traffic Loadings
At Ultimate Development
3.26 THE PUBLIC TRANSPORTATION SYSTEM

External Transit System

An analysis of the 1967 Master Plan for Germantown indicates the need to reevaluate the capacity for north-south, peak-hour trip movements in the I-70-S corridor.

Even with twenty-five percent of the total projected Germantown work force both living and working in Germantown, it is projected that the proposed road system could become overloaded. It is not feasible to consider expansion of the road network beyond that specified in this Plan. The basic transportation concept requires the creation of a balanced transportation system, providing a mixture of automobiles, pedestrians, and transit modes to meet the total needs of Germantown. Therefore, a series of staged public transit improvements is proposed, paralleling those of the staged road network.

The Transportation Plan proposes a first-stage public transit system, involving bus service, linking Germantown with employment centers in Gaithersburg, Rockville, and Washington. This system should be initiated in the early period of development, utilizing existing roadways, and shall be patterned on the highly successful operations in Reston, Virginia, and Columbia, Maryland. Buses will circulate within Germantown and provide service to downtown Washington. One route is proposed to follow Clopper Road to the National Bureau of Standards and the Gaithersburg town center, then express via I-70-S and the Rockville Pike, Wisconsin Avenue, to downtown Washington. The second route will follow Maryland Route 355 through Gaithersburg and Rockville, with buses alternating to downtown Washington by way of Bethesda and Silver Spring.

During this first stage of development, existing commuter rail service on the Baltimore and Ohio Railroad right-of-way will be improved and expanded. Improvements will include upgrading the station, parking facilities, and rolling stock. This recommendation is consistent with the County Executive’s recent comments on the State Highway Administration 1974-1978 Secondary Highway Program, which recommends that the outer terminal of the expanded commuter rail service be in Germantown, rather than Gaithersburg.

The second stage will involve the construction of an exclusive transit right-of-way, starting northwest of Middlebrook Road and running along I-70-S to Gaithersburg, then paralleling the Baltimore and Ohio Railroad to the proposed northern terminus of the Metro rail system south of Gaithersburg. The location of this terminal is still to be determined by State, City, and County officials. Stops along the proposed transitway will be provided at locations near the major residential and employment centers along the I-70-S corridor between Gaithersburg and Germantown. Right-of-way easement also should be obtained through the Germantown town center at this time, in preparation for future stages of development. Right-of-way along I-70-S and through Gaithersburg should be obtained through purchase or by dedication during the subdivision process.

Consideration should be given also to the extension of this transitway northward to the City of Frederick. Additional external service on the Eastern and Western Arterials also should be considered in subsequent reviews of the Germantown Plan.

A third stage of development will upgrade the bus transitway to a rail transit extension of the Metro system. The geometrics of the transitway should be designed to allow for this eventual upgrading. When the need for rail service occurs, the service should be extended in a subway under the Atomic Energy Commission and proposed M-84, emerging near the M-27/I-70-S interchange to cross I-70-S to rail storage and turnaround facilities; and a northern station should be provided near the north edge of the planning area (see Exhibit 10).

Internal Transit System

The Plan proposes an internal bus system, focusing on the town center and the Montgomery College. This system will link these two focal points with village centers, employment areas, and residential concentrations (see Transit Routes Map). To become a useful component of the Germantown transport network, this system should be instituted in stages, corresponding with the growth of Germantown.
Proposed Mass Transit Easement Alignment

LEGEND
- Employment Centers
- College Site
- Town Center
- Proposed Metro Transit Easement
- B&A Railroad
Summary

The total balanced transportation system recommended is essential to the growth and operation of the Germantown corridor city. For the town to function properly, this transportation system needs to be implemented as an integral part of the total Germantown Plan. Supported through a Special Taxing District or other means during the early stages of development, the system is proposed to become a self-supporting service to the residents in the later development stages (see Section 4.54).

3.3 COMMUNITY FACILITIES

3.31 CLASSIFICATION OF COMMUNITY FACILITIES BY APPROPRIATE SERVICE LEVEL

Introduction

The provision of community services should respond to the hierarchy of town/village/neighborhood, as discussed in Sections 1.22 and 2.2. The scope and variety of activities provided will increase with the number of people served. Each center of a particular level should provide for certain basic activities; but, beyond that, a variety of activities between centers is encouraged. The following partial lists of facilities appropriate to the hierarchy make this distinction clear. Responsibility for the provision and operation of the facilities may fall to private commercial enterprise, homeowners’ associations, the Germantown Taxing District, the County Government, or a combination of these. It is the policy of the Montgomery County Planning Board to examine the adequacy of community services and facilities in the review of public or private development proposals under the subdivision review, site plan review, or mandatory review provisions. This policy should be extended to include review by the Planning Board of Board of Appeals cases and special exception applications.

Community and public facilities are not in every case indicated on the Land Use Plan by size and specific location. More appropriately, public facilities are classified according to the levels of population that they will serve.

The Neighborhood

Residential areas and activity centers of each neighborhood will be connected by a network of pedestrian and bicycle ways. Each neighborhood will offer most of the following facilities, many of them located in the neighborhood centers:
- Elementary school
- Local or mini-parks
- Playfields and other areas of appropriate scale, such as tot lots, for active recreation
- Swimming pool
- Churches, synagogues, and other ecclesiastical facilities
- Child care (church or synagogue facilities might be used for day-care and early learning activities)
- Facilities for small meetings
- Small-scale, convenience retail facilities

The Village

Most of the following facilities will be included within each village, with many located in the village centers:
- Junior high school (one per village)
- Senior high school (one for every two villages)
- Community meeting rooms
- Recreation facilities for special groups, such as teenagers and elderly residents
- Tennis courts
- Churches, synagogues, and other ecclesiastical facilities
- Child care (preschool, early learning, and/or other forms of day-care facilities)
- One library for every two villages (see Land Use Plan for specific locations)
- One fire station for every two villages (see Land Use Plan for locations)
- Convenience commercial operations (retail, service, office)
- Medical clinic, medical offices, and other professional offices
- Car care center

The Town

Certain facilities are needed to serve the total population of the corridor city, and, in some instances, additional populations (beyond the bounds of the planning area). These include the following, many of which will be located in the town center:
- Internal and external public transportation systems and facilities
- Pedestrian and bicycle pathway systems
- Regional commercial facilities (retail, service, and office)
- Hotel/motel facilities
- Hospital or medical center
- Central public safety facilities (police, fire)
- Regional library
- Major recreational facilities
- Specialized educational facilities for community college, tutorial programs, ecological edu-
cation, arts and crafts, lecture series, and similar operations
- Specialized recreational facilities for such activities as boating, fishing, and organized sports programs
- Churches, synagogues, and other facilities for worship, education, and counseling

3.32 OTHER COMMUNITY SERVICES

Health Care Facilities

_Private_—The availability of adequate access to quality health care for all citizens is an important factor in any area. In a developing area, such as Germantown, access to health care is sometimes limited until the area’s population is large enough to make it feasible for health care providers to establish their own practices. Locally, discussion with the County Health Planning, Research, and Education staff indicates that the provision of a private medical office building in the town center will be feasible near the end of Stage One. Such a building could appropriately be in the size range of 25,000 to 30,000 square feet.

Later in the development program, possibly at the end of Stage Two, medical office space will be needed east of I-70-S. In addition, a phasing-in of increasingly more sophisticated services, encompassing provisions for more complete health care, may be developed. It is suggested that such facilities and services be built on the Montgomery College campus site.

_Public_—During the early years of development, the County Health Department could function in “satellite” facilities, providing primarily mental health care services. By the end of Stage I, Germantown should be served by a super satellite health center, as defined in current Montgomery County Health Department standards, with smaller satellite centers in Poolesville and Damascus. A permanent area health center or community service center could become feasible, when the population of the area served reaches 75,000.

Summary—During the early developmental period, demand for obstetric and pediatric care will be high. As the population in the area ages, health care needs will change, requiring differing mixes of primary, secondary, and tertiary health care services. Changes in health care delivery must also be accommodated; therefore, it is suggested that any health care facility constructed in the Germantown area be made flexible enough to provide for these changes.

Public Schools

Twenty-nine elementary, six junior high, and three senior high schools are proposed in the Land Use Plan. Elementary schools will average approximately 650 students, drawn from service areas with a radius of approximately 1,500 feet. Junior high schools will average 1,200 students; and senior high schools, 2,000 pupils.

Other Specific Community Facilities

Reference should be made to the Land Use Map and the _Capital Improvements Program for Stages One and Two_ (Appendix E) for the location and timing of such facilities as fire stations, County administrative offices, centers for youth and elderly, police stations, community service centers, and libraries.

Town Center

Major green spaces for visual variety and pedestrian enjoyment shall be developed within the town center. Because the actual location and configuration of these areas should respond closely to the physical development, a floating symbol has been indicated on the Land Use Plan to represent these green areas. These areas or green spaces shall total at least 10 acres.

Administrative offices for Germantown and Upper Montgomery County should be integrated into the development of the town center. These facilities may be provided in the form of freestanding structures or leased or dedicated space in other structures. A floating symbol, representing approximately 10 acres for these facilities, has been identified in the town center on the Land Use Plan.

3.4 VILLAGE DESCRIPTIONS

The essential structure of the Land Use Plan for Germantown involves the creation of six village units, with populations of about 18,000 to 20,000 persons each (see _Exhibit_ 3). The six villages are:

1. Churchill Village
2. Gunners Lake Village
3. Middlebrook Village
4. Neelsville Village
5. Clopper Village
6. Kingsview Village

Each village will be organized around a center, intended to provide commercial facilities and community services and facilities appropriate for the population of the village.

The village units generally encompass areas of
Gunnersons Lake Village
Land Use

LEGEND
See Land Use Plan
approximately 3,000 foot radii (a distance that can be traversed on foot in 11 to 14 minutes). The rationale is to create a scale appropriate for pedestrian access to the village centers from most neighborhoods.

Where residential areas are unavoidably located too far for easy pedestrian access to village centers, neighborhood centers with convenience retail and service facilities are proposed to serve these population areas.

3.41 CHURCHILL VILLAGE

Churchill Village is the second development in Montgomery County to use the Town Sector Zone. With approximately 1,500 acres lying west of I-70-S, north of Maryland Route 118, east of the Baltimore and Ohio Railroad, and south of the Little Seneca Park greenbelt, Churchill could yield a maximum population of some 22,500 (see Exhibit 11). The developers are now starting preliminary work on 2,300 dwelling units, for which the Washington Suburban Sanitary Commission has granted sewer allocations.

The following points should be noted:

While the Churchill Village program meets many of the goals and objectives of the proposed Germantown corridor city, the planned mix of housing types and costs does not appear to be sufficiently varied to provide for a fully balanced community. One remedy might be sponsorship by the Montgomery County Housing Authority or a nonprofit organization of low- and moderate-income housing on small, scattered sites within Churchill, in concert with the developer’s program.

Lockbury Drive should be extended westerly from Middlebrook Road (M-85) to Waters Road. This road may be extended along the Waters Road right-of-way to Wisteria Drive (B-2), pending study of subsequent subdivision and site plan applications.

The Waters House, a historic structure, should be preserved; and the site, established as a park for community activities. The preservation of this house and its setting is highly recommended.

The Village Center is recommended for development as a true focus of the Churchill community.

In response to the studies conducted by the Planning Board as a part of the Master Plan amendment process and also as a result of the developers’ consultant studies, the developers of the Churchill Town Sector have submitted for approval a major series of amendments to the previously approved Town Sector site plan.

The Montgomery County Planning Board is in general agreement with the proposed Churchill Town Sector site plan amendments, essentially as submitted, except for densities established in certain specific areas. The Planning Board, therefore, recommends amendment of the site development plan, in accordance with this Amendment.

3.42 GUNNERS LAKE VILLAGE

Gunnerson Lake Village is located south of Maryland Route 118, east of the Baltimore and Ohio Railroad, west of I-70-S, and north of the Great Seneca Creek greenbelt (see Exhibit 12). Lake No. 9, proposed in the Soil Conservation Service Study of the Seneca Creek Watershed, lies within the central portion of this village. This lake will be an important sediment and flood control facility, as well as a potential recreational asset for the village.

Developers of the Nemazee tract, which surrounds most of the proposed lake area, have recently offered to build the dam for the impoundment of the lake independent of Federal, State, and County agencies. Although the developers will create a smaller surface lake than that recommended by the Soil Conservation Service, the developers’ plan will accomplish most of the necessary sediment and flood control objectives.

Approximately 5 acres east of the Nemazee tract will be required to store a portion of the water impounded by the dam during flood periods. Most of this land is in the 100-year floodplain and, thus, is not developable. This land must either be acquired (in fee or easement) by the developers of the Nemazee tract or obtained by the County through normal subdivision procedures.

It should be noted that the dam site proposed by the Nemazee tract developers will take up a major portion of an elementary school site owned by the Board of Education. It is essential that the Board of Education site be exchanged for a location more central to the proposed development, as indicated in the Land Use Plan.

The Nemazee development will be shown as part of a comprehensive sectional map amendment to change existing zoning in the area. These changes will include the relocation of the village center to an area south of the Western Arterial, near its Middlebrook Road intersection. Such a location will greatly improve pedestrian access to the village center. In certain areas, densities in the Nemazee development will be reduced from levels permitted.
Middlebrook Village

Land Use

LEGEND
See Land Use Plan
under currently existing zoning to densities more compatible with the steep slopes and soil conditions of the property. The developers have agreed to submit an application for a planned development subdivision and have outlined several innovative proposals for the provision of community services.

3.43 MIDDLEBROOK VILLAGE

Middlebrook Village is bounded by I-70-S on the west, relocated Maryland Route 118 on the north, and the greenbelt on the east and south (see Exhibit 13).

The Germantown campus of Montgomery College will be located in Middlebrook Village (see Section 3.8).

Because the Middlebrook Village is bisected by two major highways (Route 355 and Middlebrook Road), particular care must be taken to check the potential spread of highway and general commercial activity. This commercial area has a large number of individual ownerships, a large amount of existing general commercial zoning, and a fragmented zoning pattern.

The Middlebrook Village commercial center is located near the intersection of Route 355 and Crawford Road. A comprehensive revision of existing zoning in this area is proposed. This realignment is necessary to convert a potential general and strip commercial area into a village center and highway commercial area.

The village center is located on the east side of Maryland Route 355 on land, now under one ownership, for which there is an outstanding sewer authorization. This Amendment recommends that the commercial acreage be expanded so as to provide for more appropriate commercial development by permitting the utilization of the one-half-acre, pedestrian-oriented park indicated in the village center on the Land Use Plan. This expansion of commercial land, the bringing of all of the commercial land to local commercial use, and the inclusion of the urban park, all relate to the realization of the village center concept, as expressed in Section 2.2.

Pedestrian, grade-separated crossings at Maryland Route 355 and M-6 are needed to insure ease of accessibility to the commercial areas for residents and members of the College community. (See Open Space, Circulation, and Historic Sites Plan.)

3.44 NEELSVILLE VILLAGE

This village is bounded on the west by I-70-S, on the south by relocated Maryland Route 118, and on the north and east by the greenbelt (see Exhibit 14). No existing zoning or subdivision activity presents any major constraints in the village development. The village center is proposed to front on Maryland Route 355, near the intersection with Maryland Route 27.

In the case of Neelsville, the planning area has been extended in order to include enough developable land to create a reasonable-size village.

Conservation areas and road alignments should be so located as to buffer the existing Meadowbrook Estates development.

The Church of the Saviour’s “Dayspring Retreat Farm,” the largest privately owned institutional facility in Germantown, merits special attention.

Because of the unique value of Dayspring as a major religious retreat center and of its significance as part of the Germantown greenbelt, the locations and treatment of highways M-61 (Maryland Route 118 extended) and M-83 (the Eastern Arterial) are important. The alignments shown on Exhibit 14 were determined with the assistance of representatives of the Church of the Saviour and other major landholders in the area. Highway M-83 should be screened, both visually and acoustically, by such means as special plantings and earth berms by the State Highway Administration. The maximum noise level along M-83, as measured at the Dayspring Retreat Center buildings, should not exceed L10 (dBA)51 at night. (Information relating to these recommendations is provided in a consultant report, prepared for the Church of the Saviour by Planners, Incorporated.)

As evidence of its intent to maintain the present use and character of Dayspring, the Church of the Saviour has indicated its willingness to consider granting a scenic easement at some future time.

3.45 CLOPPER VILLAGE

Clopper Village is bounded on the east by the Baltimore and Ohio Railroad right-of-way, on the north by relocated Maryland Route 118, and on the west and south by the greenbelt (see Exhibit 13). The Western Arterial enters this village on the southeast and bears north, roughly parallel to Maryland Route 118, until it terminates at its intersection.
with Middlebrook Road in Gunners Lake Village.

The village center for Clopper Village should be located near the intersection of Clopper Road and the Western Arterial. This will be central to the village and accessible by pedestrian, as well as automobile, circulation.

Several rezonings, in accordance with the 1967 Master Plan, have already been granted in the eastern half of the village. Cinnamon Woods, with 655 sewer authorizations, is presently under construction. The Stoneridge town-house development, along Mateney Road, holds 284 outstanding sewer authorizations. On the south side of Clopper Road, the Pleasant Fields subdivision holds 413 sewer authorizations. The Meredith tract, now Farmingdale Estates, has 1,740 outstanding sewer authorizations; and, while some of the town houses have been recorded by record plat, the Master Plan, as amended, proposes that the dwelling unit mix for the remainder of the subdivision be modified to permit development more suitable to the stream valley and some severe topography on the site.

This Amendment recommends a scenic easement for one of the largest working farms in the area. The owner and farmer has requested that his land remain as a farm. Such a scenic easement will assure retention of the present agricultural use, as recommended on the Land Use Plan.

Development along the north side of existing Mateney Road should be limited to the areas along the ridge—in order to protect the adjacent valley. Most of the historic sites in Germantown are located along Clopper Road and are identified on the Open Space, Circulation, and Historic Sites Plan.

3.46 KINGSVIEW VILLAGE

Kingsview Village is bounded on the east by the Baltimore and Ohio Railroad, on the south by relocated Maryland Route 118, and on the north and west by the greenbelt (see Exhibit 16). Due to difficulty in supplying sewer service to this area, development should not occur until the final stages of development in Germantown (see Exhibit 20).

Major transportation access to the Kingsview area is provided by relocated Maryland Route 118, Clopper Road, and Maryland Route 27, the last of which is designated by the State Highway Administration as a through link from Damascus to the southwestern portion of the County.

High-density, residential development in this village should be limited to those areas adjacent to the village center, in order to maintain a more rural character in the rest of the village and to encourage diversity of environment within the planning area. Because of the large geographic area of Kingsview Village, floating symbols for neighborhood convenience commercial centers are shown in the north and south sectors of the village to facilitate the provision of easy pedestrian access to these centers. In all likelihood, the configurations of planned unit developments in the village will determine the final locations for these convenience centers.

Because of the environmental sensitivity of Little Seneca Creek, which drains the Kingsview area, storm-water detention facilities should be built prior to development of the area.

3.5 COMMERCIAL LAND USE

In calculating Germantown's estimated share of total retail expenditures in the market area, existing and planned competitive retail commercial areas have been evaluated, in terms of their relative drawing powers. These market analyses indicate that no more than 130 to 135 acres of comparative retail commercial activity will be supportable in Germantown (see Appendix A). Some additional retail commercial acreage will be required for convenience and highway commercial uses.

Commercial acreage is classified under four major categories:

Neighborhood Center Commercial Areas

Neighborhood centers are recommended where existing land use, topography, and other criteria dictate that the village boundary extend beyond the reasonable walking distance of about 3,000 feet from the village center. These centers will also be located where density levels are such that there will be a viable market for a local commercial and community facility. Such centers will be sited for convenient pedestrian access. Neighborhood centers of 2 to 3 acres will each contain a small convenience retail facility and community service facilities, with buildings and parking sited so as to provide convenient pedestrian access for neighborhood residents.

Village Center Commercial Areas

Village centers should be the focus of village activity. They will include 10 to 12 acres of convenience and specialty retail, service, office, and community facilities of appropriate scale and na-
Clopper Village

Land Use

LEGEND
See Land Use Plan
ture to serve the village unit (100,000 to 120,000 square feet per center). Each center will contain a major supermarket and other commercial facilities, such as butcher shop, bakery, ice cream parlor, stationery store, barber shop, beauty parlor, bank, liquor store, restaurant, and hardware store, as market conditions warrant.

The intensity of uses permitted under the existing C-2 Zone (General Commercial) is not compatible with this concept; and, where C-2 zoning presently exists, the Zoning Plan recommends amendment to the C-1 Zone (Convenience Commercial).

**Highway-Related Commercial Areas**

Such facilities include bowling alleys, commercial recreational activities, automobile-related uses, motels, nurseries, building materials sales and services, heavy equipment sales and services, and other uses set forth for the C-3 Zone. The Land Use Plan proposes two areas of highway commercial in the town center area and three parcels in the Middlebrook Area.

**Town Center Commercial Areas**

Since the 1967 Plan proposes general commercial acreage in excess of market needs for the foreseeable future, this Amendment recommends that the total acreage devoted to such uses in the town center be reduced, as reflected in both the Land Use Plan and the Zoning Plan. Moreover, present commercial zoning categories appear inadequate to promote the degree of mixed use and design flexibility needed for the corridor city's town center. Zones which permit the needed design flexibility and multi-use character should be evaluated for use in the central business district portion of the Germantown Town Center.

3.6 THE TOWN CENTER

3.61 GUIDELINES FOR DEVELOPMENT

*The following guidelines should govern development of the town center of the Germantown Corridor City:*

The town center shall be the principal focal point for the corridor city of ultimate population of 120,000 people.

The town center development shall be staged to serve the needs of a growing population, and premature development which would preempt more appropriate development shall be discouraged.

Development of the town center shall recognize Germantown's relationship to other commercial areas in the I-70-S corridor and in the County and to employment concentrations nearby.

The town center is defined as the 280-acre portion of Germantown delineated for such development on the Master Plan in Exhibit 17.

Although residents and customers will, of necessity, have to rely on private auto transportation in the early stages of development, any plans for the town center should provide for, and promote the establishment of, public transportation services for the area.

Development in the town center shall contribute toward the provision of a well-balanced pattern of employment in the Germantown area as a whole.

Necessary public facilities shall be developed in close relationship to residential-commercial facilities in the town center.

Within the town center, a portion of the area shall be defined as the central business district of the town center. This area is bounded by a line along the proposed transit easement to Maryland Route 118 (M-61), then along existing and relocated Maryland Route 118 west across Middlebrook Road (M-85) to the proposed B-2 Road and then continuing up B-2 to Germantown Drive (M-87), north on Germantown Drive (M-27) to Middlebrook Road, east on Middlebrook Road to Locbury Drive, north on Locbury Drive, and then across to the transit easement (see Exhibit 17). This area contains 142.5 acres. The central business district is considered separately from the town center, in order to signify the intensity of development proposed and the recommendation for its inclusion in the eventual establishment of a parking district. Detailed description of the program for the central business district and its character is presented in Section 3.62.

Related and compatible residential, public, and commercial business uses shall be grouped together in suitable, properly located areas.

An extra degree of care shall be used to maintain the aesthetics, provide amenities, and make all areas within the town center more enjoyable as places in which to live, work, and shop.

Adequate parking and loading facilities should be developed in all areas of the town center.

The assemblage and/or coordination of the several large and small ownerships in the town center shall be encouraged.

*In the town center, exclusive of the central business district, the Germantown Master Plan Amendment recommends the following uses: (Showed in Exhibit 17 for land use and Exhibit 18 for zoning)*

A highway commercial (C-3) area is recommended for the south side of Maryland Route 118, east
of Middlebrook Road. Access shall be permitted from the AEC access road and from a curb cut 500 feet south of that major access road. Local commercial use (C-1) is depicted in the Zoning Plan; however, this parcel is recommended for highway commercial use in the Land Use Plan.

A second highway commercial area is proposed for location between existing and relocated alignments for Maryland Route 118, west of Middlebrook Road. Access should be permitted from existing Maryland Route 118 or B-2, in addition to a possible curb cut from relocated Maryland Route 118. This area is shown as local commercial (C-1) in the Zoning Plan; it is recommended for highway commercial use in the Land Use Plan.

The transit easement shall run through the Atomic Energy Commission property, across Maryland Route 118, and along Aircraft Drive, to serve the employment centers along I-70-S and the central business district area of Germantown. Discussion of the transit easement is provided in Section 3.36.

Aircraft Drive should terminate in a cul-de-sac above Maryland Route 118, with access only from Century Boulevard.

Proposed business services and professional office areas are shown as service commercial uses on the Land Use Map in an area south of existing Maryland Route 118 and east of the Baltimore and Ohio Railroad right-of-way.

Existing Commercial Office (C-O) zoning on land south of Maryland Route 118 and west of Middlebrook Road shall be maintained; but the development of these properties shall be considered in relationship to the proposed development of the remainder of the Nemazee tract, as well as that proposed for the town center.

Light industrial uses should be developed within the town center area, in the section adjacent to the Baltimore and Ohio Railroad right-of-way, in order to promote employment diversity and to accommodate uses related to the building and maintenance of a new community.

A fire station should be developed in an early stage south of relocated Maryland Route 118.

Zoning shall be granted only in accordance with the Staging Plan. Proposed zoning recommended for Stage I and for Stage II is shown in Exhibit 18.

Review by the County of applications for development of the proposed town center and central business district area of Germantown, including approval of site plans, staging questions, and Master Plan Amendments, shall insure that no uses permitted in this area, as far as can be determined, are incompatible with the intent and purpose outlined for development in the village centers.

3.62 THE CENTRAL BUSINESS DISTRICT DEVELOPMENT PROGRAM

The Comprehensive Amendment to the Master Plan for Germantown defines an area for central business district development. It should be noted that the types of land uses and implementation recommendations differ from those recommended by the Montgomery County Planning Board for other central business districts. As compared to other Montgomery County central business districts—Bethesda, Silver Spring, and Rockville—Germantown presents a unique type of problem. The creation of an urban form out of a series of farms differs from the creation of a desirable form from an urbanized area. While the creation of a new corridor city from relatively undeveloped, rural land has its definite advantages over the creation of a complete corridor city from an area of existing urban development, it does have some drawbacks. Two factors compound the problems to be faced in developing a central business district in Germantown. One is the weak commercial market that the area possesses, since Gaithersburg has already developed to some extent, or will shortly develop, as the up-County commercial center. The other is the weak office market the area has, since in all probability Century XXI will capture most of the demand for those uses. These problems cause pressures for the development of some short-range uses in the remainder of the central business district which may be undesirable over the long run.

In response to the existing problems and the quality development desired for the Germantown central business district, a “policy plan” is proposed. This policy plan simply cites a series of components and land uses necessary within the given area and places the burden on the developers to prepare comprehensive plans for the implementation of development with these components. No exact locations are indicated in the Master Plan, as amended, for these components; general locations are shown by “floating” symbols within the boundaries of the central business district in the Land Use Plan and in Exhibit 17.

It is possible to physically “fit” a central business district development program on a portion of the area recommended for the central business district, but such a reduction in area would necessitate a great deal more structured parking than that which is likely to occur.

The following major land use elements should be developed within the central business district through implementation of a comprehensive, staged development plan that blends the many diverse
elements into a satisfying interrelationship. Development at appropriate densities will be required in the central business district, to avoid such uses as car dealerships and other freestanding activities that are inappropriate. Facilities and land uses recommended as appropriate include:

Regional comparison shopping facilities

Commercial office facilities (the tract of land between Aircraft Drive and M-84 is envisioned as an office area but is shown as I-1 on the Zoning Plan to blend with the I-1 development of Century XXI)

High-density residential units

Central bus station for internal and external service with provision for a future Metro station

Administrative offices for Germantown and upper Montgomery County

Pedestrian-related public plazas and open spaces at one or more locations within the central business district

Such community facilities as a regional library, youth center, religious facilities, and multi-purpose activity areas

Police headquarters, depending upon operational considerations

The key sectors of the central business district are shown for development in Stage Three; it is possible that these sectors may be moved to Stage Two upon the preparation of a comprehensive land use plan for the development of that area. Some sections of the central business district should be developed as soon as possible in order to create a sense of identity; therefore, a floating symbol for Stage Two development is shown on the west side of Middlebrook Road. The full extent and range of land uses are left flexible and cannot be projected at this time. The Montgomery County Planning Board, however, will review applications to avoid conflict of the uses contemplated with those recommended for village centers. Such applications will be reviewed, as they relate to the orderly development of the total central business district.

3.7 EMPLOYMENT AREAS

3.71 RELATIONSHIP OF EMPLOYMENT TO HOUSING

A new community can, and should, offer residents the opportunity to live and work in the same area. This decreases the time and money spent in commuting between home and work and reduces the burden on costly highway facilities and other transportation systems. Employment areas can be attrac-

tive, as well as convenient, and can be blended harmoniously with other uses.

The range of housing (both purchase and rental) available in Germantown shall be related to the range of jobs and incomes provided there and in the full I-70S corridor. While industries currently located in the Germantown area need employees at every level, a survey of major employers in the area indicates that the jobs hardest to fill are those in the lower pay brackets. This is attributed to the general lack of housing in the area for lower-salaried workers. Development of new employment centers in Germantown will require the provision of more housing for low- and moderate-income families. Conversely, the broader the spectrum of skills and incomes represented in the Germantown population, the more attractive Germantown will become as a prospective location for new businesses.

3.72 EMPLOYMENT AND LAND USE

The allocation of land for the development of employment centers is calculated to provide job opportunities for a substantial portion of the work force living in Germantown. It is estimated that some twenty-five percent of those working in the planning area will live in Germantown.

3.73 INDUSTRIAL EMPLOYMENT

Industrial park areas are recommended for developments, existing or under way, in the Germantown area. The allocation of some 750 acres, zoned for various industrial uses, is considered reasonable and easily marketable within the development period of this Amendment.

The Amended Master Plan recommends that the Zoning Ordinance be amended to add an industrial zone which will permit smaller minimum acreages and more intensive land coverages than are now allowed. This will facilitate the more intensive use of the area and encourage development of a more diversified employment base (see Section 3.71). Such a reduction in minimum acreage should be determined through a strict site plan review procedure, to assure the provision of well-designed development.

3.74 OFFICE EMPLOYMENT

The Century XXI developers propose construction of 3,000,000 square feet of office space over a 10-year period. Such development might absorb virtually all the demand for office space in German-
town for several years. In any event, the demand for major commercial office space in Germantown, in addition to the areas projected by the Century XXI, is likely to be limited.

3.8 MONTGOMERY COLLEGE

Several weeks before the review of the Master Plan for Germantown was begun, the Board of Trustees of Montgomery College tentatively selected a 240-acre site on Riffle Ford Road, in the southwestern segment of the Germantown planning area, as a site for a proposed third campus to accommodate the College’s rapidly expanding student body. In preparation of this Amendment, the Montgomery County Planning Board carefully studied the proposed Riffle Ford Road site and determined that the relatively remote location and rough terrain of the site would create serious disadvantages for the College, its students, and even more important for the County’s efforts to develop a new corridor city in Germantown. As a result a Task Force, which included members of the Board of Trustees of the College and of the Planning Board, has agreed on a more centrally located site at the southeast quadrant of I-70-S and Maryland Route 118, north of Middlebrook Road and west of Maryland Route 355 (see Exhibit 19).

The 245-acre site identified in this Amendment meets the need for an attractive, spacious, easily accessible location, with suitable terrain for the College campus and related facilities. The proposed site lies within view of the existing highway interchange, at the center of Germantown and the I-70-S corridor. The topography is moderate; much of the land could be used for structures, recreational use, or parking, with a minimum of grading and site preparation. The site includes several fine, wooded areas and an attractive stream valley, upstream from one of the major lakes proposed for storm-water management.

Most community college students in the past have had to commute by private automobile, because suburban college sites have not been adequately served by public transit. The proposed Germantown location will offer the opportunity for reliable public transportation, via the proposed external and internal transit systems.

The County should actively support public transit by locating such major public facilities as the Montgomery College, libraries, and County offices close to proposed transit facilities. The provision of transit facilities could significantly reduce the amount of land needed for parking, permitting greater design flexibility and the provision of more open space in future development.

Location of the College closer to the proposed town center will, not only strengthen that core area development, but should stimulate greater job opportunities for students in the urban core and the employment centers along the I-70-S corridor. The Century XXI development proposes a convention and hotel complex; the College has also discussed the possibility of including a convention center complex as part of its Germantown campus.

Several joint-use facilities, such as a cultural center, library, and/or recreation facilities, are proposed for the College. If a central library is to be built on the College site, the regional library proposal for the Germantown town center will be replaced with a recommendation for a community library in the Churchill Village area.

Although the estimated land cost for the recommended College location is greater than the cost of the Riffle Ford Road site, acquisition costs should not be the overriding criteria upon which site selection will be determined. The many benefits and long-term advantages noted for the proposed site far outweigh the estimated initial cost differential between the two sites. These advantages are: a more useable site, lower site development costs, greater site visibility, higher accessibility to the residents of the County by both automobile and public transit, subsequent savings to residents in terms of travel time and costs, and higher potential for the joint use of facilities.
A Development Sequence Plan
4.1 RECOMMENDED POLICIES TO STAGE DEVELOPMENT IN GERMANTown

If Germantown is to develop in an orderly fashion—in the proper places, at the proper time, and in the proper sequence—a series of decisions about zoning, capital improvements, subdivisions, and other County policies and programs must be made. Moreover, it will be necessary to establish a continuous process of monitoring Germantown’s development and adjusting these policies and programs as the pace, type, and amount of development require. This chapter spells out the initial actions which should be taken to carry out the objectives and recommendations of the Master Plan Amendment, and it also proposes the creation of governmental processes which will make possible the timely actions needed to revise initial policies and to move smoothly into each subsequent “stage” of development.

The importance of staging and its relationship to master planning is well stated in the January 9, 1973, report of the Development Advisory Board to the Montgomery County Council:

“Staging compliments . . . master planning which . . . embodies the relationship between private land use regulation and public facility financing. Land densities are laid out, population projections are made, with the result that public facilities are budgeted and scheduled to serve the master plan. Failure to coordinate growth with this schedule of public facilities defies reason, as does failure to coordinate facilities with growth.”

4.11 GUIDING PRINCIPLES FOR STAGING POLICIES

Coordination of Land Development with the Provision of Publicly Financed Capital Improvements

The 1967 Germantown Master Plan recognizes the need for staged development but includes no mechanisms for implementation. The staging policies contained in this Amendment have been developed to coordinate the timing of zoning and land development with the provision of publicly financed capital improvements for sewer, water, storm water management, transportation, education, parks and recreation, and other public services. The Germantown corridor city is organized into six villages, each comprised of several identifiable neighborhoods. The village unit should be the primary element in the sequence of stages to the maximum extent pos-
sible. Because of the location and extent of private development already under way or authorized and the public improvements already committed, however, the program for the development of public facilities has been structured to deal with smaller geographic areas, such as neighborhoods or development areas comparative in size to elementary school attendance areas. Development in several such neighborhood units can, and should, proceed concurrently, according to the proposed timetable. Each neighborhood unit should be provided with necessary public facilities and services at the time private development occurs. Such capital facilities can best be financed without undue burden to the County and its taxpayers if these facilities are built in a logical, rational fashion, servicing only a few compact development areas at any one time and proceeding, in later stages, to build out from the already developed areas in a logical incremental sequence. By this means, the County can avoid the high tax burden of scattered, piecemeal development which forces wasteful public expenditures for expensive, but underutilized, public facilities.

Careful staging can help assure the development of adequate employment opportunities and a full variety of housing types in each phase. The Staging Policies provide sufficient flexibility to enable the County to adjust the location and scale of capital expenditures to fit changing conditions, such as travel modes, family sizes, life styles, and work patterns, within the framework of development pace, scale, housing mix and location, and diversity of housing price and type.

Two Major Public Facility Systems—the Sewerage System and the Transportation System—Will Constrain the Ultimate Development of Germantown and the Staging of its Development

The existing sewer authorizations for 5,600 dwellings in Germantown will yield a population of about 18,000 people. The sewer moratorium is a constraint to further Germantown development until an advanced wastewater treatment plant is in operation. County policy does not, and should not, allow private community systems to be provided. The extension of sewer service to new areas is a critical element of the staging recommendations and requires special attention in the adoption and modification of the Comprehensive 10-Year Water and Sewerage Plan, as well as the 6-Year Capital Improvements Program (see Sections 4.53 and 4.52, respectively).

It is necessary, not only to change the service area designations, but also to amend the text of the Comprehensive 10-Year Water and Sewerage Plan to permit the staging of development at a more detailed scale within watershed areas, down to the scale of minor basins. For example, water and
Storm Drainage Staging
sewer service should be restricted to some sections of the town center until sufficient population and market demand exist for proper development and utilization. Water and sewer service should also be restricted to residential areas in conformance with the Development Sequence Plan (see Exhibit 20). This must be done to prevent this section of the planning area from developing prematurely, perhaps at intensities below what is recommended in this Amendment. Limited-access sewers for certain periods of time are required throughout the first stages of development since existing lines have the capability to serve more development than the transportation system can handle (see Section 4.53).

Over the entire development, the timing of major transportation system improvements is even more crucial than that of sewer service. The transportation facilities called for in this Plan must not only be built to sustain the corridor city—they must be built in a sequence, and within a time frame, that is closely coordinated with the development of housing and employment opportunities, to avoid imposing severe hardships on the residents of Germantown and the entire I-70-S corridor. Thus, the staging of development in Germantown is dependent upon provision of the major elements prior to, or concurrently with, the development they must serve.

For Germantown to "work," the County will have to supply these facilities in a manner designed to lead and encourage development, and not simply to react to it.

Protection of Drainage Basins from Premature Development Upstream from Projected Storm-Water Management Facilities

Fundamental to this Amendment is the proposition that Germantown’s development must proceed in harmony with its environment. If this basic rule is followed, Germantown will accommodate a large population without serious effect on the lower reaches of the Seneca watershed. But following the rule clearly means that development cannot move ahead of major storm-water management facilities. These facilities are to be developed by the developer or by the County, in conformance with standards to be derived in the ongoing Countywide storm-water study (see Exhibit 21).

Maintenance of a Steady Pace of Development in Germantown

Development at the scale of Germantown, and of the type recommended in this Plan, requires a positive commitment by the County and other public agencies to assure that development, once it begins, can proceed in accordance with the Plan without serious interruption. This is essential to maintain a healthy financial position for both the public investments needed for such a great undertaking and the private developers whose large "front end" costs in community-scale development require a steady cash flow to enable them to fulfill their part of the bargain in the production of a high-quality corridor city.

Planned for a total population of 120,000, Germantown could sustain an average rate of development for 6,000 people annually. The year-by-year growth rate, however, will not be constant. It will start fairly small—perhaps less than 1,000 people the first year of actual building—and will climb to a rapid rate of housing production—perhaps twice the average—and then will decline toward the end of the development period. Thus, it will be necessary to closely monitor development activity and market characteristics, as well as public improvements, to make decisions regarding the amount of development to be accommodated in any given year.

Current projections for the corridor indicate 7,500 housing units for a population of 25,000 in Germantown by 1982. By that time, the annual rate of increase is expected to accelerate rapidly. These projections may need revision within five to eight years, based on experience and County growth policies for Germantown, to reflect more precise knowledge as it becomes available.

In addition, when an individual developer is unable to maintain the schedule of development needed to maintain a proper pace of growth for Germantown, the development program must be revised so that others who are ready and able to proceed, in conformity with the Master Plan Amendment, may do so. One means of revising the development program is through the programming of public facilities into new areas. Another is to initiate a comprehensive sectional map amendment for Germantown to zone additional land for development. Additionally, this will entail developing a means, within a framework of Countywide policy, of recapturing unused or useless sewer commitments for public facilities if they have not been used within a reasonable period of time. At the present time, the approval of staging documents for a proposed development is a requirement for preliminary subdivision approval (see Section 4.33).

Provision for Competition to Offer Consumers a Range of Choice in Housing Prices and Living Styles

In administering the policies for staging the development of Germantown, sufficient land should be designated as available for development in each stage to encourage competition among developers. This not only avoids the creation of a monopoly position by a single firm, but also provides for wider
Highway Development Staging

LEGEND
Existing
Stage 1
Stage 2
Stage 3
Stage 4

0 4000

N
consumer choice, better prices, and wider experimentation in improved community design.

Carrying out this principle requires careful monitoring of development and close attention to such matters as the designation of sewer service areas and the provision of public facilities. Commitments for sewer service or for subdivision, for instance, must not be allowed to be monopolized. This suggests that development should occur in more than one village within each “stage” of the Plan—that staging should not proceed one village at a time until a full village is completed and then proceed to the next—rather, as stated above, that the development program should be structured to facilitate the concurrent development of neighborhood units, elementary school attendance areas, and drainage basins. Carrying out this principle, suggests that it will be necessary to designate more land as developable in a given stage than the amount which will actually be developed, to allow for competition as well as error. In addition, if the desired pace of development is not being maintained, consideration should be given to the initiation of further comprehensive zoning through sectional map amendments.

Development of Employment and Commercial Areas Should Keep Pace with Residential Development

It is important that industrial and commercial development occur in direct relationship to the provision of residential units. Residential development and employment development are mutually reinforcing in the marketplace, as are residential development and retail commercial development. The provision of employment opportunities, in keeping with the residential development pace, will reduce the commuter trips along the I-70-S corridor.

Each “stage” of development should provide sufficient employment and retail acreage to respond to the corresponding level of residential development. It will be necessary to monitor the rates of development of these activities, to be able to respond to needed changes.

Each Subsequent “Stage” of Development for Germantown Shall Begin when the Planning Board Finds that Pertinent Decisions Have Been Made or Events Have Occurred, Rather than on a Specific Date

Because staging a complex development is of necessity a fluid process, it is not possible to set precise dates for the end of one stage and the beginning of the next. Once the Master Plan establishes the basis for staging, it is not necessary to amend the Master Plan before amending the County Capital Improvements Program or other policies which are made independently of, but related to, the Master Plan.

This Master Plan does control the staging of rezoning; i.e., applications for rezoning in areas other than those designated for development in the first two stages (primarily in the Churchill, Gunners Lake, and Middlebrook Villages) should be considered not in conformity with the Master Plan until the zoning recommended in this Master Plan Amendment is implemented through a comprehensive sectional map amendment. Such rezoning, consequently, will be governed by Section 59-208(a) of the Zoning Ordinance for the Maryland-Washington Regional District in Montgomery County, requiring five affirmative votes of the District Council (Montgomery County Council) for reclassification contrary to the recommendations of an approved and adopted Master Plan, unless the rezoning is recommended by the Planning Board for approval.

4.12 THE SEQUENCE FOR PRIVATE DEVELOPMENT

The following specific recommendations for the staging or timing of private development and the provision of public facilities should be adopted through appropriate actions as soon as possible following adoption of the Master Plan Amendment. These actions, and other recommendations which govern the staging of development in Germantown, should be reviewed and revised on an annual, or more frequent, basis. The proposal for establishing that review and revision process—a periodic development report—should be made and procedures adopted immediately following adoption of the Master Plan Amendment. (see Section 4.54).

The Staging Policies, as integral components of the Comprehensive Amendment to the Master Plan for Germantown, provide a general framework and guidance, in terms of guiding principles, mechanisms for implementation and amendment, and description of each of the “stages.” Within each stage, sufficient developable land in excess of that required for development should be designated, to provide a choice for consumer flexibility and competition among developers; to accommodate surges in population growth and housing demand; and to permit Germantown to capture any growth which, otherwise, might occur in the up-County wedge areas. Thus, if the pace of development within the areas authorized for development falls behind the schedule set for Germantown, additional areas can be opened to development as soon as public facilities can be provided. Land for employment areas will be
opened for development, and development encouraged, to keep pace with residential development.

The Development Sequence Plan (Exhibit 20) is a synthesis of underlying elements: the road network, the sewerage network, the water supply network, public school distribution, the village and neighborhood concept, population and economic growth forecasts, the land use recommendations, and the existing development pattern. Exhibit 20 is a graphic presentation of the recommendations of the Comprehensive Amendment for use by appropriate governmental agencies in arriving at subsequent rezoning and subdivision decisions and for the programming of public facility installations and expansions in relation to the increase of population.

Staged zoning is a major tool for the effective implementation of the staging policies. This tool is supported by direction of capital programs into the service areas identified in the Development Sequence Plan (Exhibit 20). The development phasing requirements of the Planned Development Zone and the linking of approval of record plats to development pace and sequence aid in maintaining the ability to project and direct these capital improvements. The Adequate Public Facilities Ordinance will also direct subdivision activity into those areas provided with capital facilities.

The areas delineated by the Development Sequence Plan include, for each stage, a sufficient number and variety of dwelling units and developers to stimulate the pace of development; to allow for competition and choice in the marketplace; and to maintain a reasonable relationship to the system constraints of each stage.

**STAGE ONE**

This development stage can be rather precisely delineated. It pertains to existing dwellings and/or other structures which are expected to remain and to those areas which have outstanding authorizations for sewer. Those areas have a potential for 5,700 units (see Exhibit 20).

**STAGE TWO**

This stage will commence, regardless of the state of development in Stage One, when additional sewer treatment capacity becomes available.

The sewer service program, therefore, should be extended as recommended in this Amendment (see Section 4.53 and Exhibit 24). This will require amendment of the Comprehensive 10-Year Water and Sewerage Plan to permit a more detailed program of service extension to areas smaller than an entire drainage basin. Limited-access sewers will also be required in some areas to avoid opening more land to development than called for in the periodically revised development program for Germantown.

Based on expected rates of development, this Master Plan Amendment recommends that the second stage of private development should permit a maximum of 11,500 additional dwelling units. This figure may be revised, based on development experience, market forecasts, and capital improvements scheduled by the time development begins in this stage. Assuming that Stages One and Two, together, will extend for about the first ten years of development, this will allow “room” for more than twice as much population as is predicted for Germantown in this period. This wide margin is recommended to allow for competition and in recognition that, for a variety of reasons, not all owners will be ready or able to develop within that time frame. Development in this stage can commence only when major additions to sewer treatment capacity are made. This area should be included in the comprehensive sectional map amendment enacted immediately following the adoption of this Comprehensive Amendment to the Master Plan for Germantown, however, to allow preliminary development approvals, such as applications for rezoning to the Planned Development Zone and for preliminary subdivision approval, to proceed.

The Stage Two development envelope should be extended to allow development to continue apace, primarily in the Churchill, Gummers Lake, and Middlebrook Villages. This land, as delineated on Exhibit 20, is currently held in 46 separate ownerships. All the areas in Stage Two are close to I-70-S and other existing improvements; are in proximity to the town center; and, importantly, are all located upstream from proposed storm-water management facilities indicated in the Seneca Creek Watershed Study or from facilities to be provided by the County or the developers, in accordance with the standards developed through the ongoing Countywide storm-water study. Also, these areas do not require major sewer trunk line extensions in excess of any required for the Montgomery College campus.

Programming for public facilities, therefore, should initially be concentrated in these three villages and in the sequence described in this Amendment. These facilities include the Germantown campus of Montgomery College, proposed for Middlebrook Village. Each neighborhood developed should be served by an elementary school.

Every effort should be made to program public facilities at the earliest possible time. Sewer and transportation facilities should also be provided concurrently. This relates particularly to a quadrant...
A Proposed Amendment to the Ten-Year Sewerage Plan - Sewer Service Categories
formed by Maryland Route 355, the Eastern Arterial, Middlebrook Road extended, and M-61. This quadrant should be placed in Stage Two. It is the intention of the Master Plan that the timing of this quadrant be governed by the availability of adequate service from the Eastern Arterial and Maryland Route 355. Consequently, the point in time that this area should be scheduled for sewer service in the Comprehensive Ten-Year Water and Sewerage Plan should be adjusted so that development will be possible at the time transportation and sewer services are concurrently available. Thus, when the time for the construction of the Eastern Arterial has been determined or capacity is found to exist on Maryland Route 355, the Comprehensive Ten-Year Water and Sewerage Plan should be adjusted to provide sewer service at that time. Exhibit 24, A Proposed Amendment to the Ten-Year Sewerage Plan, depicts this area in the three-to-six-year period for sewer service, Category II-B.

Similarly, the Staging Plan for the Germantown area must recognize the existence of an already approved subdivision in the Kingsview Village. This area, therefore, should also be designated for development in Stage Two; and the development should be contingent upon the application of adequate storm-water measures.

During Stage Two, construction of the village centers for Churchill and Middlebrook should be commenced and, possibly, the village center for Gunners Lake as well. Additional land may be developed to support the construction activities in Germantown. Some initial development in the central business district could also be included in Stage Two but only on the basis of a comprehensive development plan, indicating the full extent and schedule of development. Rezoning for the central business district should be effected in a manner that will assure the integrity of this core area and will avoid the development of premature, non-center uses that should appropriately be located in village centers or other sectors of less intense development (see Section 3.62). Highway-related commercial activities in the town center should commence in conformance with the guidelines set forth in Section 3.61. Industrial development in Germantown should be expected to expand during this stage to accommodate about 10,000 employees. If this volume of employment occurs, the staggering of work hours may be necessary to ease peak-hour traffic at Maryland Route 118 and I-70-S.

The volume of private construction in this stage will require that the programming of roads keep pace with development. The second stage is predicated upon the construction of relocated Maryland Route 118 as a four-lane facility from Maryland Route 355 to Clopper Road, the widening of Maryland Route 355 to four lanes from Montgomery Village to relocated Maryland Route 118, the widening of Clopper Road to four lanes from relocated Maryland Route 118 south to Maryland Route 124, the widening of Middlebrook Road to four lanes from Maryland Route 355 to Maryland Route 118, the extension of Middlebrook Road from Maryland Route 355 to the Eastern Arterial, and the construction of the Eastern Arterial as a six-lane facility from Montgomery Village Avenue to Middlebrook Road extended. These projects should be placed in the Capital Improvements Program and/or the Maryland State Department of Transportation five-year construction program for development concurrently with the commencement of the second stage of private development.

STAGE THREE

The third stage of Germantown development depends upon detailed study and decisions and will open the remaining sections of the first three villages to development. It will also open the sections of Clopper Village which can be properly served by public facilities.

The areas to be opened within Stage Three will be dependent upon specific major transportation facilities being programmed for construction and the programmed extension of sewer service areas. While zoning for Stage Three may occur fairly early, under the Adequate Public Facilities Ordinance, subdivision development cannot commence until major additions to provide traffic accessibility and sewer service have been programmed. Thus, subdivision approval cannot be granted for those areas in Stage Three until the improvements necessary for their support have been programmed. The timing for the programming of the necessary facilities should be reviewed as the time approaches to commence Stage Three and annually thereafter, in regard to the pace of development during Stages One and Two.

There are three major transportation facilities which relate to this phase: (1) the Eastern Arterial, (2) the Western Arterial, and (3) the additional interchanges on I-70-S (see Section 3.2). The areas encompassed in the sectional map amendment process recommended for Stage Three should relate to the transportation facility to be provided.

The aggregate potential number of new units in Stage Three is 4,700. The land in Stage Three is currently held in 42 separate ownerships.

Major development in the central business district, as well as the development of village centers in Gunners Lake Village if not already under way and in Clopper Village, is expected to take place during Stage Three. This stage can also be expected to produce major highway-oriented uses in the areas designated for them in the Land Use Plan.
Subject only to sewer service and storm-water management constraints, all remaining land indicated for industrial development on the Land Use Plan should be included in the sectional map amendment for Stage Three; and development should be authorized.

**SUBSEQUENT STAGES**

The subsequent stages of development depend primarily upon major sewer service extensions, in terms of trunk lines and pumping stations. They are also dependent upon the provision of additional storm-water management facilities. Comprehensive rezoning in the form of sectional map amendments will be undertaken, as necessary in response to the construction of such facilities. During these final “build-out” stages, 10,000 additional dwelling units will be developed, as well as the two additional village centers and completion of the town center and central business district.

4.2 POLICIES FOR ZONING IN THE GERMANTOWN PLANNING AREA

Until 1971, when this review was begun, zoning changes in Germantown were made by local map amendment, generally in conformity with the 1967 Master Plan. The result was the premature zoning of some land and pressures for development in a fairly random fashion outside the area of the Town Sector Zone.

This amendment to the Master Plan proposes two major changes in policy, with respect to zoning: (1) zoning should be accomplished by successive comprehensive sectional map amendments to reinforce the staging policies outlined above and (2) the zones used in sectional map amendments should encourage, to the maximum extent possible, the use of the Planned Development Zone and the Town Sector Zone in the development of Germantown at the densities shown on the Land Use Plan (see Highway and Zoning Plan).

Immediately following the adoption of this Master Plan Amendment, a comprehensive sectional map amendment should be carried out to: (1) establish the zoning for Stages One and Two, and (2) effectuate changes in rezonings previously granted that are necessary to achieve the objectives of this Amendment.

Subsequent comprehensive sectional map amendments will be initiated, in conformance with the Development Sequence Plan (Exhibit 20), to open more land to development in relation to facilities being programmed to support additional dwelling units. These sectional map amendments may occur prior to the opening of a new stage, so as to allow applications for development approvals to proceed. Each sectional map amendment will encompass a comprehensive reevaluation of the recommended and existing zoning for the entire planning area and, thus, will include all other changes that might then be appropriate. Comprehensive rezoning, in the form of sectional map amendments, may also be initiated between those for each subsequent stage, in response to the ongoing review of development in Germantown.

4.3 POLICIES FOR THE REVIEW OF SUBDIVISIONS IN THE GERMANTOWN PLANNING AREA

4.31 ADEQUATE PUBLIC FACILITIES ORDINANCE

The Adequate Public Facilities Ordinance has been recently adopted by the County Council (Ordinance 7-41, June 26, 1973). The intent of this ordinance is to prevent scattered, fragmentated development which is costly to service by requiring that all public facilities needed to support a proposed subdivision be in place or scheduled for construction under an approved Capital Improvements Program or a State Highway Construction Program prior to the approval of preliminary subdivision plans.

Such authority provides one of the tools essential to the effectuation of the staging policies for Germantown. It is through utilization of this tool that development in Germantown will be permitted to occur only in accordance with the capacity of the service systems programmed for development.

4.32 DEVELOPMENT OF STEEP SLOPES

Steep slope areas should be given specific emphasis; because they are the most scenic, the most susceptible to erosion, and the most difficult and costly lands on which to build. Susceptibility to erosion presents nuisances and hazards to the homeowner and his property, as well as to others.

In Germantown, most of the steep slope areas form the valley walls of the tributaries of Great Seneca and Little Seneca Creeks. These stream valleys in Germantown are irreplaceable assets which deserve
On March 9, 1972, the Montgomery County Planning Board adopted the following administrative policy:

"In addition to the information required in Section 104-23 (currently Section 50-34) of the Subdivision Regulations, staging plans for the proposed development of the entire tract must be submitted as part of the application for approval of preliminary subdivision plans.

"The applicant will be required to submit his staging plans prior to the presentation of the preliminary subdivision plan to the Planning Board for formal action.

"All staging plans will indicate a sequence of development, in addition to an approximate time schedule."

Such requirements will also facilitate the proper administration of the Adequate Public Facilities Ordinance.

4.34 PEDESTRIAN AND BICYCLE PATH SYSTEM

The Montgomery County Planning Board will use its subdivision review authority to ensure development of the proposed pedestrian and bicycle path system, as indicated on the Open Space, Circulation, and Historic Sites Plan. It is the policy of the Planning Board to require that plans submitted for subdivision approval shall indicate proposed pedestrian and bicycle paths and that such paths shall be developed, so as to form a continuous system in accordance with the network shown on the Open Space, Circulation, and Historic Sites Plan. Roadways crossing the major stream valleys should not interfere with the continuity of the path system. Pedestrian separated crossings should be developed at least at those locations indicated on the Open Space, Circulation, and Historic Sites Plan.

4.35 JOINT USE OF FACILITIES

The Montgomery County Planning Board reviews proposed private development plans under its subdivision and site plan review authority and public construction proposals under mandatory referral procedures. Whenever possible, the Planning Board will encourage optimum use of land through appropriate siting and the joint use of facilities.

A single parking area, for example, might serve library, church, recreation, and commercial facilities. The design of the six large water tanks programmed for Germantown merits particular attention. These tanks might be designed low to the ground in such a manner as to facilitate use of the tops of the tanks for recreational or other public purposes.

The Montgomery County Planning Board will encourage the joint use of facilities, as it reviews applications for subdivision and site plan approval and for grants of special exceptions and variances by the Board of Appeals.

4.36 DESIGN QUALITY

The Montgomery County Planning Board will continue to require quality design in development, through its review of public building projects under mandatory referral procedures and in its examination of private development proposals subject to subdivision approval and site plan review.

4.4 HOUSING POLICY

To assure development of a balanced community, offering a variety of housing types, sizes, tenures, and costs to accommodate families representing a full range of ages and income levels, the Montgomery County Planning Board urges the enactment of zones and ordinances that will encourage the provision of housing for low- and moderate-income families. In considering such proposals, the County should examine the possibility of establishing programs, under which it could assist in financing such construction.

The Planning Board will encourage dispersal of low- and moderate-income housing—regardless of whether it is built by private developers or under programs of the Montgomery County Public Housing Authority—throughout the Germantown planning area. The Board will encourage the development of such housing on scattered sites in each stage in Germantown’s development. The total number of low- and moderate-income housing units in the Germantown area should be related to any fair-share formula that may be developed for the County as a whole.

4.5 POLICY FOR PUBLIC PARTICIPATION AND REVIEW

Planning must be a dynamic, continuing process, to keep pace with the development of new technologies and changing social concerns. A serious deficiency of the 1967 Master Plan is its lack of mechanisms for the control or guidance of development patterns in the Germantown area. This weakness is reflected in the random nature of requests for rezonings and subdivisions and in the lack of
variety in types of housing, particularly the excessive numbers of town-house units existing or under way. The ongoing planning process and the staging policies of this Amendment are directed to alleviate this problem.

4.51 MONITORING AND ANNUAL REVIEW

Development of a corridor city according to the concepts outlined in this Amended Master Plan is an extremely complex undertaking which will require the continuous and accurate monitoring of the nature and extent of development activity in Germantown and the adaptation of public policies and programs to meet the requirements of changing times and technologies. Under the general direction of the Germantown development coordinator, staff of appropriate County agencies should be assigned to monitor and evaluate development activity. In addition to the ongoing review, the Planning Board will conduct a comprehensive annual review and will revise the Plan, as needed, every three to five years. The staging policies of this Amendment and the Capital Improvements Program are implementation measures, through which the Plan can be adapted to change. To meet the ambitious goals and objectives of the corridor city proposal, it may well be necessary from time to time to consider: modifications in the staging policies of this Amendment and the Capital Improvements Program, additional comprehensive sectional map amendments, amendments to the texts of the Zoning Ordinance and the Subdivision Regulations, new operating procedures, and new forms of assistance from State and/or Federal agencies.

4.52 THE CAPITAL IMPROVEMENTS PROGRAM

The 6-Year Capital Improvements Program of Montgomery County will be used to guide growth according to adopted Staging Policies. Appendix E lists those public facilities needed to create the infrastructure for Germantown’s development during the first two stages. Under the Adequate Public Facilities Ordinance, the scheduling of roads, sewers, water, schools, parks, and other necessary public facilities will be considered in the Montgomery County Planning Board’s review of subdivision applications to assure the proper staging of development. The Capital Improvements Program will be reviewed each year by the Montgomery County Planning Board and by the Germantown development coordinator to maintain proper balance between private development and public facilities.

4.53 WATER AND SEWERAGE POLICY AND PROGRAM

The following policies should govern the program for water and sewer service in the Germantown area:

The provision of water and sewer service is to be used as one of the tools in governing the timing of development, in accordance with the Development Sequence Plan (Exhibit 20).

The implementation of sewer service commitments in Germantown shall be consistent with the staging policies for Germantown. Specifically, the Montgomery County Planning Board and the Germantown development coordinator will review future Comprehensive 10-Year Water and Sewerage Plans for compliance with the intent of the development sequence outlined in Section 4.1.

Exhibit 24, A Proposal Amendment to the Comprehensive 10-Year Water and Sewerage Plan, should be used as the basis for an amendment to the existing Comprehensive 10-Year Water and Sewerage Plan (also see Exhibits 25 and 26).

4.54 COORDINATION OF COUNTY, STATE, AND FEDERAL GOVERNMENT

Because of the significance of the Germantown “new town” concept to the future development pattern of the entire County, as expressed in both the General Plan and this Master Plan Amendment, it is imperative that special care be given to promote development as planned. The objectives upon which this Amendment is based can only be achieved if a continuous process of monitoring and coordination is carried on among the relevant agencies and the developers in the development of the Germantown corridor city.

It is envisioned, therefore, that a specific staff function of the Montgomery County Planning Board will be designated to assume responsibility for the continuous monitoring, coordination, and promotion of development in Germantown. Initially, this staff effort will begin with one position, referred to as the Germantown development coordinator, but may be expanded as time goes on to provide a level of service adequate to meet the needs of the pace of development. Specifically, this staff function will undertake activities and provide leadership in the following areas:

Providing a continuing resource and focus for assisting and coordinating the private and public development activities necessary to produce the kind of new town envisioned in the Master Plan, including the provision of information and supportive assistance to individuals, developers, and
agencies involved in the development of the new town.

Encouraging the provision of public services and institutional development in Germantown, through all appropriate avenues, including exploration of relevant State and Federal funding programs and assistance in the preparation of requests for such grants as may be available from Federal agencies, such as the Departments of Housing and Urban Development; Transportation; Labor; and Health, Education, and Welfare, with particular regard to assistance programs under Title VII, the New Communities Development Act of 1970.

Monitoring the progress achieved in Germantown, in terms of such influences and factors as ecological impact, circulation system development, residential development, sewer and water supply programming, employment level, economic and residential development mixes, and social interaction—reporting this activity to the Planning Board in the form of a development report, prepared annually or more frequently, including recommenda-

tions for further Plan or program modification, as necessary, to keep pace with area changes and needs and to sustain the flexibility and current status of the Master Plan.

Establishing and working with a Germantown Advisory Committee, to be appointed by the Montgomery County Planning Board, to assist in the continuous monitoring and coordination of developed activities—increased resident representation on this Committee, as the Germantown community develops, is envisioned.

Undertaking the studies necessary to establish a Germantown Special Taxing District to provide for certain desirable public facility features of the Plan, such as the early development and continuing maintenance of a unified pedestrian trail and bikeway system, internal bus systems, early learning and training centers, local service institutions, and other social service facilities and activities that will relate specifically to the residents of Germantown and their diversified life styles.
I. PREVIOUS PLANNING ACTIVITY AND CRITIQUE

The 1967 Master Plan for Germantown was evaluated, at the request of the Montgomery County Council, by the firm of Vosbeck, Vosbeck, Kendrick and Redinger with the assistance of members of the Montgomery County Planning Board staff. In the light of the findings of that evaluation, a report was prepared. This report was discussed at several work sessions between the public and the members of the Montgomery County Planning Board and staff.

A. The 1967 Circulation Plan

There are four basic elements of a transportation system: roads, parking, mass transit, and pedestrian ways. The effectiveness of the transportation system depends upon the way in which all four elements complement and reinforce each other to provide maximum access opportunities, with minimum adverse impact on the community. To test the effectiveness of the transportation system of the 1967 Master Plan for Germantown, the following criteria were established:

- The transportation system must reinforce the Land Use Plan and the neighborhood and village concept.
- Vehicular trip making and parking requirements should be minimized by the judicious juxtaposition of land uses.
- The effects of transportation-related noise and air pollution should be minimized through use of effective land development controls.
- Provision should be made for safe, uninterrupted, easy, and enjoyable pedestrian access between residences and commercial, educational, and other community activities.
- The road system should be of minimum size and standards to provide congestion-free operation.
- Through traffic should be segregated from local traffic.
- Provisions should be made for effective internal and external transit systems.

On the basis of these criteria, the 1967 Master Plan was found deficient in several respects:

- Roads — The 1967 Master Plan for Germantown presents an interesting paradox: congestion in an overabundant road network—71.3 miles of "major highways," "arterials," and "primary streets" were recommended for Germantown. To put this mileage in context, Table A compares roads proposed for Germantown in the 1967 Master Plan with those of other new towns.

### Table A

<table>
<thead>
<tr>
<th>Town Description</th>
<th>Population</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germantown (based on 1967 Master Plan, not including I-70-S)</td>
<td>95,000</td>
<td>71.3</td>
</tr>
<tr>
<td>Columbia (not including US 29)</td>
<td>110,000</td>
<td>48.5</td>
</tr>
<tr>
<td>Reston (not including Dulles Access Road)</td>
<td>75,000</td>
<td>46.0</td>
</tr>
<tr>
<td>Maumelle, Arkansas (typical new town)</td>
<td>60,000</td>
<td>37.0</td>
</tr>
</tbody>
</table>

While the Germantown road network appears to be excessive, analysis of peak-hour traffic requirements indicates the I-70-S interchanges as substantially overloaded in terms of alternate Germantown development.

With the standard of 1,500 vehicles a lane per hour accepted as the capacity level for a ramp, it can be seen from Exhibit 27 that three of the ramps will require two lanes each and one ramp will require three lanes. Traffic safety and geometric design considerations prescribe such a treatment; otherwise, the resultant congestion will adversely affect travel on both I-70-S and Maryland Route 118. There also are additional problems relating to the Master Plan road network of the 1967 Master Plan. Eight neighborhoods of the 1967 Master Plan will be bisected by major highways. Also, the commercial centers in some neighborhoods will be blocked from pedestrian access by major highways or arterials.

- Parking — There is no mention of parking policy in the 1967 Master Plan.
- Transit — The 1967 Master Plan focuses on rapid transit. Three stations are suggested along the Baltimore and Ohio Railroad right-of-way—one each at the Maryland Route 118 crossing, at Waring Station Road, and near Little Seneca Creek. Buses are suggested for feeder routes to rapid transit stations and for supplementary express service to the metropolitan center. An analysis of probable transit trips generated by Germantown indicates that a rapid transit focus will be inappropriate for the foreseeable future. Because of the presently approved rail alignment, the travel times involved, and the possible trip destinations within walking distances of various stations along the route to downtown Washington, only a relatively small percentage of Germantown residents' work trips will be
Loadings on Present Interchange
Based on Ultimate Development
of 1967 Plan.

Vehicles per peak hour
made by way of the rail system. The logical implication is that buses will provide the major mass transportation service, with the ultimate development of rapid transit providing ancillary service. The most important aspect is that bus transit can be quickly implemented; whereas the extension of rapid transit to Germantown is questionable at best and almost certainly will not take place within the next decade and a half. Nevertheless, the State’s effort toward enlarging commuter service is supported. For a further discussion of the public transportation program, see Section 3.26.

Pedestrians — The pedestrian aspects of the 1967 Master Plan are only inferred. Reference is made to “... providing pedestrian ways in some areas...” but no details are shown. Several of the commercial centers are too remote from residential concentrations for effective pedestrian linkage. All but two of the neighborhoods will require crossing of major highways or arterial roads by elementary school children. The lack of pedestrian plans, coupled with the excessive road mileage, indicates that Germantown, under the 1967 Master Plan, will unfortunately necessitate a heavy reliance on the automobile. For a further discussion of the pedestrian system, see Section 3.25.

B. Evaluation of 1967 Land Use Plan

Environmental Factors which Warrant New Emphasis

The 1967 Master Plan omits the identification and programming of natural environmental elements as specific criteria for determining land use.

The 1967 Master Plan fails to include an open space program as an important system, integrated with residential development.

A specific identification of areas and sites appropriate for preservation is lacking from the 1967 Master Plan.

A modification of the proposed water resource management program by treating the problem at its source through the proper allocation of land use density is needed.

Residential Land Use Factors which Warrant Reevaluation

There is a need for the placement of primary emphasis upon the importance of providing for a wider and more diverse housing mix within neighborhood and village areas.

There is a need for a structural reorganization of residential land use. In the 1967 Master Plan, there is a lack of identifiable organizational hierarchy.

- The neighborhood units, as identified in the 1967 Master Plan, have no real relationship to one another on a level which would integrate the “whole” community.
- There is an apparent need for reevaluation of neighborhood densities and potential pupil yields for specific residential areas.
- Allocation of R-H zoning in the 1967 Master Plan often occurs in areas not suitable for such building intensity. The planned number of 43.5 dwelling units per acre is excessive density for land characterized by steep slopes and erosion-prone soils.

Commercial Land Use Factors which Warrant Reevaluation

The 1967 Master Plan proposes two to three times more commercial acreage than can be economically developed by the 1990 horizon year.

There exists a need for reevaluation of commercial acreage to conform to the provision of a physical residential hierarchy; this would locate commercial areas appropriately to serve specific population levels. Provisions must be made for more intense commercial land use and for restriction of premature “strip-type” development.

The 1967 Master Plan proposes commercial areas oriented to automobile users only.

Industrial Land Use Factors which Warrant Reevaluation

In the areas identified as industrial zones, there should be consideration given to a smaller permissible acreage, to permit more employment diversification and more intensive land use.

C. Review of 1967 Development Goals and Objectives

There is a need for a reevaluation of the 1967 Master Plan goals and objectives, in view of the facts that they are generally vague and are not reflected specifically in the 1967 Germantown Land Use Plan.

Reference is made to “Goals and Objectives” (page 22) and “Conclusion” (page 37) of the 1967 Master Plan for Germantown.

- Although the establishment of “quality” in community development is a stated goal in the 1967 Master Plan, no specific mechanism, standards, or procedures for achieving such “quality development” are delineated.
- “Maintaining a proper scale” is mentioned in the Master Plan as a development objective, but no criteria are established for “proper scale” in the land use proposals.
- “Identification” is suggested as one objective,
Existing Re-Zoning
with reference to the planning area. Again, the identification parameter mentioned is only generally applied to the entire planning area; identification is not explicitly developed at smaller organizational scales. No scaled physical hierarchy is articulated. A site plan review program is needed to provide for the application of design standards to insure the achievement of this objective.

(See Section 2.1 for the Goals and Objectives of this Amendment.)

D. Review of 1967 Implementation Plan

Although the 1967 Master Plan expresses a need for staging plans, no staging or implementation programs are outlined. Since the present water and sewer facilities are out of phase with each other, there is the obvious necessity to implement policies and guidelines to coordinate the development of comprehensive community facilities with all land uses (see Section 4.1).

II. EXISTING DEVELOPMENT AND EXISTING DEVELOPMENT COMMITMENTS

A. Public Sector

Montgomery College is in the process of acquiring a site of at least 240 acres, on which to build a third major community campus.

Interstate Highway 70-S is being widened to eight lanes north to a point just south of the Route 118 interchange.

The Maryland Department of Forests and Parks presently owns 1,700 acres of woodland, which have been acquired for development of Seneca State Park.

The Montgomery County Board of Education has acquired 11 school sites.

The Montgomery County Housing Authority has completed 76 units of publicly assisted housing in the Middlebrook Village.

Public water and sewer facilities are out of phase with one another.

The Seneca Watershed Study identifies three critical lakes in the planning area:

- Lake No. 3 (the Churchill Lake), located on Little Seneca Creek;
- Lake No. 9, located on Gunners Branch above the Baltimore and Ohio Railroad right-of-way; and
- Lake No. 6, located on the Great Seneca Creek, south of Churchill Town Sector.

For further discussion of these lakes, see Section 314.

B. Private Sector

Currently, the 1,500-acre Churchill Town Sector is being developed northwest of Maryland Route 118 and I-70-S. This village will provide about 8,200 new dwelling units and related facilities by 1985.

Scattered low-density and medium-density developments presently exist throughout the planning area (see Table B).

Approximately 70 percent of the existing land use is zoned in accordance with the 1967 Master Plan. All except the Churchill project are in the form of single-use districts (see Exhibit 28).

Recent subdivision activity in Germantown centers around the Kingsview Knolls subdivision on Shaeffer Road, south of Clopper Road; Germantown Estates, south of the elementary school; Fox Chapel subdivision, south of Middlebrook on Route 355; and Meadowbrook Estates, northeast of Maryland Route 118 and I-70-S.

Table B

<table>
<thead>
<tr>
<th>AREA</th>
<th>APPROVED Dwelling Units</th>
<th>Population</th>
<th>PENDING Dwelling Units</th>
<th>Population</th>
<th>PRELIMINARY SUBDIVISION PLANS Dwelling Units</th>
<th>Population</th>
<th>BUILDING PERMITS ISSUED Dwelling Units</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaithersburg*</td>
<td>28,480</td>
<td>84,834</td>
<td>8,347</td>
<td>25,637</td>
<td>23,977</td>
<td>74,723</td>
<td>7,258</td>
<td>23,163</td>
</tr>
<tr>
<td>Germantown**</td>
<td>7,347</td>
<td>23,067</td>
<td>2,385</td>
<td>8,672</td>
<td>17,986</td>
<td>53,196</td>
<td>7,019</td>
<td>1,283</td>
</tr>
<tr>
<td>Total</td>
<td>21,142</td>
<td>61,767</td>
<td>5,962</td>
<td>16,965</td>
<td>5,991</td>
<td>21,527</td>
<td>239</td>
<td>24,446</td>
</tr>
</tbody>
</table>

* Gaithersburg vicinity data for 1968-1971; Gaithersburg City data for 1968-1970
** Germantown data for 1967-1971
The major nonresidential activity currently in Germantown is that of the Century XXI project, a joint development venture of Fairchild Industries and Real Estate Central. The project covers nearly 300 acres and is intended as an office and research center, comprising 3,000,000 square feet, accommodating over 10,000 people. The estimated cost of the project is over 100,000,000 dollars.

III. DEMOGRAPHIC FACTORS AND ECONOMIC FACTORS

A. Population

Metropolitan Washington population increased from 2,076,610 in 1960 to 2,861,123 in 1970, an average annual increase of 78,451 persons or 3.8 percent.

Over the same period, Montgomery County population increased from 340,928 to 522,809, about 53 percent—an average of 18,188 persons each year.

The Montgomery County population is projected to reach 690,000 by 1980 and 840,000 by 1990. The average annual growth over the 1970-80 decade is projected at 16,719 (3.2 percent) and 15,000 (about 2.2 percent each year) between 1980-90.

Population trends for the Washington metropolitan area are detailed by area in Table C.

The Germantown population is projected to

<table>
<thead>
<tr>
<th>AREA</th>
<th>1970* Number</th>
<th>Percent</th>
<th>1980** Number</th>
<th>Percent</th>
<th>1990** Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington, D.C., and</td>
<td>1,677,747</td>
<td>58.6</td>
<td>2,229,700</td>
<td>59.5</td>
<td>2,662,800</td>
<td>59.0</td>
</tr>
<tr>
<td>Northern Virginia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prince George's County</td>
<td>660,567</td>
<td>23.1</td>
<td>830,100</td>
<td>22.1</td>
<td>1,011,100</td>
<td>22.4</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>522,809</td>
<td>18.3</td>
<td>690,000</td>
<td>18.4</td>
<td>840,000</td>
<td>18.6</td>
</tr>
<tr>
<td>GERMANTOWN CORRIDOR CITY</td>
<td>2,797</td>
<td>0.1</td>
<td>30,000</td>
<td>0.8</td>
<td>64,700</td>
<td>1.4</td>
</tr>
<tr>
<td>Washington Metropolitan Area</td>
<td>2,861,123</td>
<td>100.0</td>
<td>3,749,800</td>
<td>100.0</td>
<td>4,513,900</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Sources: * U. S. Bureau of the Census
** The Maryland-National Capital Park and Planning Commission

Table D

PROJECTED CHANGES IN THE POPULATION
Washington Metropolitan Area, 1970 to 1990

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington, D.C., and Northern Virginia</td>
<td>55,195</td>
<td>3.3</td>
<td>43,310</td>
<td>1.9</td>
</tr>
<tr>
<td>Prince George's County</td>
<td>16,953</td>
<td>2.6</td>
<td>18,100</td>
<td>2.2</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>16,719</td>
<td>3.2</td>
<td>15,000</td>
<td>2.2</td>
</tr>
<tr>
<td>GERMANTOWN CORRIDOR CITY</td>
<td>2,720</td>
<td>97.3</td>
<td>3,470</td>
<td>11.6</td>
</tr>
<tr>
<td>Washington Metropolitan Area</td>
<td>86,867</td>
<td>3.1</td>
<td>76,410</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Sources: U. S. Bureau of the Census;
The Maryland-National Capital Park and Planning Commission;
Consulting Services Company
reach 30,000 by 1980, an average annual increase of 2,720. This figure represents 11.5 percent of the growth projected for Montgomery County. Between 1980 and 1990, population is projected to increase to 64,700 at an average increase of 3,470 persons each year, representing 11.7 percent of Montgomery County's forecasted population growth. Detailed population projections are indicated in Table D.

B. Housing

Patterns in housing authorizations issued in the I-70-S corridor above Rockville have been examined. The housing types developed between 1965 and 1967 were heavily oriented toward single-family detached units: 58 percent single-family detached units and 42 percent single-family attached and multi-family units. The 1968-70 period indicated a strong reversal in building patterns: only 13 percent of the housing units were single-family detached units; 87 percent were single-family attached and multi-family developments. Table E shows average annual building permits issued and distribution by housing types for the 1965-1970 period.

In the Germantown area, land zoned for high-rise apartment buildings is being developed in garden apartments, reflecting the current market resistance to high-rise development in the I-70-S corridor. This resistance is exemplified by the slow leasing pace of the elevator apartment building which was developed at Montgomery Village.

C. Retail

The ultimate population projected for Germantown is over 100,000. With a population of that magnitude, assuming a per capita disposable income of $3,200 in constant 1970 dollars, 138 acres of retail land are indicated for the town center shopping mall, discounting outside factors. However, due to existing and planned shopping facilities in the I-70-S corridor, the supportable shopping mall will more likely require an area on the order of only 110 to 115 acres. This core commercial site will include regional shopping facilities and nonretail commercial functions (see Section 3.6).

Major I-70-S corridor commercial competition currently includes Gaithersburg commercial area, Montgomery Mall (occupying 726,000 square feet), Rockville Mall, and strip commercial development along Rockville Pike. Planned competitive retail space is programmed for Montgomery Village, with the first phase of construction slated to begin in 1976, ultimately to include 1,000,000 square feet of retail space.

Montgomery Mall is a highly competitive shopping center, with a strong combination of anchor stores and mall shops, including a full range of department store merchandising: Sears Roebuck and Company, The Hecht Company, and Garfinckel's. The Montgomery Village regional mall will need to provide a competitive complement to Montgomery Mall in order to attract shoppers.

D. Employment

Germantown employment is projected to reach 5,000 by 1975. Reflecting an increasing pace of development, 1980 employment is expected to be 9,000. By 1990, with the development of Germantown well under way, employment will probably reach 23,000 people.
Table F
PROJECTED EMPLOYMENT
Washington Metropolitan Area

<table>
<thead>
<tr>
<th>AREA</th>
<th>1975</th>
<th>1980</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington Standard Metropolitan Statistical Area</td>
<td>1,434,300</td>
<td>1,664,000</td>
<td>2,055,000</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>213,900</td>
<td>249,000</td>
<td>338,000</td>
</tr>
<tr>
<td>GERMANTOWN CORRIDOR CITY</td>
<td>5,000</td>
<td>9,000</td>
<td>23,000</td>
</tr>
</tbody>
</table>

Source: Consulting Services Company

Should Century XXI be the success its developers hope for, these numbers will be much higher. The projections were made with a conservative evaluation of near-term impact.

Population growth is related to the employment opportunities in an area and to the percentage of population participating in the labor force. The labor participation ratio is expected to remain fairly constant through 1990 in the overall Washington, D. C., Standard Metropolitan Statistical Area and in Montgomery County. Labor participation ratio may be as high as 45 percent in Germantown in 1975, reflecting a large inflow of employees now living elsewhere. By 1980, the impact of residential development is expected to catch up with employment, resulting in below normal labor participation rates—represented by 30 percent in 1980. By 1990, the balance between housing development and employment opportunities is expected to normalize, approaching metropolitan averages at 36 percent. Employment projections are detailed in Table F.

Industrial park land absorption averaged over 70 acres per year during the 1961-1965 period in the County. The latter part of the decade produced a sharp downturn in industrial land absorption, with Countywide absorption averaging between 30 and 40 acres per year in 1970 and 1971. This trend reflects an economic downturn experienced throughout the Washington metropolitan area and the nation.

Industrial land use was absorbed vigorously during the early 1960-70 period in Montgomery County. The Germantown employment base has already been established by five industries: IBM (International Business Machines), Fairchild-Hiller, COMSAT (Communications Satellite Corporation), the Atomic Energy Commission, and the Bureau of Standards.

Century XXI, an ambitious office space development, is at present under construction adjacent to the Fairchild-Hiller space. The project is planned to total 3,000,000 square feet upon completion. About 173,000 square feet of construction is in place. The development features covered parking and a landscaped site which includes a golf course.

Major industrial parks in the I-70-S corridor area include: Montgomery Air Park, Washington Science Center, and three Danac research and development office parks. Montgomery Air Park is the largest, occupying 275 acres, and is located in Gaithersburg. The developer sells or leases land and offers warehouse space in six speculative buildings with a total of 150,000 square feet of floor area. One hundred acres have been developed since its opening in 1960.

Washington Science Center is in Rockville, with 86 acres of land. Forty of the 86 acres have been developed since the industrial park opened in 1970. The Center currently has six office buildings.

Danac has developed 160 acres of industrial parks in three locations—Danac Research Center opened in 1965, Danac Technical Park opened in 1966, and Danac Diamond Tract opened in 1969. Some 88 acres have been developed in these three industrial parks.

Industrial land absorption has been aggressively developed in Montgomery County. The I-70-S corridor is established as a prestige location for campus-type facilities by large firms. As the recession lifts and industrial location activity increases, the I-70-S corridor should begin to have more industrial sites developing within its area.

A questionnaire survey of major employers was conducted to obtain information on:
1. Occupational distribution
2. Occupational shortages
3. Difficulty in finding employees
4. Journey to work patterns

The survey represented 10,632 employees in nine major firms in the general area of the I-70-S corridor.

Managerial and white-collar workers represented 45 percent of all employees; while the other 55 percent were skilled, semi-skilled, and unskilled workers. Employment shortages were in the skilled, semi-
skilled, and unskilled categories; no employer expressed a difficulty in attracting managerial and white-collar employees. Of those employers indicating difficulty in hiring workers, 45 percent of the respondents listed general market scarcity as the major reason. Another 33 percent identified, as a major problem in finding workers, the lack of adequate housing in the area for these moderately paid employees.

Journey-to-work patterns add weight to the problem of inadequate moderately priced housing in the corridor area. Some 63 percent of the 10,000 employees commute into the corridor area to their jobs.

The relationship of scarcity of low- and moderate-price housing in the corridor area, difficulty in finding semi-skilled and unskilled workers, and lengthy journey-to-work patterns indicates the need for a broader range of housing opportunities in the corridor area. The housing choices in the proposed new town should be reflective of employment opportunities and household incomes of the Germantown labor force.
APPENDIX B

I. METHOD OF REVIEW OF THE POPULATION DENSITY AND LAND USE RECOMMENDATIONS CONTAINED IN THE 1967 PLAN

After reviewing the 1967 Master Plan for Germantown, as directed by the Montgomery County Council, the Planning Board has concluded that several weaknesses in the Master Plan must be corrected. Therefore, this Amendment is based on the following criteria:

1. Establishment of an overall population for the Germantown Planning Area.
2. Establishment of villages to act as community focuses and to provide centers for services and community activities.
3. Establishment of an optimum population range for each village.
4. Respect for the capacity of the land to "hold" the density proposed in each subarea, so as to avoid serious environmental problems resulting from erosion, storm water, or destruction of areas of natural beauty or ecological and historical value.
5. Assignment of development densities which do not exceed local capacities of roads, schools, and other facilities planned for the section of the Plan or for the specific community.
6. Respect for certain developments which are "committed" either by the existence of an approved subdivision or by other governmental or private decisions which, if revoked, would damage the full faith and credit of the planning process.

Staging of private development in concert with the provision of public facilities and services, to assure development of a high-quality environment and to avoid inefficiencies, premature extension of public facilities, or overuse of existing facilities—The staging of development should recognize the importance of Germantown to the achievement of the goals of the General Plan and its role in providing homes and jobs for a substantial portion of the County's population increase during the next 20 years.

Each parcel of land was reviewed, with respect to each of the above criteria. Care was exercised and planning judgments were made, based upon a comprehensive review employing these criteria.

II. TOTAL POPULATION AND RESIDENTIAL LAND USE DENSITIES

The system of assigning densities and zoning classifications employed in this Amendment differs significantly from that used in the 1967 Master Plan for Germantown.

In the 1967 Master Plan, the number of units generated by the indicated densities on the residential land was used as a determinant for road design and educational facility allocations. These units totaled about 34,000 dwellings, housing about 95,000 people. However, when the Zoning Map was prepared, the areas indicated for "residential," "conservation," and "institution" uses were given zoning classifications corresponding to the densities indicated for the net residential land on the Land Use Plan. Diagram A gives a hypothetical example of this procedure. If these zoning classifications were employed to the maximum allowable units permitted by law, 51,000 units housing about 150,000 people would be developed. Thus, there is a potential for overloading by over 50 percent the schools and the transportation network that were designed for 95,000 people.

Four major criteria were employed in reassigning the residential land use densities in the planning area: (1) the development capability of the land, (2) the creation of a balanced road network, (3) the development of a village and neighborhood structure, and (4) the provision of adequate educational facilities at reasonable distances from each dwelling unit. The more efficient land use and transportation systems proposed in this Amendment will enable a larger population to be served than do those of the 1967 Master Plan.

This Amendment encourages the use of the Planned Development Zone, with its provisions for appropriate transfers of densities and for mixes of dwelling unit types. The Amendment also encourages, where clustering is possible, the shifting of dwelling units out of conservation areas, rights-of-way, and school sites. The numbers of residential units used in calculating land impact, school needs, and road network usage were based on the net residential land and the net residential intensity shown on the Land Use Plan. In transferring these units to the Zoning and Highway Plan, a procedure was used that closely follows the precedent set in the adopted Gaithersburg Master Plan. An indicator of gross residential intensity was determined; and a euclidian zone, approximating that indicator, was assigned on the Zoning Map. Diagram B gives a hypothetical example of this procedure.
APPENDIX C

Among the primary reasons for the restudy of the Master Plan for Germantown were the environmental implications that the Master Plan had on the land and streams in the area. The 1967 Plan considered the natural features of the area only incidentally. Except for relying on the cluster provisions of the Zoning Ordinance and noting the existence of various stream valleys, no specific actions or proposals were made to insure the protection of the natural features. One of the major defects of the 1967 Master Plan was the large difference in density yields between the Land Use and Zoning Plans (see Section 1.11).

As an integral part of the restudy of the Master Plan for Germantown, a series of environmental studies was undertaken. These studies included a survey of soils and slopes, in relation to building development; the locations of major stands of trees; locations of both major and minor watercourses; and, in several specific areas, considerations of the depth to ground water and bedrock. As a result of these studies, the development intensities have been rearranged and, in many instances, reduced in consideration of the environment of each specific area.

A staging sequence is also recommended for the planning area, to insure that the proper public facilities and protective measures are in place or under way before dense development occurs. These measures will include on-site flood and sediment controls, public water and sewer service, adequate highway capacity, public transportation, and detailed design controls, where available, through the site plan review process and the subdivision process.

It is recognized that any high-intensity, urban development will have an adverse impact on the natural environment, and the development in Germantown will be no exception. In the larger context of Montgomery County, however, it should be noted that Germantown is planned to direct and channel a large percentage of the County's growth over the next 20 years into a controlled, staged, and monitored area. The alternative would be wide-scale, suburban sprawl over large portions of the County, most particularly in areas designated in the General Plan as low-density rural and semi-rural "wedge" areas.

The Germantown area lies entirely within the Seneca Creek Watershed, one of the largest and most important conservation areas in Montgomery County. There is a large public investment in both County and State park lands, designed to help protect the watershed from despoilation. However, high-intensity, urban development in the watershed has caused many problems, including heavy siltation and flooding, both caused by insufficient storm-water management. The Comprehensive Amendment to the Master Plan for Germantown, therefore, takes cognizance of the findings of the Seneca Creek Watershed Study and the proposed flood and sediment control measures suggested in that study (see Section 3.14 and Exhibits 6 and 22). The stated policy of limiting development in stream valley walls and on other steep slopes is also calculated to help limit excessive erosion and runoff as development increases (see Section 4.32).

The impact on air quality is expected to be minimized through the provision of a convenient, local, tax-supported internal bus system, serving the entire planning area. Expectations are that 20 percent of the work force will both live and work in the planning area. Express bus service, improved commuter rail service, and later rapid transit will provide fast, convenient commuter service to other employment areas to the south in the I-70-S corridor and also to Washington, D.C. Potential traffic congestion around the Montgomery College campus is expected to be eased, due to the availability of internal transit near the site, as well as the site's proximity to I-70-S (see Section 3.26).

Detailed site planning and environmental considerations have been conducted for specific areas considered important, either because of impending development or because of the long-range significance of these areas to Germantown. A noise pollution impact study was conducted for the Church of the Savior retreat facility in the Neelsville area, to assess the impact on that facility of two proposed major highways. As a result of this private study, both highway alignments are recommended for relocation, to reduce both the acoustic and the visual impacts. Similarly, the developers of the Churchill Town Sector have agreed to provide berms and other buffers, to protect proposed residential development adjacent to I-70-S.

Several specific terrain capacity analyses were performed. A few of these are cited as examples. A detailed soil, slope, and bedrock study was conducted to assist in the proper site selection for the proposed Montgomery College campus. Another detailed environmental study of the proposal submitted by the developers of the Nemazee tract (in Gunners Lake Village) indicates that the original development density proposed from conventional zoning was much in excess of what the site would...
actually support without excessive environmental impact. As a result, the developers have agreed to reduce the scale of development in the area. The Kline tract (also in Gunners Lake Village), which was zoned for high-rise development, is recommended for a development density of 15 dwelling units an acre, permitting preservation of the trees and watercourses in the southeast corner of the property.

Water and sanitary sewer services will be provided in the planning area, in concert with development. The programming of these services is proposed to be overseen by the Germantown development coordinator, who will monitor the development process and make recommendations to the appropriate agencies for the provision of public facilities. The Germantown development coordinator will also be responsible for monitoring the private development sector to insure compliance with all necessary safeguards.

The greenbelt park system stream valley conservation policy and controls, at the subdivision and site plan levels, should protect the major tree stands in the planning area. Little Seneca Creek should receive particular attention, due to its relatively unspoiled state and its being a trout-stocked stream.

In summary, an attempt has been made to amend the Germantown Plan to designate appropriate densities and locations for development, based on environmental constraints, as well as on economic and social criteria. This Amendment reflects the current public value that is placed on the environmental integrity of the Germantown area within the Seneca Creek Watershed.


## Table 1

**Comparison of 1967 Master Plan for Germantown and Comprehensive Amendment to the Master Plan for Germantown**

<table>
<thead>
<tr>
<th>Land-Use Classification</th>
<th>1967 Plan</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN SPACE:</td>
<td>2,971</td>
<td>3,643</td>
</tr>
<tr>
<td>M-NCPPC Parks</td>
<td>1,602</td>
<td>1,940</td>
</tr>
<tr>
<td>State Parks</td>
<td>576</td>
<td>790</td>
</tr>
<tr>
<td>Conservation Areas</td>
<td>793</td>
<td>913</td>
</tr>
<tr>
<td>SCHOOLS</td>
<td>353</td>
<td>488</td>
</tr>
<tr>
<td>INSTITUTIONAL USES</td>
<td>312</td>
<td>392</td>
</tr>
<tr>
<td>RESIDENTIAL USES:</td>
<td>4,189</td>
<td>4,695</td>
</tr>
<tr>
<td>Single-Family Units</td>
<td>2,912</td>
<td></td>
</tr>
<tr>
<td>Multi-Family Units</td>
<td>978</td>
<td></td>
</tr>
<tr>
<td>High-Rise Apartments</td>
<td>299</td>
<td></td>
</tr>
<tr>
<td>COMMERCIAL ACTIVITIES:</td>
<td>495</td>
<td>207</td>
</tr>
<tr>
<td>Regional Center</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Commercial Office Uses</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Service Commercial Uses</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Highway Commercial Uses</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Medical Offices</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Village Center Commercial Uses</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>Neighborhood Center</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Commercial Uses Office and Commercial</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>EMPLOYMENT (Industrial Parks)</td>
<td>1,023</td>
<td>694</td>
</tr>
<tr>
<td>TOTAL*</td>
<td>9,343</td>
<td>10,119</td>
</tr>
</tbody>
</table>

*Does not include rights-of-way of various highway classifications (arterial roads, major highways, freeways) or the B and O Railroad. There are 10,915 acres in the Planning Area.*
### Table 2

**COMPREHENSIVE AMENDMENT TO THE MASTER PLAN FOR GERMANTOWN**

*Proposed Land Uses by Village (Acreage)*

<table>
<thead>
<tr>
<th>AREA</th>
<th>OPEN SPACE*</th>
<th>SCHOOLS</th>
<th>INSTITUTIONAL</th>
<th>RESIDENTIAL</th>
<th>COMMERCIAL</th>
<th>EMPLOYMENT</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Center</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>30</td>
<td>99**</td>
<td>—</td>
<td>129</td>
</tr>
<tr>
<td>Churchill</td>
<td>206</td>
<td>76</td>
<td>—</td>
<td>741</td>
<td>—</td>
<td>339</td>
<td>1,362</td>
</tr>
<tr>
<td>Gunners Lake</td>
<td>167</td>
<td>81</td>
<td>—</td>
<td>518</td>
<td>12</td>
<td>94</td>
<td>872</td>
</tr>
<tr>
<td>Middlebrook</td>
<td>217</td>
<td>50</td>
<td>216</td>
<td>626</td>
<td>34</td>
<td>38</td>
<td>1,181</td>
</tr>
<tr>
<td>Neelsville</td>
<td>32</td>
<td>106</td>
<td>154</td>
<td>757</td>
<td>20</td>
<td>198</td>
<td>1,267</td>
</tr>
<tr>
<td>Clopper</td>
<td>562</td>
<td>60</td>
<td>22</td>
<td>792</td>
<td>27</td>
<td>—</td>
<td>1,463</td>
</tr>
<tr>
<td>Kingsview</td>
<td>217</td>
<td>115</td>
<td>—</td>
<td>1,231</td>
<td>15</td>
<td>25</td>
<td>1,603</td>
</tr>
<tr>
<td><strong>Total</strong>***</td>
<td><strong>1,401</strong>*</td>
<td><strong>488</strong></td>
<td><strong>392</strong></td>
<td><strong>4,695</strong></td>
<td><strong>207</strong></td>
<td><strong>694</strong></td>
<td><strong>7,877</strong></td>
</tr>
</tbody>
</table>

* Includes conservation areas and local parks; does not include Greenbelt Park (2,006 acres).
** Includes library, administrative offices and common green.
*** Totals do not include rights-of-way of various highway classifications (arterial roads, major highways, freeways) or the B and O Railroad.

### Table 3

**COMPARISON OF 1967 MASTER PLAN AND COMPREHENSIVE AMENDMENT**

*Residential Land Use*

<table>
<thead>
<tr>
<th>AREA</th>
<th>RESIDENTIAL ACRES</th>
<th>DWELLING UNITS</th>
<th>AVERAGE DWELLING UNITS PER ACRE</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Center</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>1,036</td>
</tr>
<tr>
<td>Churchill</td>
<td>803</td>
<td>741</td>
<td>8,200</td>
<td>7,264</td>
</tr>
<tr>
<td>Gunners Lake</td>
<td>400</td>
<td>518</td>
<td>3,509</td>
<td>5,288</td>
</tr>
<tr>
<td>Middlebrook</td>
<td>754</td>
<td>626</td>
<td>6,746</td>
<td>4,310</td>
</tr>
<tr>
<td>Neelsville</td>
<td>428</td>
<td>757</td>
<td>3,435</td>
<td>4,411</td>
</tr>
<tr>
<td>Clopper</td>
<td>935</td>
<td>792</td>
<td>9,431</td>
<td>7,099</td>
</tr>
<tr>
<td>Kingsview</td>
<td>869</td>
<td>1,231</td>
<td>1,790</td>
<td>5,380</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,189</strong></td>
<td><strong>4,695</strong></td>
<td><strong>33,111</strong></td>
<td><strong>34,788</strong></td>
</tr>
</tbody>
</table>
### Table 4
SUMMARY STATISTICS FROM LAND USE PLAN OF THE COMPREHENSIVE AMENDMENT TO THE 1967 MASTER PLAN FOR GERMANTOWN
By Village and Density Categories

<table>
<thead>
<tr>
<th>Dwelling Unit Density Categories</th>
<th>Areas</th>
<th>2 Units Per Acre</th>
<th>3 Units Per Acre</th>
<th>4 Units Per Acre</th>
<th>5 Units Per Acre</th>
<th>7 Units Per Acre</th>
<th>9 Units Per Acre</th>
<th>11 Units Per Acre</th>
<th>15 Units Per Acre</th>
<th>18 Units Per Acre</th>
<th>22 Units Per Acre</th>
<th>28 Units Per Acre</th>
<th>44 Units Per Acre</th>
<th>TOWN SECTOR UNITS PER ACRE</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Town Center</td>
<td>Churchill</td>
<td>Gunners Lake</td>
<td>Middlebrook</td>
<td>Neenah</td>
<td>Clopper</td>
<td>Kingsview</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44 Units Per Acre:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOWN SECTOR UNITS PER ACRE:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.U.'s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Dwelling Units per Acre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average Dwelling Units per Acre: 34.5, 9.8, 10.2, 6.8, 5.8, 8.9, 4.4, 7.4
### Table 5
**POPULATION GROWTH FORECAST, MONTGOMERY COUNTY**
1972-1982 By Forecast Areas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poolesville</td>
<td>6,353</td>
<td>7,100</td>
<td>750</td>
<td>11,100</td>
<td>4,000</td>
<td>56.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Damascus</td>
<td>11,938</td>
<td>12,720</td>
<td>780</td>
<td>16,720</td>
<td>4,000</td>
<td>31.4</td>
<td>2.5</td>
</tr>
<tr>
<td>I-70-S CORRIDOR*</td>
<td>26,936</td>
<td>38,400</td>
<td>11,460</td>
<td>107,400</td>
<td>69,000</td>
<td>179.7</td>
<td>8.3</td>
</tr>
<tr>
<td>Potomac</td>
<td>28,221</td>
<td>33,850</td>
<td>5,630</td>
<td>45,350</td>
<td>11,500</td>
<td>34.0</td>
<td>11.7</td>
</tr>
<tr>
<td>Olney</td>
<td>12,513</td>
<td>15,850</td>
<td>3,340</td>
<td>21,850</td>
<td>6,000</td>
<td>37.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Colesville</td>
<td>41,653</td>
<td>44,550</td>
<td>2,900</td>
<td>62,900</td>
<td>18,440</td>
<td>41.4</td>
<td>14.2</td>
</tr>
<tr>
<td>Urban Ring</td>
<td>395,195</td>
<td>405,590</td>
<td>10,390</td>
<td>465,590</td>
<td>60,000</td>
<td>14.8</td>
<td>59.2</td>
</tr>
<tr>
<td>Total County</td>
<td>522,809</td>
<td>558,060</td>
<td>35,250</td>
<td>731,000</td>
<td>172,940</td>
<td>33.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Includes Germantown, Clarksburg, and Gaithersburg.

Source: Population estimated by M-NCPPC; except 1970, which is U. S. Census figure.

### Table 6
**LOCAL PARK LAND**
By Village

<table>
<thead>
<tr>
<th>Village</th>
<th>Projected Population to be Served</th>
<th>Minimum Park Land Acreage**</th>
<th>Resulting Number of 10-Acre Local Parks</th>
<th>Current Master Plan Proposal 10-Acre Parks</th>
<th>Remaining Local Park Deficit***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Center</td>
<td>4,065</td>
<td>10 acres</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Churchill</td>
<td>18,882</td>
<td>47</td>
<td>4-5</td>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>Gunners Lake</td>
<td>14,782</td>
<td>37</td>
<td>3-4</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Middlebrook</td>
<td>14,296</td>
<td>36</td>
<td>3-4</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Neelsville</td>
<td>15,905</td>
<td>40</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Clopper</td>
<td>22,266</td>
<td>56</td>
<td>5-6</td>
<td>5</td>
<td>0.1</td>
</tr>
<tr>
<td>Kingsview</td>
<td>17,387</td>
<td>43</td>
<td>4-5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Totals*</td>
<td>107,583</td>
<td>269 acres*</td>
<td>27 (24-29)*</td>
<td>22*</td>
<td></td>
</tr>
<tr>
<td>M-NCPPC Local Parks***</td>
<td>88,701</td>
<td>222 acres</td>
<td>22 (19-24)</td>
<td>22</td>
<td>0 (1-3)</td>
</tr>
</tbody>
</table>

* Does not include Stream Valley, Regional, or Special Parks.

** Based on minimum of 2.5 acres of local park land per 1,000 people.

*** To be supplied either through dedication or as private green space—Common Green.

**** Excluding Churchill.
## APPENDIX E

**Stage One**

**RECOMMENDED CAPITAL IMPROVEMENTS PROGRAM**  
*Estimated Expenditures*

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>PROJECT DESCRIPTION AND VILLAGE</th>
<th>ESTIMATED PROJECT COST*</th>
<th>JURISDICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRANSPORTATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-27 (Germantown Drive)</td>
<td>Churchill Village</td>
<td>Private Funds</td>
<td>Private</td>
</tr>
<tr>
<td>M-85 (middlebrook Road) from M-27 (Germantown Drive) to M-61 (Maryland Route 118)</td>
<td>Churchill Village</td>
<td>Private Funds</td>
<td>Private</td>
</tr>
<tr>
<td>M-90 (Western Arterial) South of M-26 (Clopper Road)</td>
<td>Small section of arterial within subdivision. Clopper Village</td>
<td>Private Funds</td>
<td>Private</td>
</tr>
<tr>
<td>Transit Easement</td>
<td>Along I-70-S from Middlebrook Road and Maryland Route 118 to Gaithersburg. Right-of-way, construction of bridge and overpasses, and rolling stock. Various villages</td>
<td>$9,360,000</td>
<td>State/Federal</td>
</tr>
<tr>
<td>Internal Bus Equipment</td>
<td>Establish first stage routes and equipment. Various villages</td>
<td>Dependent upon level of service</td>
<td>Taxing District</td>
</tr>
<tr>
<td>Upgrade Transit Service</td>
<td>Existing B&amp;O Railroad tracks and station improvements. Various villages</td>
<td>No estimate at this time</td>
<td>State</td>
</tr>
<tr>
<td><strong>SCHOOLS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Elementary School</td>
<td>Churchill Village</td>
<td>$1,200,000</td>
<td>County</td>
</tr>
<tr>
<td>One Elementary School</td>
<td>Fox Chapel Subdivision. Middlebrook Village</td>
<td>$1,200,000</td>
<td>County</td>
</tr>
<tr>
<td>Two Elementary Schools</td>
<td>Bellsfield and South Gunners Branch locations. Clopper Village</td>
<td>$2,400,000</td>
<td>County</td>
</tr>
<tr>
<td><strong>SEWERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project 84.7</td>
<td>Churchill Relief Program. Churchill Village</td>
<td>$55,000</td>
<td>WSSC</td>
</tr>
<tr>
<td>Project 82</td>
<td>To serve Montgomery Community College. Middlebrook Village</td>
<td>$516,000</td>
<td>WSSC</td>
</tr>
<tr>
<td>Projects 82.1 and 82.2</td>
<td>Clopper Village</td>
<td>$235,000</td>
<td>WSSC</td>
</tr>
</tbody>
</table>

*Note all funds in 1972 dollars.*
### Stage One
(Continued)

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>PROJECT DESCRIPTION AND VILLAGE</th>
<th>ESTIMATED PROJECT COST*</th>
<th>JURISDICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER FACILITIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project 37.5 (Partial)</td>
<td>Churchill Village</td>
<td>$1,520,000</td>
<td>WSSC</td>
</tr>
<tr>
<td>COMMUNITY COLLEGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Acquisition and Construction</td>
<td>Middlebrook Village</td>
<td>No estimate</td>
<td>State/County</td>
</tr>
<tr>
<td>STORM-WATER PROTECTION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impoundment Facilities below each subdivision being developed</td>
<td>Various villages</td>
<td>No estimate</td>
<td>State/County/Private</td>
</tr>
<tr>
<td>FIRE STATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Acquisition (2 acres)</td>
<td>Town Center</td>
<td>$30,000</td>
<td>County</td>
</tr>
<tr>
<td>POLICE STATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Acquisition and Construction</td>
<td>Central business district of Town Center</td>
<td>$796,000</td>
<td>County</td>
</tr>
<tr>
<td>LOW- AND MODERATE-INCOME HOUSING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition and Development of scattered sites</td>
<td>Various villages</td>
<td>No estimate</td>
<td>Montgomery County Housing Authority</td>
</tr>
<tr>
<td>PARKS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plungar Local Park, Site Development</td>
<td>Middlebrook Village</td>
<td>$156,000</td>
<td>M-NCPDC</td>
</tr>
<tr>
<td>Germantown Local Park, Site Development</td>
<td>Middlebrook Village</td>
<td>$67,000</td>
<td>M-NCPDC</td>
</tr>
<tr>
<td>South Gunners Branch Local Park, Site Development</td>
<td>Clopper Village</td>
<td>$156,000</td>
<td>M-NCPDC</td>
</tr>
<tr>
<td>Fox Chapel Local Park Site Development</td>
<td>Middlebrook Village</td>
<td>$137,000</td>
<td>M-NCPDC</td>
</tr>
<tr>
<td>Middlebrook Hill Local Park, Site Development</td>
<td>Middlebrook Village</td>
<td>$67,000</td>
<td>M-NCPDC</td>
</tr>
<tr>
<td>Kingsview Local Park Site Development</td>
<td>Clopper Village</td>
<td>$137,000</td>
<td>M-NCPDC</td>
</tr>
<tr>
<td>Gunners Branch Local Park, Site Development</td>
<td>Clopper Village</td>
<td>$67,000</td>
<td>M-NCPDC</td>
</tr>
<tr>
<td>Seneca State Park, Site Development</td>
<td>Middlebrook, Gunners Lake, and Clopper Villages</td>
<td>$800,000</td>
<td>State</td>
</tr>
<tr>
<td>Land Acquisition for parks listed above for Fiscal Years 1972-76</td>
<td>Various villages</td>
<td>$4,330,000</td>
<td>State and M-NCPDC</td>
</tr>
</tbody>
</table>

*Note all funds in 1972 dollars.*
## Stage Two

### RECOMMENDED CAPITAL IMPROVEMENTS PROGRAM

#### Estimated Expenditures

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>PROJECT DESCRIPTION AND VILLAGE</th>
<th>ESTIMATED PROJECT COST*</th>
<th>JURISDICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRANSPORTATION</td>
<td>Complete M-27 (Germantown Drive). Churchill Village</td>
<td>$4,695,000</td>
<td>Private</td>
</tr>
<tr>
<td>M-61 (Maryland Route 118)</td>
<td>Rebuild and relocate M-61/M-27 (Maryland Route 118) from M-6 (Maryland Route 355) to M-26 (Clopper Road). The section south of the B&amp;O Railroad should be 2 lanes only. Various villages</td>
<td>$4,725,000</td>
<td>State</td>
</tr>
<tr>
<td>M-84 (Crystal Rock Drive)</td>
<td>Build M-84 (Crystal Rock Drive) from M-27 (Germantown Drive) to M-61 (Maryland Route 118) to service industrial development. Churchill Village</td>
<td>$1,170,000</td>
<td>Private/County</td>
</tr>
<tr>
<td>M-85 (Middlebrook Road)</td>
<td>Upgrade service of M-85 (Middlebrook Road) to 4 lanes from M-6 (Maryland Route 355) to M-61 (Maryland Route 118) and construct M-85 (Middlebrook Road, extended) at 4 lanes from M-6 (Maryland Route 355) to M-83 (Eastern Arterial). Churchill, Middlebrook, and Gunners Lake Villages.</td>
<td>$3,150,000</td>
<td>Private/County</td>
</tr>
<tr>
<td>M-90 (Western Arterial)</td>
<td>Construct a section of M-90 (Western Arterial) from M-85 (Middlebrook Road) to Mateney Road. Gunners Lake and Clopper Villages</td>
<td>$570,000</td>
<td>Private/County</td>
</tr>
<tr>
<td>M-26 (Clopper Road)</td>
<td>Upgrade M-26 (Clopper Road) from M-27 (Maryland Route 118, relocated), south to Maryland Route 124 in Gaithersburg at the end of the planning area. Clopper Village</td>
<td>$1,710,000</td>
<td>County</td>
</tr>
<tr>
<td>M-6 (Maryland Route 355)</td>
<td>Reconstruct M-6 (Maryland Route 355) at 6 lanes from Montgomery Village Avenue to M-61 (Maryland Route 118). Middlebrook Village</td>
<td>No estimate at this time</td>
<td>State</td>
</tr>
<tr>
<td>M-83 (Eastern Arterial)</td>
<td>Construct M-83 (Eastern Arterial) at 6 lanes from Montgomery Village Avenue to M-85 (Middlebrook Road). Middlebrook Village</td>
<td>No estimate at this time</td>
<td>State</td>
</tr>
<tr>
<td>Transit Easement</td>
<td>Continuation of project described in Stage One. Various villages</td>
<td>$4,050,000</td>
<td>State/Federal</td>
</tr>
</tbody>
</table>

### SCHOOLS

<table>
<thead>
<tr>
<th>Type</th>
<th>Village</th>
<th>Estimated Cost</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Elementary Schools</td>
<td>Churchill Village</td>
<td>$2,400,000</td>
<td>County</td>
</tr>
<tr>
<td>Two Elementary Schools</td>
<td>Gunners Lake Village</td>
<td>$2,400,000</td>
<td>County</td>
</tr>
<tr>
<td>Two Elementary Schools</td>
<td>Middlebrook Village</td>
<td>$2,400,000</td>
<td>County</td>
</tr>
<tr>
<td>One Junior High School</td>
<td>Gunners Lake Village</td>
<td>$6,200,000</td>
<td>County</td>
</tr>
</tbody>
</table>

*Note all funds in 1972 dollars.*
### Stage Two

*(Continued)*

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>PROJECT DESCRIPTION AND VILLAGE</th>
<th>ESTIMATED PROJECT COST*</th>
<th>JURISDICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEWER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project 82.3</td>
<td>Gunners Lake Village</td>
<td>$119,000</td>
<td>WSSC</td>
</tr>
<tr>
<td><strong>WATER FACILITIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project 37.5 (extension)</td>
<td>Churchill Village</td>
<td>No estimate at this time</td>
<td>WSSC</td>
</tr>
<tr>
<td>Project 37 (along Middlebrook Road)</td>
<td>Gunners Lake Village</td>
<td>No estimate at this time</td>
<td>WSSC</td>
</tr>
<tr>
<td><strong>LIBRARY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Library in central business district, to be later expanded to central status</td>
<td>Town Center</td>
<td>$700,000</td>
<td>County</td>
</tr>
<tr>
<td><strong>STORM-WATER PROTECTION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impoundment Facilities below each subdivision being developed</td>
<td>Various villages</td>
<td>No estimate at this time</td>
<td>State/County/Private</td>
</tr>
<tr>
<td><strong>LOW- AND MODERATE-INCOME HOUSING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition and Development of scattered sites</td>
<td>Various villages</td>
<td>No estimate at this time</td>
<td>Montgomery County Housing Authority</td>
</tr>
<tr>
<td><strong>PARKS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Gunners Branch Local Park, Site Development</td>
<td>Gunners Lake Village</td>
<td>$700,000</td>
<td>M-NCPHC</td>
</tr>
<tr>
<td>Clopper Local Park, Site Development</td>
<td>Clopper Village</td>
<td>$156,000</td>
<td>M-NCPHC</td>
</tr>
<tr>
<td>Great Seneca Stream Valley Park, Site Development</td>
<td>Middlebrook and Neelsville Villages</td>
<td>$156,000</td>
<td>M-NCPHC</td>
</tr>
<tr>
<td>Little Seneca Stream Valley Park, Site Development</td>
<td>Kingsview and Clopper Villages</td>
<td>$560,000</td>
<td>M-NCPHC</td>
</tr>
<tr>
<td>Little Seneca Regional Park, Site Development</td>
<td>Churchill Village vicinity</td>
<td>Development outside of planning area boundary</td>
<td>M-NCPHC</td>
</tr>
<tr>
<td>South Germantown Greenbelt, Site Development</td>
<td>Kingsview and Clopper Villages</td>
<td>$65,000</td>
<td>M-NCPHC</td>
</tr>
<tr>
<td>North Germantown Greenbelt, Site Development</td>
<td>Neelsville Village</td>
<td>$130,000</td>
<td>M-NCPHC</td>
</tr>
<tr>
<td>Land Acquisition for above listed parks</td>
<td>Various villages</td>
<td>$3,650,000</td>
<td>M-NCPHC</td>
</tr>
</tbody>
</table>

*Note all funds in 1972 dollars.*
# STREET AND HIGHWAY CLASSIFICATIONS

<table>
<thead>
<tr>
<th>PROJECT NUMBER</th>
<th>NAME</th>
<th>LIMITS</th>
<th>RIGHT-OF-WAY WIDTH</th>
<th>RECOMMENDED NUMBER OF LANES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FREEWAYS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-1</td>
<td>Interstate 70-S</td>
<td>From Little Seneca Creek to Great Seneca Creek</td>
<td>Varies 200'-250'</td>
<td>8 Lanes</td>
</tr>
<tr>
<td><strong>CONTROLLED MAJOR HIGHWAYS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-83</td>
<td>Eastern Arterial</td>
<td>From Maryland Route 27 (Cedar Grove Road) to Great Seneca Creek</td>
<td>150'</td>
<td>4-6 Lanes</td>
</tr>
<tr>
<td>M-90</td>
<td>Western Arterial</td>
<td>From Middlebrook Road (M-85) to Great Seneca Creek</td>
<td>150'</td>
<td>4-6 Lanes</td>
</tr>
<tr>
<td><strong>MAJOR HIGHWAYS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-6</td>
<td>Maryland Route 355 (Frederick Avenue)</td>
<td>From Eastern Arterial (M-83) to Great Seneca Creek</td>
<td>Varies 120'-150'</td>
<td>6-8 Lanes</td>
</tr>
<tr>
<td>M-26</td>
<td>Old Germantown-Boyd Road, Clopper Road</td>
<td>From Little Seneca Creek to Great Seneca Creek</td>
<td>120'</td>
<td>4-6 Lanes</td>
</tr>
<tr>
<td>M-27</td>
<td>Maryland Route 118 (Darnestown/Germantown Road), Maryland Route 118 relocated, Maryland Route 27 extended (Germantown Drive)</td>
<td>From Black Rock Road to Maryland Route 27 (Cedar Grove Road) at M-83</td>
<td>120'</td>
<td>6 Lanes</td>
</tr>
<tr>
<td>M-61</td>
<td>Maryland Route 118 relocated, (Darnestown/Germantown Road), Maryland Route 118 relocated and extended</td>
<td>From Germantown Drive (M-27) to Eastern Arterial (M-83) at Blunt Road</td>
<td>Varies 120'-150'</td>
<td>6-8 Lanes</td>
</tr>
<tr>
<td>M-84</td>
<td>Maryland Route 120A relocated (Crystal Rock Drive)</td>
<td>From Darnestown/Germantown Road (M-61) to Germantown Drive (M-27)</td>
<td>120'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>M-85</td>
<td>Middlebrook Road</td>
<td>From Germantown Drive (M-27) to Eastern Arterial (M-83)</td>
<td>Varies 120'-150'</td>
<td>4-8 Lanes</td>
</tr>
<tr>
<td><strong>ARTERIAL ROADS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-17</td>
<td>Watkins Mill Road relocated</td>
<td>From Eastern Arterial (M-83) at M-61 to Watkins Mill Road at Great Seneca Creek</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-19</td>
<td>New Road</td>
<td>From Germantown Drive (M-27) to Little Seneca Creek</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-20</td>
<td>Maryland Route 118</td>
<td>From Sunnyview Drive to Maryland 355 (Frederick Road) (M-6)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-21</td>
<td>Gunners Branch Road, Scenery Drive</td>
<td>From Middlebrook Road (M-85) to Maryland Route 118 extended (M-61)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>PROJECT NUMBER</td>
<td>NAME</td>
<td>LIMITS</td>
<td>RIGHT-OF-WAY WIDTH</td>
<td>RECOMMENDED NUMBER OF Lanes</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>A-22</td>
<td>New Road</td>
<td>From Germantown Drive (M-27) to 1900 feet north of Germantown Drive (M-27)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-23</td>
<td>New Road</td>
<td>From Riffle Ford Road (A-103) to Western Arterial (M-90)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-74</td>
<td>New Road</td>
<td>From B-1 to Middlebrook Road (M-85)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-80</td>
<td>New Road</td>
<td>From Germantown/Boys Road (M-26) to Germantown Drive (M-27)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-103</td>
<td>Riffle Ford Road,</td>
<td>From Germantown/Boys Road (M-26) to Great Seneca Creek</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td></td>
<td>Riffle Ford Road</td>
<td>extended</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-252</td>
<td>Wisteria Drive</td>
<td>From Germantown/Boys Road (M-26) to Germantown Drive (M-27)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-254</td>
<td>New Road</td>
<td>From Germantown Drive (M-27) to Western Arterial (M-90)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-289</td>
<td>Waring Station Road</td>
<td>From A-74 to Clopper Road (M-26)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td></td>
<td>relocated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-290</td>
<td>Mateney Road relocated</td>
<td>From Mateney Road to 1500' south of Clopper Road (M-26)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>A-291</td>
<td>New Road</td>
<td>From Maryland Route 118 relocated (M-61) to Maryland Route 118 extended (M-61)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
</tbody>
</table>

**BUSINESS DISTRICT STREETS**

<table>
<thead>
<tr>
<th>PROJECT NUMBER</th>
<th>NAME</th>
<th>LIMITS</th>
<th>RIGHT-OF-WAY WIDTH</th>
<th>RECOMMENDED NUMBER OF Lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-1</td>
<td>New Road</td>
<td>From Middlebrook Road (M-85) to Maryland Route 118 (B-3)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>B-2</td>
<td>Wisteria Drive</td>
<td>From Germantown Drive (M-27) to Maryland Route 118 (B-3)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>B-3</td>
<td>Maryland Route 118</td>
<td>From Waters Road at B&amp;O Bridge to 800' west of Wisteria Drive (B-2)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>B-4</td>
<td>New Road</td>
<td>From Wisteria Drive (B-2) to Middlebrook Drive (M-85)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>B-5</td>
<td>Locbury Drive/Waters Road</td>
<td>From Wisteria Drive (B-2) to Middlebrook Drive (M-85)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>B-6</td>
<td>Aircraft Road extended</td>
<td>From Maryland Route 118 (M-61) south 300'</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
</tbody>
</table>

**INDUSTRIAL DISTRICT STREETS**

<table>
<thead>
<tr>
<th>PROJECT NUMBER</th>
<th>NAME</th>
<th>LIMITS</th>
<th>RIGHT-OF-WAY WIDTH</th>
<th>RECOMMENDED NUMBER OF Lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-1</td>
<td>Century Drive</td>
<td>From Aircraft Road relocated (M-84) to Germantown Drive (M-27)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
</tbody>
</table>
### STREET AND HIGHWAY CLASSIFICATIONS

<table>
<thead>
<tr>
<th>PROJECT NUMBER</th>
<th>NAME</th>
<th>LIMITS</th>
<th>RIGHT-OF-WAY WIDTH</th>
<th>RECOMMENDED NUMBER OF LANES</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-2</td>
<td>New Road</td>
<td>From Century Drive (I-1) to Aircraft Road (M-84)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
<tr>
<td>I-3</td>
<td>New Road</td>
<td>From Maryland Route 118 (M-61) to Germantown Drive (M-27)</td>
<td>80'</td>
<td>4 Lanes</td>
</tr>
</tbody>
</table>

### PRIMARY ROADS

The alignments of primary roads are shown on the Land Use Plan and on the Zoning and Highway Plan only for illustrative purposes. At the time of subdivision review, alternative primary road alignments and intersections may be permitted, to allow for flexibility of design (see Section 3.23 of text). Primary roads have 70' rights-of-way and are recommended for 2 lanes of traffic.

* **ARTERIAL ROADS**
Any street right-of-way (not otherwise classified) abutting existing or Master Plan multi-family zoning, whether such classification lies on one or both sides of the right-of-way, shall be considered an Arterial Road with a minimum right-of-way as established in the Montgomery County Subdivision Regulations (Montgomery County Code 1972, Chapter 50) for Arterial Roads and shall be built in conformance with the Montgomery County Road Construction Code (Montgomery County Code 1972, Chapter 49).

** **BUSINESS DISTRICT STREETS**
Any street right-of-way (not otherwise classified) abutting existing or Master Plan commercial zoning, whether such classification lies on one or both sides of the right-of-way, shall be considered a Business District Street with a minimum right-of-way as established in the Montgomery County Subdivision Regulations (Montgomery County Code 1972, Chapter 50) for Business Districts and shall be built in conformance with the Montgomery County Road Construction Code (Montgomery County Code 1972, Chapter 49).

*** **INDUSTRIAL STREETS**
Any street right-of-way (not otherwise classified) abutting existing or Master Plan industrial zoning, whether such classification lies on one or both sides of the right-of-way, shall be considered an Industrial Street with a minimum right-of-way as established in the Montgomery County Subdivision Regulations (Montgomery County Code 1972, Chapter 50) for Industrial Streets and shall be built in conformance with the Montgomery County Road Construction Code (Montgomery County Code 1972, Chapter 49).
RESOLUTION OF APPROVAL

Resolution No. 7-1567

Introduced: January 8, 1974
Adopted: January 8, 1974

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS A DISTRICT COUNCIL FOR THAT PORTION
OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT
WITHIN MONTGOMERY COUNTY

By: County Council

SUBJECT: Approval of the Amendment to the Germantown Master Plan

WHEREAS, on September 20, 1973, The Maryland-National Capital Park and Planning Commission approved the final draft of the proposed amendment to the Germantown Master Plan and duly transmitted said approved final amendment to the Montgomery County District Council and the Montgomery County Executive; and

WHEREAS, the Montgomery County Executive, pursuant to Ordinance 7-38, Section 70A-7, has duly conveyed to the Montgomery County District Council his comments and recommendations on said approved final draft;

NOW, THEREFORE BE IT RESOLVED by the County Council, sitting as a District Council for that portion of the Maryland-Washington Regional District within Montgomery County, that said final draft amendment to the Germantown Master Plan is hereby approved; however, the Council takes recognition that further implementation studies are necessary and that, if necessary, the Montgomery County Planning Board should initiate changes in the Board's work program to reflect the further studies to be undertaken.

A True Copy.

ATTEST:

Anna P. Spates, Secretary of the
County Council for Montgomery
County, Maryland
RESOLUTION OF ADOPTION

WHEREAS, The Maryland-National Capital Park and Planning Commission, by virtue of Chapter 780 of the Laws of Maryland, 1959, as amended, is authorized and empowered to make, adopt, and from time to time amend, extend, and add to a General Plan for the Physical Development of the Maryland-Washington Regional District; and

WHEREAS, a Preliminary Plan of the Comprehensive Amendment to the Master Plan for Germantown was prepared and submitted to the Montgomery County District Council on February 15, 1973; and

WHEREAS, the Montgomery County Planning Board, pursuant to said laws, held a duly advertised public hearing on March 12, 1973, on a Preliminary Plan of the Comprehensive Amendment to the Master Plan for Germantown, said Preliminary Plan being a proposed amendment of the Clarksburg and Vicinity Master Plan and a proposed amendment of, and addition to, the Master Plan of Highways and the General Plan for the Physical Development of the Maryland-Washington Regional District; and

WHEREAS, following the public hearing, the Montgomery County Planning Board did prepare a Final Draft of the Comprehensive Amendment to the Master Plan for Germantown with such revisions, modifications, and amendments recommended by the Planning Board; and

WHEREAS, such Final Draft of the Comprehensive Amendment, dated October 1, 1973, was transmitted to the Montgomery County District Council for final approval on October 14, 1973; and

WHEREAS, the Montgomery County District Council reviewed said Final Draft of the Comprehensive Amendment, dated October 1, 1973, including the maps and text, and on January 8, 1974, adopted Resolution No. 7-1567, approving the Comprehensive Amendment as transmitted by The Maryland-National Capital Park and Planning Commission;

NOW, THEREFORE, BE IT RESOLVED, that The Maryland-National Capital Park and Planning Commission hereby adopts the Comprehensive Amendment to the Master Plan for Germantown, as set forth in said Resolution No. 7-1567, said Comprehensive Amendment consisting of maps and descriptive matter and being an amendment to the Clarksburg and Vicinity Master Plan and an amendment of, and addition to, the Master Plan of Highways and the General Plan for the Physical Development of the Maryland-Washington Regional District;

BE IT FURTHER RESOLVED, that this Amendment and appropriate certificate of
adoption shall be recorded on the maps, Comprehensive Amendment, and descriptive matter, said certificate shall contain the signatures of the Chairman, Vice Chairman, and Secretary-Treasurer of this Commission; and

BE IT FURTHER RESOLVED, that the Commission takes note of the opinion of the District Council in adopting Resolution No. 7-1567 that the Commission, through the Montgomery County Planning Board, should conduct further studies with respect to the Comprehensive Amendment to the Master Plan for Germantown and hereby accepts those instructions; and

BE IT FURTHER RESOLVED, that the Comprehensive Amendment to the Master Plan for Germantown, as herein adopted, is applicable to the area within the boundaries delineated on the maps of the Comprehensive Amendment and consists of maps entitled "Land Use Plan" and "Zoning and Highway Plan," together with the descriptive and explanatory matter which is a part thereof; and

BE IT FURTHER RESOLVED, that an attested copy of the Comprehensive Amendment and all parts thereof shall be certified by the Commission and filed with the Clerk of the Circuit Court of Montgomery County, Maryland.

*   *   *   *   *

This is to certify that the foregoing is a true and correct copy of a Resolution adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission on motion of Commissioner Gelman, seconded by Commissioner Scharf, with Commissioners Alfandre, Anderson, Gelman, Hanson, and Scharf voting in favor of the motion, at its regular meeting held on Thursday, January 10, 1974, in Silver Spring, Maryland, at which meeting all of the five Planning Board members were present.

MCPB No. 74-2
January 10, 1974

JOHN P. HEWITT
Executive Director

This is to certify that the foregoing is a true and correct copy of a Resolution adopted by The Maryland-National Capital Park and Planning Commission, on motion of Commissioner Hanson, seconded by Commissioner Gelman, with Commissioners Anderson, Brown, Crawley, Gelman, Hanson, Hogue, and Scharf voting in favor of the motion, Commissioners Churchill and Dutton being temporarily absent and Commissioner Alfandre being absent, at its regular meeting held on Wednesday, January 16, 1974, in Silver Spring, Maryland, at which meeting nine of the ten Commissioners were present.

M-NCPCC No. 74-1
January 16, 1974

JOHN P. HEWITT
Executive Director
ACKNOWLEDGEMENTS

MONTGOMERY COUNTY PLANNING BOARD STAFF:
Herbert Benson—Publications Specialist
Perry Berman—Planning Coordinator
David Fugit—Senior Draftsman
James Giegerich—Chief, Community Planning Division (North)
Myron Goldberg—Chief, Park Planning Division
Marie Elaine Lanza—Senior Illustrator
Kathleen Leedy—Administrative Secretary
Harrison Leffler—Drafting Supervisor
Joyce Little—Technical Editor
John Matthews—Chief, Community Planning Division (West)
John Matthias—Principal Urban Designer
Deane Mellander—Planning Technician
Rita Mills—Administrative Secretary
Thomas Pearce—Park Planner
Barbara Preller—Administrative Secretary
Donald Spivack—Chief, Community Planning Division (East)
Robert Wells—Senior Draftsman

CONSULTANT SERVICES SUPPLIED BY:
Vosbeck, Vosbeck, Kendrick, Redinger; R. Gene Brooks, Director of Planning
Robert Morris, Traffic Consultant
Consultant Services Company; Donald and Donna Barnhill, Economic Consultants