URBAN DESIGN

Chapter 9

URBAN DESIGN

9.1 INTRODUCTION

The urban design recommendations made for the Shady Grove Transit Station Area are intended to assure the harmonious integration of public facilities with the area's commercial, industrial, and residential development as well as with its natural environment. A primary goal of the recommendations is to support and promote a positive sense of identity and character independent of that of Rockville and Gaithersburg.

A sense of visual harmony will be achieved through the use of compatible and coordinated landscaping, building color, signs, lighting, and the design of related amenities, which includes walkways, parking areas, recreational centers, and the like. The recommendations of this chapter offer guidance for development that is based on the highest standards of architecture and overall design.

It is also intended that this plan in no way restrict fresh, innovative approaches to design problem-solving, nor hinder flexibility of permitted uses. On the contrary, it is hoped that because of this plan, designers will bring to Shady Grove the full measure of new visual experiences.

9.2 GENERAL RECOMMENDATIONS

The various developments in Shady Grove should be planned in such a way as to minimize the exposure of visually undesirable features of the development, such as loading docks and trash pickup-and-deposit areas.

Barrier-free movement for pedestrians, especially for the handicapped, should be ensured throughout the planning area.

Because there are no site plan review requirements for the C-1 zone and for the I-1 zone below 3 stories, and in view of the level of industrial and commercial development recommended by this plan, developers are urged to work with the commission staff to assure that their development plans are consistent with urban design recommendations.

Exterior signs and advertising should be designed and located so as to be attractive and effective without competing in size, color, brightness, shape, etc., with neighboring signs.

Every effort should be made to coordinate the design, size, and location of outdoor lighting fixtures and lighting color so that a unified and orderly appearance is created throughout the area and so that safety and protection of individuals and

property is promoted without adversely affecting nearby properties. Utility lines for lighting should be installed underground. The following have been identified in the plan as elements for which lighting should be most carefully considered:

- driveways and roads;
- parking areas;
- pedestrian walkways;
- areas where security or special aesthetic effects are required after dark;

Public and private amenities for the safety, convenience, relaxation, and recreation of area employees, residents, and visitors should be provided appropriate to their numbers and location.

The natural topography and significant existing landscape features should be retained and incorporated into all proposed development.

Every opportunity to soften, reinforce, or enhance the environment should be taken in building design and landscaping.

The effects of visual, noise, and air pollution should be held to a minimum.

Design treatments for specific conditions not covered by the urban design plan should be determined in consultation with the Commission's staff.

Earth colors should be used for industrial and commercial buildings.

9.3 GENERAL DESIGN CRITERIA

9.31 Overview

The sensitive design and treatment of buildings and their surroundings can be of great importance in creating for Shady Grove an identity and a visual character it presently lacks. Although building designs, colors and textures will vary reflecting the choices of individual architects, it is important to consider the following to assure design unity within the area:

However large or small the overall development, the proportions of the various elements of the design should be consonant with the natural landscape of any given site. Natural colors (white, beige, sand, red-brown, deep brown, etc.) should be used in building materials, although certain elements in each design might be of contrasting colors, textures, or materials. In buildings where sunlight and solar heat are problems, specially treated, tinted glass should be used to control light and heat intensity.

The visually satisfying use of space depends on the careful balance of buildings and landscape. The balance, when not predominantly in the direction of either element, can result in a positive and satisfying environment. However, if

there are too many buildings too closely clustered together or if buildings are too loosely grouped to contain space, a negative visual impact results. Organizing space in a positive way, then, is the key to a visually pleasing environment.

Figures 32 through 36 illustrates how the appearance of existing businesses and roadways can be improved through the application of these general design criteria.

9.32 Landscaping and Screening

Landscaping is one of the elements of urban design most capable of tying together the multitude of projects, of softening their visual and audible impact and of assuring an identifiable character for Shady Grove.

Landscaping should be varied and made interesting by using an undulating pattern of tree planting wherever feasible, and by leaving small open spaces where such items as rocks, trees, grass, and/or ground cover can be placed. This approach will achieve a more natural appearance.

General Considerations

- * Evergreens, rather than deciduous trees, should be used for screening.
- * Earth berms with evergreens and occasional deciduous trees provide the most effective means of noise control and should be used extensively.
- Mature trees should be saved, wherever possible, following the method outlined in Section 9.33.
- Although grading should not exceed a 3:1 slope, a 2:1 slope is acceptable and should not be exceeded except under occasional unavoidable circumstances or when special screening or buffering is required within a limited space. Lawn areas should have a minimum grade of 2 percent to achieve adequate water runoff.
- * The use of ground cover other than grass is suggested for areas where lawn maintenance would be difficult and on slopes where erosion control is of importance.

Space-defining trees should be used along roadways to provide overhead canopy and to direct the line of automobile movement. Shade trees should be used in parking lots to relieve the monotony of large, paved masses. Red oak trees are excellent for roadways and sidewalk planting.

- Plant materials should be of the quality recommended in the current edition of the <u>USA Standard for Nursery Stock</u>, published by the American Association of Nurserymen; plant materials should be chosen from the Plant Materials List on the reverse side of the illustrative Landscape Plan.
- Where control of exposure to public view is of primary concern, such as loading docks and parking lots, plant materials should be larger than those

recommended for general use on the Plant Materials List.

- * Entrance and exit points should be appropriately landscaped and the use of accent landscaping or directional plantings should be used to mark or indicate critical areas of movement.
- * Major existing natural features or amenities, such as adjacent open spaces, large trees, or streams, should be identified and used to advantage.
- * The careful use of landscaping along access roads and interchanges is important to the landscape concept. Access roads to Metro, and especially the interchange, have two design problems--noise and visual pollution. Heavy buffering along the roads and around the interchanges should be employed to minimize visual and noise impact on surrounding areas. Plantings inside the interchanges should aid the motorist by creating visual variation, thus minimizing any negative impact upon the motoring experience.
- * Landscaping along roadways other than access roads is intended to serve the dual purpose of:
- providing light buffering in some areas, as well as directing motorists' visual line; and
 - screening or "berming" for control of noise and visual pollution.

Intersections and median breaks should have low-lying shrubs and/or rocks to create a visual point of reference, as well as an attractive break for motorists.

- As a general rule, trees should not be lined in a row, but clustered at varying distances from the frontage line. The use of a variety of planting materials, rather than one or two varieties, is preferred. It is important to create a complete design plan. The location and design of the man-made green areas should reflect overall treatment of the area, rather than consideration of each part separately. Buffered areas should be shown, with accent areas—perhaps with a theme of rocks and/or specific plants spotted at critical points—to link together the whole concept.
- Mounded and planted islands should be provided in and around parking areas; plantings should be chosen from the Plant Materials List on the reverse side of the Illustrative Landscape Plan.
- * Paving grade across large areas should not exceed five percent; grade changes can be taken up in planting islands. Lawn areas, as indicated previously, should have no less than two-percent slope.
- * Parking areas should be separated from buildings by planting zones and pedestrian walkways.
- * Pedestrian walkways should be surfaced with concrete, brick unit pavers, exposed aggregate, flagstone, or other safe and attractive materials. They should

be separated from vehicle traffic by elevation, distance, landscaping, or a combination of these methods.

- Truck loading areas should be screened from view from major public roads or adjacent residential or public areas. This can be accomplished in several ways, important among them being:
 - careful positioning of docks in relationship to such viewing points;
- use of landscaping devices, such as planting mounds, opaque fencing, or other screening techniques.
- placement of loading area so that screening can be an extension of the building walls.

Chain-link security fences should be painted black or covered by black vinyl to minimize their visual impact, and made of galvanized metal.

Trash recepticles should be part of a commonly shared area when possible. Either a shared or an individual trash area should be screened or enclosed in a structure similar in color and materials as the main building and designed to prevent the trash from being blown about.

9.33 Environmental Considerations

Site analysis should take into consideration hydrology, flooding, ponding, storm-water runoff patterns, geology, erosion, slope stability, support of plantings, rockfall areas, as well as vegetation to be preserved, enhanced, or removed. Positive and negative features should be identified, and protective or corrective measures applied.

Existing vegetative growth should be identified as to type, condition, diseases, natural associations, erosion control, reestablishment or replacement potentials, and preservation. Potential for noise, air, and light pollution as well as potential for litter, deterioration, and hazardous areas should be minimized: and measures should be taken to protect surrounding lands.

9.34 Lighting and Illumination

The coordination of light fixtures and light color will contribute toward the creation of a unified appearance in Shady Grove. Lighting should be functional, informational, and, where appropriate, decorative.

The use of artificial lighting and illumination can provide improved visibility; greater safety and security for people and property; serve aesthetic needs; and provide individuals with adequate orientation.

It is imperative that certain private as well as public areas have adequate artificial illumination so that their functions can be continued after dark. Adequate lighting of certain private and public areas is necessary for the safety of

users as well as for security from vandalism and crime. Care should be exercised to choose lighting that will not spill over into adjacent areas.

It may be determined that certain architectural or landscape elements, or certain areas be artifically lit to provide specific aesthetic effects.

It may also be necessary or desirable to illuminate certain architectural or other elements within an area in order to orient the viewer after dark.

Private as well as the public developers should make a careful study of illumination needs based on the above considerations as well as the following criteria, and take steps to provide the necessary lighting to best achieve stated objectives.

To promote a coordinated design approach to exterior lighting in Shady Grove, the following design criteria are necessary.

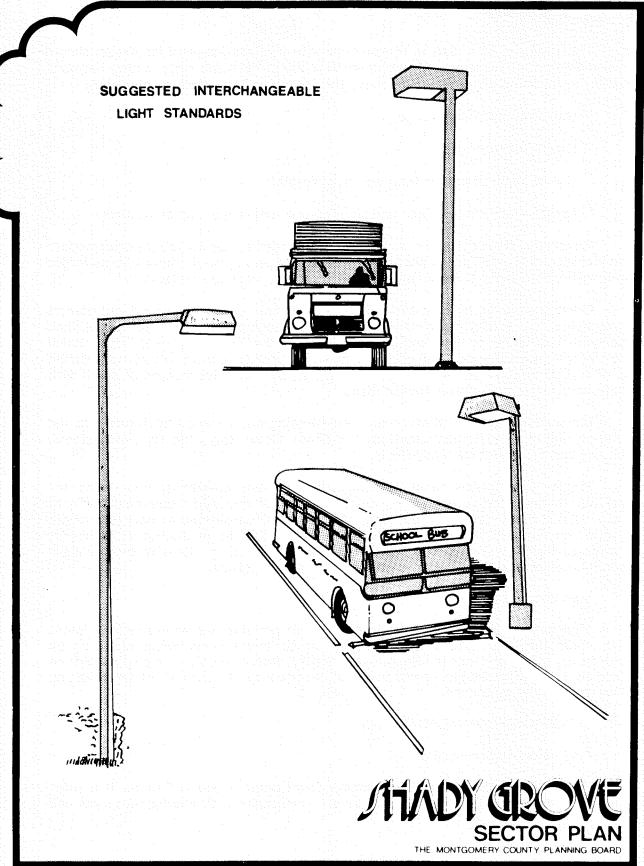
- * Use of lighting fixtures similar if not the same in material, color, and design to those proposed for use in the county service park complex and along Shady Grove Road (see Figure 30).
- * Creation of visual distinction between vehicle and pedestrian zones through use of different color lighting. Cool, color-corrected mercury vapor lighting might be used along roadways and in parking lots, while warm, incandescent lighting might be used to light pedestrian networks, building facades, entrances etc.
- Plantings should be lighted by recessed or concealed light sources. Special plant material or courtyard features should be accented, rather than generally illuminated. Lighting of buildings, except to emphasize special architectural points or entrances, is discouraged. Casting shadows from plant material onto wall surfaces or backlighting plantings adjacent to building is acceptable.

9.35 Signs and Graphics

An additional means of enhancing and unifying development within Shady Grove is the use of a coordinated graphics system. Developers and architects should familiarize themselves with the provision of the Montgomery County Zoning Ordinance, Article V, "Signs and Advertising Structures," which regulates signs for all development in the county and takes precedence over the specific recommendations in this sector plan, should any conflict arise.

The Shady Grove Logo

A graphic symbol or logo, to represent Shady Grove has been designed so that businesses and other activities can show a visual tie with the area. The Shady Grove logo and illustrative examples of its use appear in Figure 31. It is recommended that this logo be included on all new and replacement signs.



Design

The function of a sign is to communicate information, and its design should ensure instant recognition. To achieve this objective while maintaining harmony with other elements, signs should satisfy the following basic design objectives:

- Uniformity of appearance
- Clarity of message
- * Use of symbols rather than words, if feasible
- * Use of standard typeface and size; colors; and supporting structures

Generally, signs should be no larger than needed to comfortably accommodate the message or symbol to be portrayed. Lettering and symbols should be no larger than will enable them to be seen clearly from the appropriate distance.

Lettering should be bold and generally of simple design for speed and ease of recognition. To effect design uniformity, background colors should be darker than the symbol or lettering used and lighting, if other than internal, should be provided from a concealed source. The edges, back and supporting structures of signs should be of the same color as the background. Signs should be constructed of wood with routed out letters to minimize vandalism.

Messages or printed matter on free-standing signs should be limited to the building and/or tenant identification, the Shady Grove logo, the type of business, and any special event, such as sales.

Single- and multi-tenant buildings should have on-site service signs for parking, loading docks, entrances, exits, and other necessary communication to users. All service signs on a building site should be considered as part of a whole system, common to the building; and each sign should be evaluated as to how it relates to the sign system in use in the rest of the building. On-site service signs should be alike in size, materials, color, finish, and typeface.

Sign Location

Signs should be grouped together whenever possible and whenever consistent with their purpose. Care should be taken to avoid signs being obscured by structures, trees, or other landscaping elements. Where possible signs should be fixed to walls or other structures in order to minimize the number of freestanding structures in the landscape.

9.4 SPECIFIC RECOMMENDATIONS

9.41 County Service Park

The county service park is a primary focal point in Shady Grove. It is most important, therefore, that it be attractively landscaped with appropriate signs and

lighting, and a coordinated maintenance program. The following recommendations will help create a high standard of design for area.

Berms

"Berming" should be used where specifically recommended in the Landscape Plan. (A berm is a mound of earth that screens or buffers one area from another; berming is shown on the reverse side of the Illustrative Landscape Plan.) The berm should be varied in shape to create an undulating and natural appearance, and should not be located flat against the roadway. Evergreens, such as Canadian hemlock, should predominate as screening material on the berms and wherever else tree screening is needed. Evergreen trees should be interspered with flowering and other deciduous trees to create a varied landscape.

Trees and Vegetation

Vegetative material in the county service park should be predominantly evergreen. Unlike deciduous plant materials, evergreens will provide year-round screening and will retain their lush foilage. Evergreens should be interspersed with deciduous and flowering trees; and, at points where vegetative material leaves a bare open space, with rocks, grass, low-lying plants, and ground cover. Size of plant material is specified on reverse side of Illustrative Landscape Plan.

Fencing

Fencing also should be used for screening unsightly activities. Fences should be constructed of attractive wood or other natural-looking material or an extension of the building wall for screening purposes. When chainlink fencing is required for security, it should be painted with black rust-proof paint or covered with black vinyl to make it less noticeable.

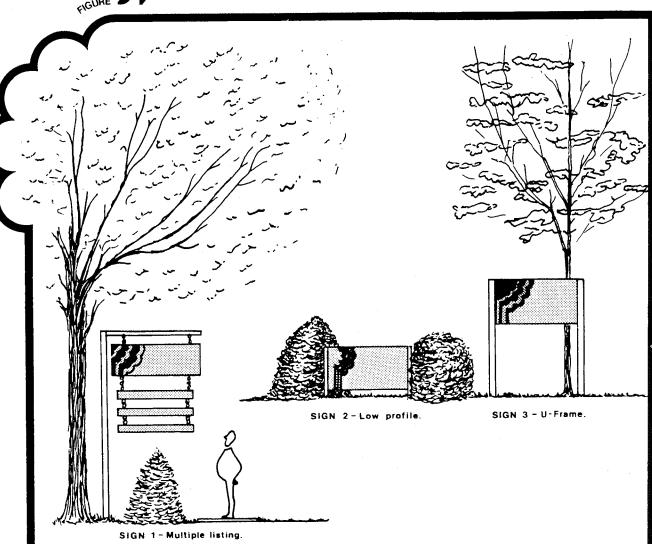
Lighting

Lighting fixtures should be similar to the illustrations in Figure 30. These are similar to the types used at the County Service Park. Similar fixtures should also be used on Crabb's Branch way in the County Service Park area.

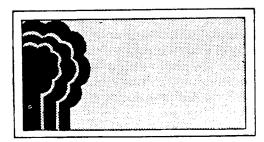
Maintenance

The county service park, as well as the central processing facility and Metro transit station and related facilities, will be the predominant development in Shady Grove. It is, therefore, extremely important that these facilities—the structures, landscaping, and accessory features—be attractively designed. The maintenance of these facilities, also, will determine the ability of Shady Grove to remain economically viable and aesthetically attractive. The Maryland-National Capital Park and Planning Commission will be a tenant in the county service park, with its central park maintenance facility located there. The plan recommends that the M-NCPPC undertake the responsibility for landscape maintenance in the county service park, with the cost of maintenance to be shared by each tenant in a manner to be agreed to either in the terms of a lease or by covenant arrangements.





The above illustrates different ways signs for Shady Grove may be used. Sign 1 can be built so that the individual tenant placques are interchangeable. Sign 2 shows landscape treatment around a low-lying sign such as an entrance accent. Sign 3 is an example of a taller sign accented with a tree. Sign 4 illustrates the inclusion of the Shady Grove Logo, which is a stylized Oak tree.



SIGN 4 - SHADY GROVE logo.



Signs

Examples of the sign system recommended appear in Figure 31. Signs should reflect the logo and be designed and constructed to minimize vandalism. The main sign identifying the CSP at the entrance to Crabb's Branch way should be large enough to be clearly visible from the roadway and designed in a coordinated manner to include the Shady Grove Logo. The CSP tenant identification signs should be of the same material, color, and shape as the main sign.

9.42 Central Processing Facility

Of all the activities in Shady Grove, the central processing facility creates the greatest concern among residents and business interests in the area. The sector plan strongly recommends that the facility be designed with the greatest of care.

Landscaping

Berming and extensive landscaping along Md. 355 are necessary to reduce noise and visual pollution. The berm should run north and south along the property lines on Md. 355. Berms should have a dense planting of evergreens interspersed with deciduous shade trees, flowering trees, rocks, andora junipers, low-lying plants, and other ground cover. The berm should not be straight and flat along the roadway but should be undulating, in order to create a dense natural appearance with interesting landscape areas. Evergreens interspersed with deciduous trees should line the driveway entrance. The depth of the berm on Md. 355 should be between 40 and 80 feet, at a height of about 15 to 20 feet. The depth of trees along the driveways should be 20 feet. The trees should be mature enough when planted to withstand the impact of the trucks and to create an "instant" buffer.

Design

The architectural design of the central processing facility building should be innovative and attractive. Although extensive berming and screening are recommended, this does not preclude the need for quality architecture. The building should incoporate as much of the activities as possible using best screening methods possible to shield the trucks queuing up for dumping, screen any outdoor equipment needed to run the plant, outdoor storage and trash areas.

Lighting

Lighting should be appropriate to the particular building design and consistent with the recommendations of Section 9.35. The type of light fixtures should be similar to those in figure 30 due to the CPF's close proximity to the County Service Park.

<u>Signs</u>

Signs should be in conformance with the recommendations of Section 9.36.

Maintenance

Maintenance should be a continuous operation and should consist of careful landscaping, structure and sidewalk, and litter control.

9.43 Metro Transit Facilities

The Metro station and storage and inspection yards should conform to the Shady Grove urban design guidelines:

The Metro station should be <u>extensively</u> landscaped using the plant materials listed on the reverse of the Illustrative Landscape Plan. The trees should be of a size that give the appearance of a mature landscape. The entire parking lot, as well as the entrance to the station, should be landscaped.

The S & I Yards should be "bermed" and landscaped. The Illustrative Landscape Plan indicates areas recommended for berms. These berms should be at least 15 feet high and heavily planted with 12-foot high evergreens interspersed with deciduous shade and flowering trees. The S & I Yards should be heavily hydraseeded with evergreens to soften the view of the yards from the Metro station platform, the CPF and CSP. All of this landscaping should not preclude good architectural design of whatever buildings are needed in the yards as well as lighting and signing. Trash and wash areas should be so placed as to be least obtrusive, considering the nature of the operation. Any entrances or driveways to the yard should receive the same careful landscape treatment as a public-use driveway.

9.44 General Roadways

Rarely is visual design given much thought, in the widening of an existing stop-and-go commercial strip or in the building of an industrial road. There are alternative possibilities to the sometime chaotic, and potentially "junky," roadways, which are all too numerous.

The economic viability of any area depends on the ability of its businesses to attract potential customers from among the motoring public. Motorists must be able to see a business and the sign and entryway soon enough to make an intelligent decision to change lanes, signal, and turn in. When the roadway is cluttered with utility poles, wires, and too many signs, motorists can become confused—either causing a hazardous situation by making abrupt lane changes, stops, or dangerous turns or they may not bother to stop at all, but go on until a more convenient place is found.

Motorists, as potential consumers for businesses located along a roadway, have a right to expect safety, convenience, and aesthetics when looking for a carpet shop, an ice cream store, or an automobile dealership. It is to these ends that proposals are made for specific improvements to roadways in Shady Grove.

The location of entry and exit points should be chosen carefully to provide proper access to businesses and other properties along the highways, and a safe,

easy flow of traffic on the highways. Adequate landscaping should be provided to protect the aesthetic quality of the roadways and adjacent lands.

Where lighting fixtures are to be used, the light fixture illustrated in Figure 30A is recommended. All telephone and utility lines should be placed underground on all future roads and road improvements.

Maryland 355

Md. 355 is the principal road in Shady Grove, with the majority of motorists traveling through the area using this route. There are approximately 40 commercial businesses located along Md. 355, between Gude Drive in Rockville and Shady Grove Road. There will also be considerable industrial development built on Md. 355 in the next 10 years. Businesses, trying to capture motorists' attention, tend to add more and bigger advertising signs, which creates visual chaos and unsafe conditions.

The following recommendations are made to overcome the visual, safety, and potentially poor economic situations along Md. 355:

Two to three inch caliper red oak or willow oak trees should be planted along both sides of Md. Rte. 355 every 40 feet on center. These oaks are recommended because their root and branch structure are compatible with sidewalk uses. The more mature the tree planted, the better chance it has to withstand weather extremes, pollution, and physical abuse. The trees should be planted in 4 feet x 5 feet at-grade planters covered by brick set in sand so air and water can penetrate. Low-lying shrubs should be planted in the median strip. The two bicycle paths on either side of the highway are nine feet wide; the trees would narrow the path to five feet every 40 feet. Bicyclists would have no trouble seeing pedestrians, as the trees would be far enough apart to allow good, safe vision.

Industrial development along Md. 355 should be heavily screened and densely landscaped. This would add immeasurably to the "parkway" appearance.

- Mast arms, instead of wires, should be used to hold traffic signals.
- ' If light fixtures are used, they should be similar to those on Shady Grove Road or in Figure 30.

Oakmont Avenue

A chaotic situation similar to that along Md. 355 exists along Oakmont Avenue. The following recommendations are made to alleviate the problems:

- Oakmont Avenue should be repaved as soon as possible.
- Some existing oak trees along Oakmont Avenue will probably have to be removed when the road is improved. A comprehensive relandscaping operation, using the same type of vegetation that now exists, should take place along the roadway immediately after the widening.

Shady Grove Road

Shady Grove Road is to be a new roadway extending from Md. 355 to Muncaster Mill Road. As the first road to be built under the recommendations of the sector plan, Shady Grove Road will set the tone and character for future roads. The following recommendations, therefore, are especially important:

- Landscaping should be extensive, with plant materials varied and plentiful, along the entire length of the road. Extensive use should be made of deciduous shade and flowering trees; low-lying shrubs, such as juniper and similar types; rocks; and grass in the median strip.
- At median breaks, a juniper and attractive rock formation should be used where appropriate and possible.

Redland/Fields Road and Needwood Road

The recommended relocation and improvements of these roads should follow the same principles as those cited for Shady Grove Road (see Illustrative Landscape Plan).

Metro Access Road and Interchanges

The Metro access road and its interchanges must be extensively and densely landscaped.

- The Metro access road should be "bermed" and landscaped as shown on the Illustrative Landscape Plan. The road as planned will cut through existing tree stands. A portion of these existing trees have been cut down. Any mature trees which have been cut should be replaced with like species of trees. This is especially important around existing subdivisions and on the outskirts of the County Service Park.
- The interchanges associated with the access road need special design attention. As shown on the Illustrative Landscape Plan extensive berms have been recommended. These berms should be approximately 15 to 20 feet high and heavily planted with evergreens interspersed with deciduous flowering trees. The inside of the interchange loops should be landscaped with evergreen and flowering trees.
- The access road at its ingress to the Metro station needs special landscape treatment. Trees should not be lined up straight in a row hugging the road. Trees should vary in distance from the edge of the roadway so that the motorist sees an open roadway, then a road closer about him, than an open roadway again. Rocks, flowering trees and ground cover should be interspersed with evergreen screening. Monotomy of landscape can be just as devastating as no landscape.

Since limited natural landscape features exist in the area of the access road interchanges, a natural-looking, man-made landscape must be created. These roads and interchanges must be considered from the viewpoints of both internal and external harmony. What mature trees do exist should be retained. The use of

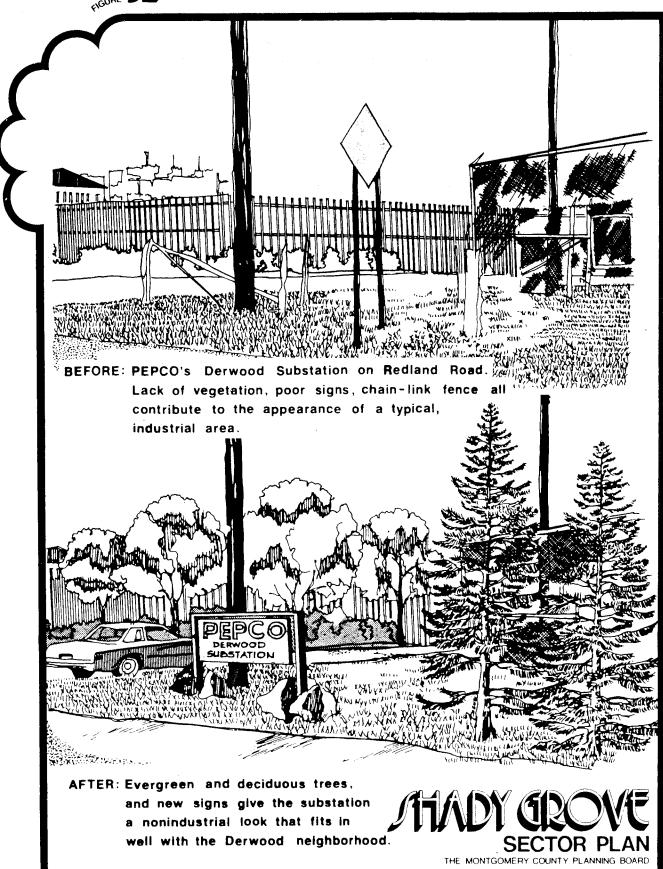
buffers, berms, screening, and accent planting, is strongly recommended. The motorist should have a pleasant, safe driving experience without intruding on the well-being and aesthetic considerations of the residents and business interests in the area.

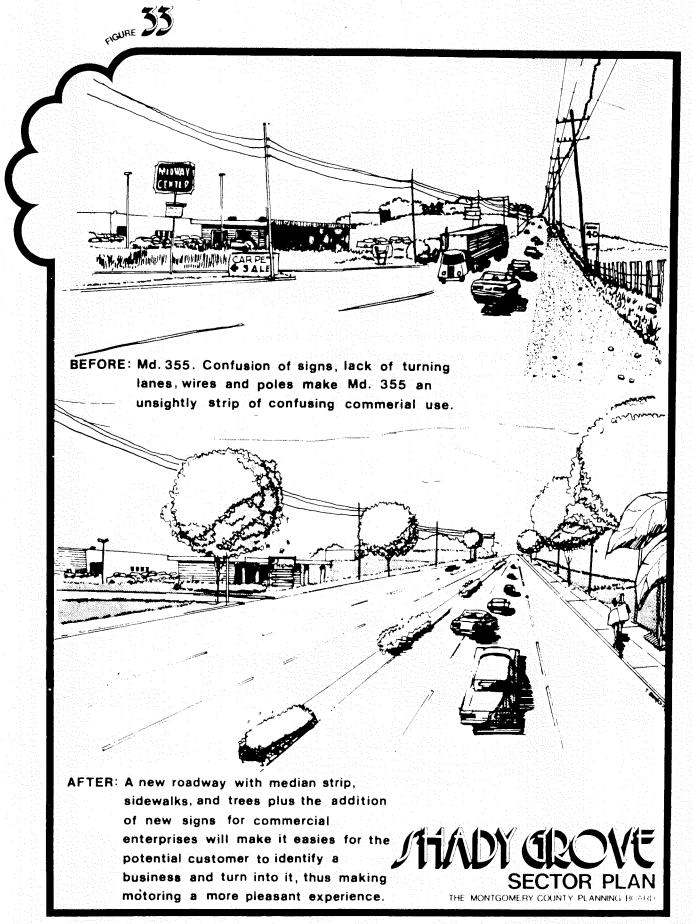
9.45 Existing Commercial Development

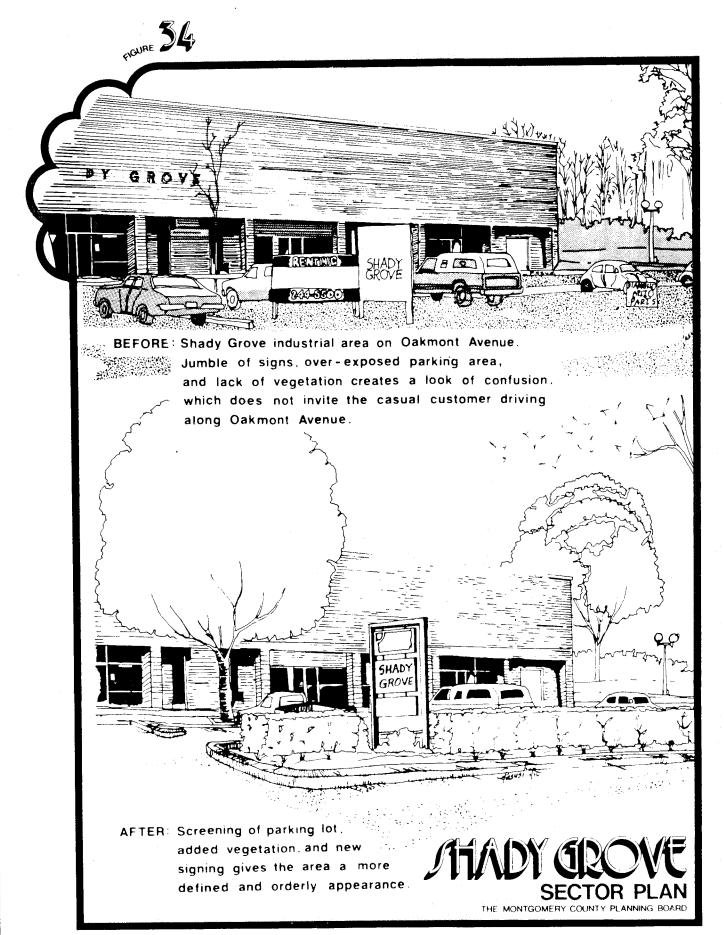
Owners of commercial developments should attempt, through the careful design and landscaping of their facilities, to relate them harmoniously with neighboring developments and with the surrounding natural landscape without compromising their visibility and identity.

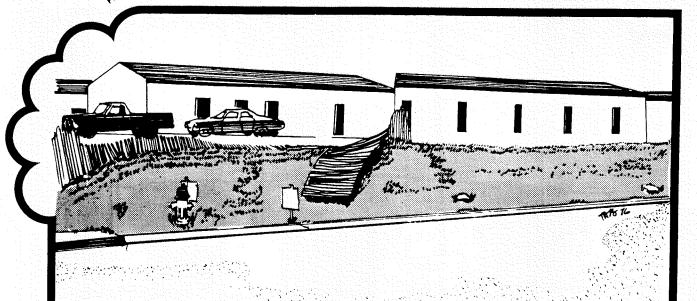
Businesses should be mindful of the recommendations dealing with signs and graphics in Section 9.36. All sign plans should be reviewed with the Licensing and Inspection Division of the Montgomery County Department of Environmental Protection (DEP) prior to installation. Businesses should also adhere to the general suggestions on lighting and illumination in Section 9.35.

The staff of the Montgomery County Planning Board of the M-NCPPC will be available to make suggestions and recommendations to businesses in the area in connection with specific design and landscaping issues.

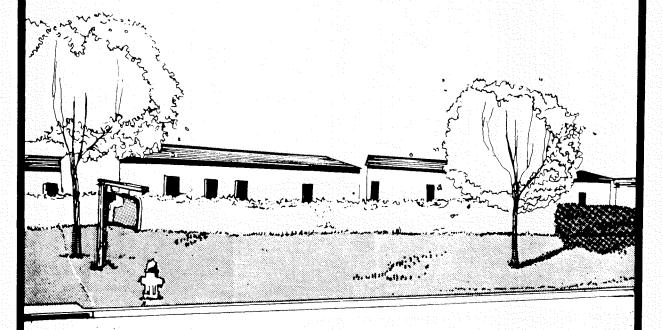








BEFORE: Community storage on Redland Road. Even though the business is new it looks old and run-down. No vegetation, broken fences, and an undefined parking area make this establisment aesthetically uninviting.



AFTER: New signs, screened parking, and new hedge and trees improve the appearance of this business and make it a welcome addition to the Shady Grove industrial area.

SECTOR PLAN

THE MONTGOMERY COUNTY PLANNING BOARD

