### D. Environmental

The General Plan states as a goal "Facilitate the orderly and efficient arrangement of public utilities and services" and proceeds to state a number of more specific objectives. These objectives and the guidelines that accompany them are concerned with planning for the most economical and efficient location of water and sewer lines, including the proper phasing of construction and concentration of development, so as to maximize the benefit of expenditures for sewerage and water systems.

Emphasis is placed on the need to use capital improvement programming in order to coordinate sewer construction with urban development, avoiding extensions of trunk lines into areas planned for rural use and concentrating them in areas proposed for urbanization. The use of limited access sewers is proposed in order to help bring about this coordination of sewer service with development patterns. The temporary use of oxidation ponds for sewage disposal until trunk sewers can be constructed is also proposed.

There is also a guideline concerning airport noise, proposing special airport zoning and the purchase of "noise easements" in the airport vicinity in order to protect both the airport and the surrounding development. Recommendations for Updating the General Plan: The following policies are proposed for approval:

#### **GOAL**

- ▶ PROVIDE AN AESTHETIC AND HEALTHFUL ENVI-RONMENT FOR PRESENT AND FUTURE GENERA-TIONS.
- Objective A. Provide for the optimum use of public funds by timely scheduling of water and sewerage systems.
- 1. Discourage development requiring major water and sewer service, where such services cannot be efficiently provided.
- 2. Provide water and sewerage service in areas where development is desirable.
- 3. Require those who benefit from water and sewerage service extensions to a new area to pay the proportionate share of both the capital and operating costs.
- 4. Encourage planned clustered development so as to provide water and sewer service at the least possible cost.
- 5. Extend community sewer service to areas to be urbanized in the desired sequence of growth.

<sup>&</sup>lt;sup>9</sup> "On Wedges and Corridors," p. 18.

## Objective B. Provide adequate water and sewerage service. Guidelines

- 1. Provide water or sewer service wherever necessary in direct relation to the planned population distribution.
- 2. Use the general plan land use development policy as the major criterion for providing water and sewer service.
- 3. Designate water and sewer mains as controlled or limited access for service to select areas.
- 4. With the exception of existing health problems, provide water service only to those areas currently served with community sewers or proposed to be served within 10 years.
- 5. Use local community water systems in outlying areas where extension of the existing community water system would constitute an economic, planning, or engineering obstacle.
- 6. Use local community or package treatment facilities in outlying areas where extension of the existing community sewerage system would constitute an economic, planning, or engineering obstacle and where discharge effluents comply with Department of Water Resources standards.
- 7. Require separate systems for sanitary sewage and storm water in all development.
- 8. Provide an adequate supply of high quality water favorable to industrial and community growth.
- 9. Insure a sufficient emergency supply of water for disaster or emergency situations.
- 10. Utilize ground water to the maximum extent possible for providing water supply.

- 11. Establish dam sites in the Potomac River basin to assure an adequate supply of water.
- 12. Insure that the Patuxent River in Montgomery County is of sufficient quality to support: a public or municipal water supply, water contact recreation, the propagation of fish and aquatic life, and agricultural water supply.

# Objective C. Provide water and sewerage systems that embody the highest technological and aesthetic standards.

#### Guidelines stand

- 1. Protect sources of water supply from pollution.
- 2. Acquire sufficient land for sewage treatment facilities to provide for future expansion including tertiary treatment facilities, to provide for buffer plantings and to provide for sludge disposition.
- 3. Locate booster pumping stations in small attractively designed buildings.
- 4. Use exceptional design standards for elevated tanks, standpipes and other water appurtenances visible to the public.

#### Objective D. Minimize the adverse effects of necessary electrical, gas, and communication systems upon the aesthetic environment.

- 1. Maximize the use of common rights-of-way for utility and transportation systems wherever feasible.
- 2. Require maximum undergrounding of all new utilities systems.
- 3. Convert overhead distribution lines to common underground trenches in the older, established areas.

#### Objective E. Monitor continuously and maintain at a high level the waters of Montgomery County to assure, for the present and future, a healthy and aesthetic supply of clean water.

#### **Guidelines**

- 1. Do not permit stream water quality to fall below the minimum standards set by the Maryland water resource commission and the Maryland Department of water resources.
- 2. Keep the waters of the Potomac River free of substances attributable to municipal, industrial, or other waste discharges in concentrations or amounts sufficient to be inimical or harmful for water recreation uses or human, animal, plant or aquatic life.
- 3. Require coordination between public agencies concerned with storm drainage and runoff management to control flood hazards and flood damage and to reduce water pollution from erosion and debris.
- 4. Control debris either floating or anchored which constitute a hazard to navigation and the free flow of water in streams or river channels.
- 5. Prevent thermal pollution that causes harmful effects upon aquatic life and the general ecology of estuary areas.
- 6. Require adequate sewage treatment capacity be available for new subdivision development.

#### Objective F. Protect water resources by requiring sound land use management. Guidelines

1. Protect the aquifer recharge area along the fall line between the Piedmont Plateau and the coastal plain near the Montgomery-Prince George's County boundary.

- 2. Recharge groundwater aquifers with storm water runoff and processed waste water from sewage treatment plants where it complies with the Department of water resources water quality standards.
- 3. Protect the natural drainage basin of the Patuxent River above the Triadelphia and T. Howard Duckett water reservoirs.
- 4. Control land use in the Potomac River basin above the raw water intakes for water supply to prevent discharge of any material that would endanger that supply.
- 5. Acquire or regulate properties abutting on county streams and rivers.

#### Objective G. Protect water resources from polluting runoff.

#### Guidelines

- 1. Design and maintain storm sewers in such a manner as to preclude water pollution.
- 2. Maintain the natural character of drainage areas in the immediate vicinity of a watercourse.
- 3. Require grass channels in lieu of pipes which completely enclose watercourses.
- 4. Clean paved areas to prevent animal wastes, chemicals, dust, dirt and litter from entering watercourses.
- 5. Require roof drain discharge onto or into pervious ground areas or temporary impoundments.
- 6. Require sediment and erosion prevention plans prior to development.

# Objective H. Protect water resources from concentrated Guidelines sources of pollution.

- 1. Require the use of advanced waste treatment methods in sewage treatment plants.
- 2. Maintain the higher natural standard in waters where the natural water quality exceeds the state standards.
- 3. Use individual, package or central sewage treatment facilities only where such systems do not cause ground water or surface water pollution.

# Objective I. Assure that the quality of air in Montgomery County will enhance the enjoyment of life and property.

- 1. Eliminate from the atmosphere the presence of odors, solids, vapors, liquids, or gases in concentrations considered to be injurious to human, plant or animal life or to property.
- 2. Control the adverse effects of air pollution.
- Objective J. Assure the residents of Montgomery County the right to the reasonable enjoyment of life and property without interference from loud, undesirable and annoying noise.

#### Guidelines

- 1. Avoid the creation or continuance of loud, unnecessary, unwanted or unusual noise.
- 2. Control the adverse effects of noise pollution.
- Objective K. Provide an adequate system for the collection and disposal of solid wastes to insure the protection of public health, the reduction of fire hazards, the elimination of water and air pollution, the conservation of land and materials, and the improvement of community appearance.

#### Guidelines

- 1. Provide solid waste disposal services to all residents and commercial and industrial establishments on a continuous and adequate basis.
- 2. Provide for the operation of incinerators, shredding equipment, salvage and reclamation processes, reduction processes and sanitary landfills in a manner that will not pollute air, land or water resources.
- 3. Provide suitable land for present and future disposal needs including lands that may ultimately be used for recreation purposes or other re-use.
- 4. Encourage a regional system for handling solid wastes in the Washington metropolitan area.

# Objective L. Promote an orderly and attractive urban growth for Montgomery County.

- 1. Promote urban design planning for the region, sub-region, and local areas.
- 2. Incorporate urban design considerations into all aspects of the planning and development process.

# Objective M. Encourage community participation to promote good design.

- 1. Encourage the creation of citizens committees to improve community appearance and spur good public and private design.
- 2. Promote a participation program for citizens groups, clubs, and business associations.

# Objective N. Create a pleasing streetscape image for the Guidelines

- 1. Improve the motorist's view by using such devices as landscaping, buffer strips, innovative design and varied setbacks.
- 2. Locate and design highways and adjacent land uses to enhance rather than destroy an area's best attributes.

## Objective O. Remove unattractive elements from roadside Guidelines developments.

- 1. Develop temporary and long-range controls for improving visual "eyesores."
- 2. Avoid haphazard conversion of older residential areas to roadside commercial and industrial land uses.

### Objective P. Align roadways to be compatible with urban design objectives.

- 1. Design roadways to instill a sense of identity, location, direction, and destination.
- 2. Develop roads to take visual cognizance of existing focal points, special activity districts, or topography.
- 3. Design attractive off-street parking areas to be visually identifiable and easily accessible to the motorist.

## Objective Q. Provide separation of pedestrian walks and Guidelines vehicular roadways.

- 1. Create attractive separations between sidewalks and roadways through landscaping, raised planting strips, and other means.
- 2. Utilize horizontal and vertical level differentials to achieve maximum visual and physical separation.
- 3. Require safe, attractive pedestrian crosswalks.

## Objective R. Encourage imaginative design of pedestrian Guidelines environments.

- 1. Utilize a variety of paving materials and curvilinear sidewalks.
- 2. Channel pedestrian paths through plantings, benches, fountains, and art works to develop a sense of movement and maximize a pleasing view.
- 3. Utilize innovative design to improve the appearance of utilitarian "street furniture" such as mail boxes, telephone booths, bus stops, and traffic signs.

## Objective S. Design activity centers for the pleasure and Guidelines convenience of the pedestrian.

- 1. Develop core areas so that all downtown functions are centralized, easily accessible and attractive.
- 2. Design transit stations to be visually attractive, functional, and convenient activity points.
- 3. Promote plazas, malls, small parks, and sidewalk cafes to provide pedestrian focal points.
- 4. Encourage innovative architecture, window display, landscaping and civic art (such as fountains, sculpture, and murals) to provide highlights in downtown areas.

# Objective T. Promote the development of compatible, yet variable and identifiable residential neighborhoods.

- 1. Promote varied site plan designs that create spaciousness, interest, and beauty.
- 2. Provide a safe, logical and imaginative street pattern with appealing street furniture and landscaping.
- 3. Design community facilities and neighborhood shopping centers to be conveniently located, architecturally integrated and visually appealing.
- 4. Integrate residential structures with an open space network to provide pleasing vistas and recreational areas.
- 5. Control appearance of commercial and industrial service areas where visible from residential structures.
- 6. Design activity centers in corridor cities to integrate residential areas with commercial, cultural, and employment facilities as well as transit stations and urban parks.

## Objective U. Provide safe, attractive and pleasant places of Guidelines employment.

- 1. Design employment centers to provide adequate and attractive parking, and leisure facilities.
- 2. Utilize landscaped open space for visual relief and employee relaxation.