

FUTURE LAND USE

8

Chapter 8

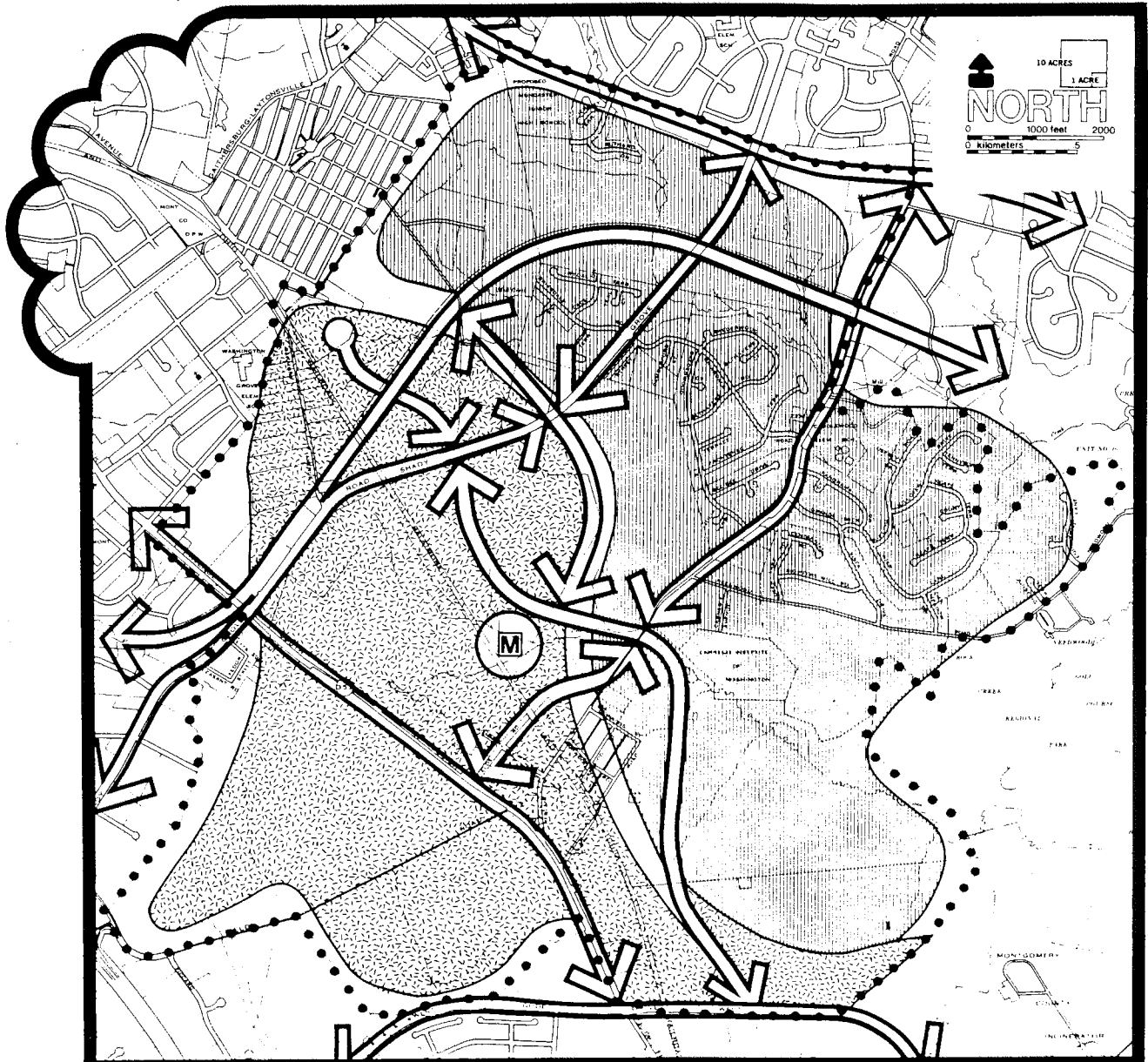
FUTURE LAND USE





8.1 PLANNING CONCEPTS

Recommendations for future land use in the Shady Grove Sector Plan area are grounded in the concepts discussed earlier in this report, and are summarized below. The concept plan (figure 26) illustrates these concepts.

- The existing residential communities in Shady Grove have identities that the sector plan proposes to strengthen, rather than change.
- Development surrounding the Metro station shall be of a low-intensity residential and commercial/industrial nature.
- Recommended land uses will not differ significantly from those shown in the Gaithersburg Vicinity Master Plan and Rock Creek Master Plan.
- Residential densities will not be increased significantly, and the existing character of the area will be retained.
- Moderate-density, residential (R-90) development is recommended for areas between nonresidential uses and existing low-density (RE-1 and R-200) residential uses.
- The proposed roadway projects are designed to alleviate congestion along Md. 355 and existing residential roads.
- Strip commercial development along Md. 355 is discouraged in favor of an industrial-employment image.
- The bikeway system is designed to facilitate residential, commuter, shopping, and recreational travel throughout the area.
- Public and private nonresidential development should conform to a consistent, comprehensive design scheme.
- The protection of stream valleys as conservation areas will help maintain natural hydrological systems.
- Mature trees shall be protected, wherever possible, to maintain the natural beauty of the area and to provide protection against erosion and air and noise pollution.
- The existing rolling topography of Shady Grove area shall be maintained or replicated where grading is necessary.

FIGURE 26



-  Residential Development
-  Industrial Development
-  Metro Station
-  Sector Plan Boundary

Concept Plan

SHADY GROVE

SECTOR PLAN

THE MONTGOMERY COUNTY PLANNING BOARD

8.2 BASIS FOR LAND USE RECOMMENDATIONS

A number of studies were undertaken to assure the development of a coordinated land use pattern in the Shady Grove area. The most rigorous and important of these studies concerned transportation. The study focused on access to the Metro transit station and on the capacity of the highway system to adequately accommodate anticipated traffic increases. The initial study was performed by jhk and associates, consultant traffic engineers to the Maryland Department of Transportation.

The Transportation Planning Division of the Montgomery County Planning Board expanded the study to provide detailed information for the sector plan. The transportation study and recommendations are presented in detail in Chapter 5.

An environmental analysis was conducted, with the assistance of the U.S. Geological Survey and the Montgomery Soil Conservation District (MSCD). This study indicated environmental factors affecting development and identified environmentally sensitive areas. This study, together with the elements of storm-water management, air quality, and noise, is discussed in Chapter 6.

A study was undertaken to determine the additional types and amounts of industry and employment that will be attracted to the area, and of the area's ability to compete with other areas of the county. A second study analyzed the convenience commercial shopping needs of area residents and made projections for 1984 to assure that appropriate amounts of commercial land will be available. Both studies are described in Chapter 7.

8.3 LAND USE ELEMENTS

8.31 Overview of Existing Land Uses

The 2,900-acre sector plan area is characterized by a limited number of residential subdivisions, industrial/commercial development, working farms, and fallow undeveloped land (80 percent of the total area).

The 2,260 acres of farmland are clustered primarily in the center of the study area, and the 430 acres of existing residential uses surround the farmland. The 210 acres of commercial/industrial uses are located along major roadways and at intersections.

8.32 Factors Affecting Development

The land use recommendations are designed to complement existing commercial and residential development and to accommodate the major public service activity center--the 300-acre county service park, central processing facility, and Metro transit station complex.

The land use recommendations also are responsive to environmental conditions. Soils, geology, vegetative cover, and slopes will have significant influences on urban development.

FIGURE 27



- | | | |
|------------|--------------------------|------------------------|
| SFD | Single Family - Detached | Conservation - Private |
| Town House | | AG |
| PD | Planned Development | Park/School |
| Commercial | | Institution |
| Industrial | | Sector Plan Boundary |
| Park | | |

**Proposed
Land
Use
1984**

**SHADY GROVE
SECTOR PLAN**

THE MONTGOMERY COUNTY PLANNING BOARD

See text regarding possible PD3 in Area 24

Recognition of the interdependence among natural environmental factors and land use elements is basic to the Shady Grove Sector Plan. There are approximately 172 acres identified as private conservation areas and approximately 142 acres of existing and proposed parkland.

8.33 Land Use Recommendations

Planning analysis areas within Shady Grove are illustrated on the Planning Analysis Areas map (Figure 28). Recommendations for land use are made by analysis area.

Area 1 (165 Acres)

Area 1 extends from Shady Grove Road to Washington Grove, and from the proposed outer beltway to Mill Creek Towne. The entire area is undeveloped; the proposed zoning is R-90 single-family residential development.

Area 2 (33 Acres)

Area 2 includes both the site for the proposed Muncaster Junior High School and 47 existing homes.

Area 3 (91 Acres)

Area 3 extends from Redland Road to Shady Grove Road and the proposed outer beltway and to Mill Creek Towne. It includes the 10-acre Redland Local Park site. A portion of this area along Shady Grove Road is proposed for R-90 zoning--single-family residential use (4 acres), with the remainder zoned R-200 --single-family residential use. Approximately 13 acres is required for Stream Valley Park.

Area 4 (17 Acres)

Area 4 includes the 12 homes along Ridge Road, immediately east of Washington Grove. The proposed zoning is R-90--single-family residential use.

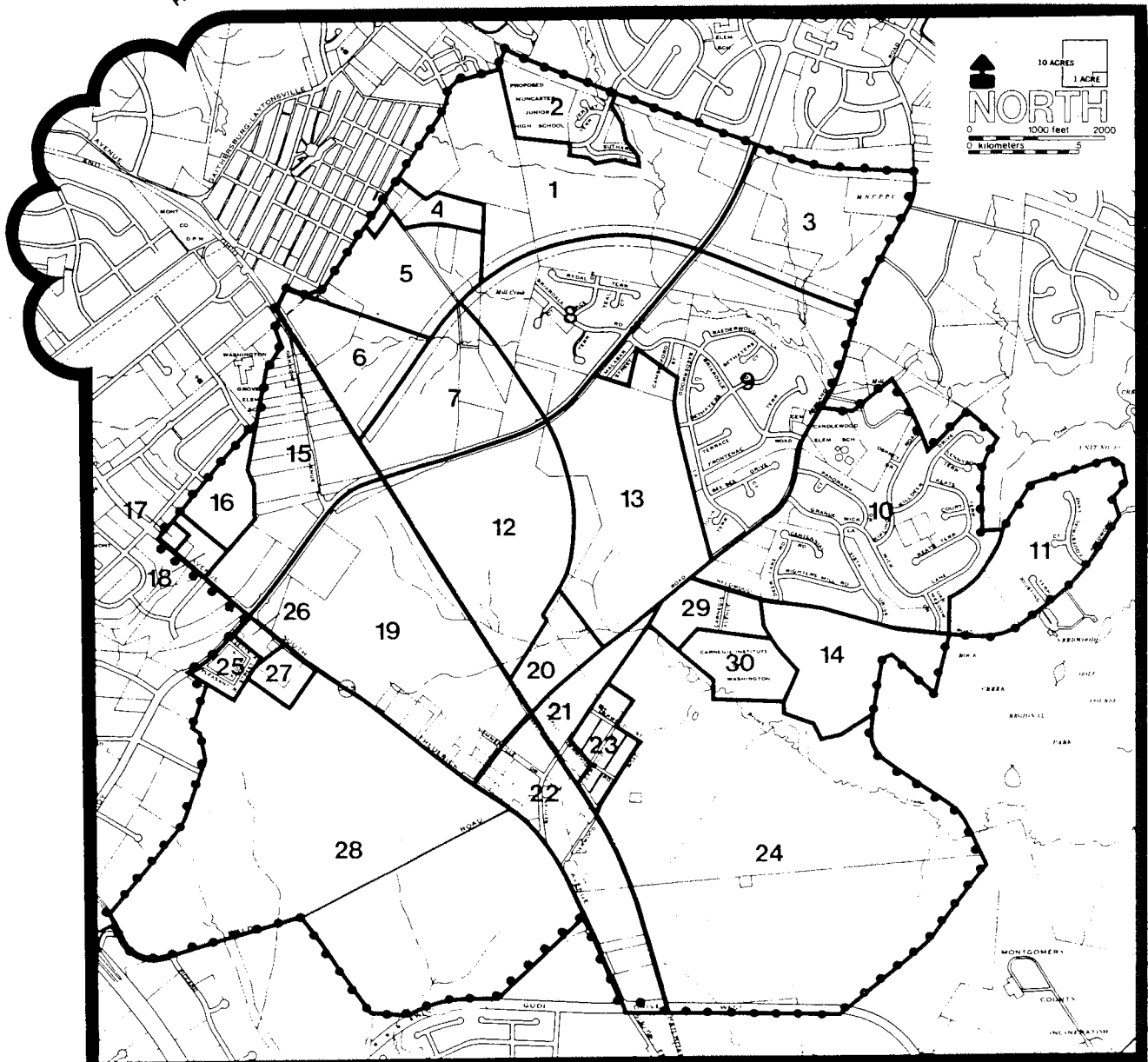
Area 5 (62 Acres)

Approximately 14 acres of Area 5 will be required for the Metro access road/outer beltway connection interchange. The proposed zoning is R-90--single-family residential development. The cluster option should be exercised so as to gain flexibility in orienting homes away from the outer beltway. The Town of Washington Grove should be consulted as development plans are approved for this area to ensure that the unique identity of that Town is retained.

Area 6 (45 Acres)

Area 6 is east of the B & O Railroad, between Washington Grove and the proposed outer beltway, and is vacant. The proposed zoning is I-1--light industrial use.

FIGURE 28



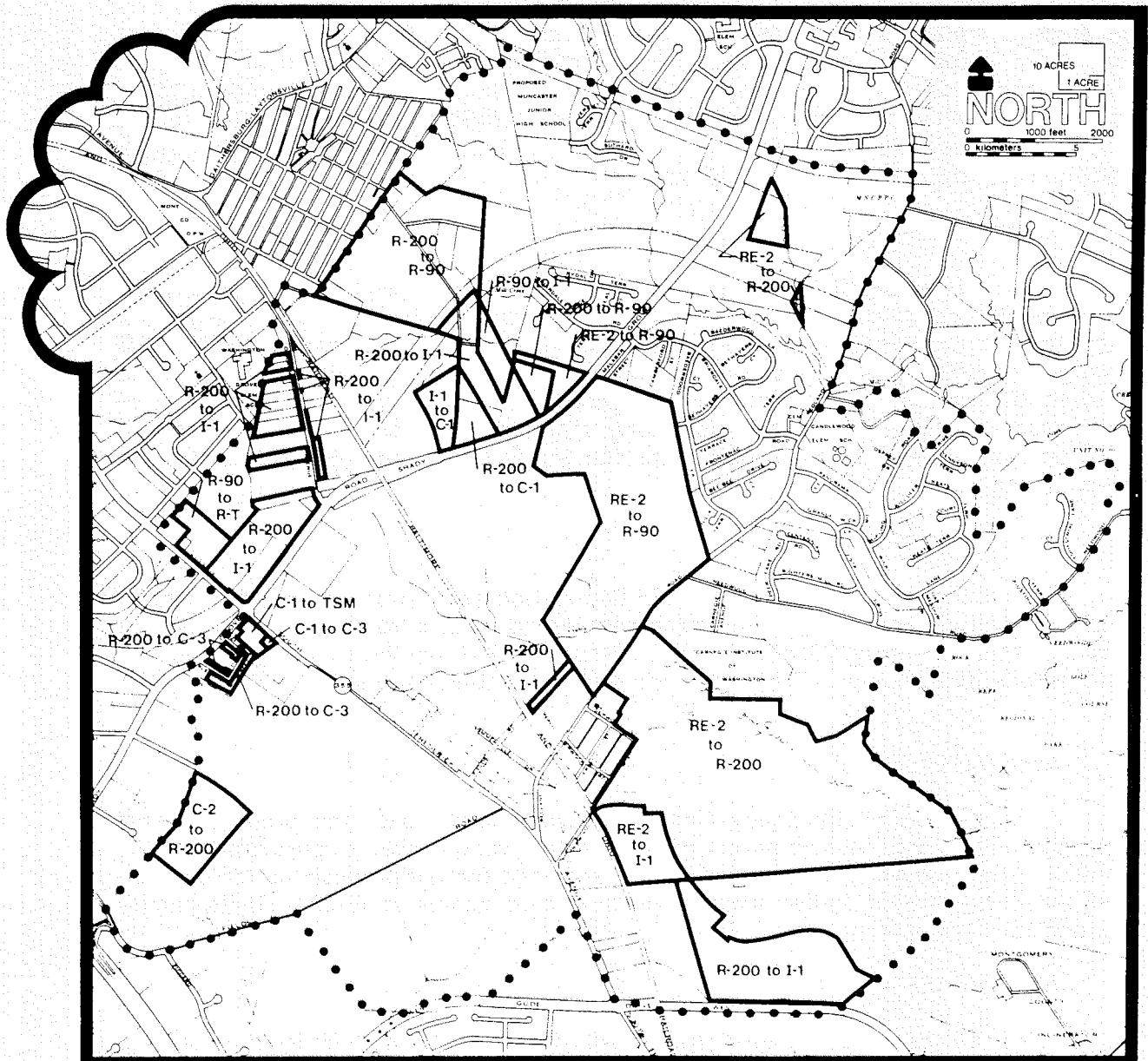
- Sector Plan Boundaries
- 14 Analysis Area Number
- Analysis Area Boundary

**Planning
Analysis
Areas**

**SHADY GROVE
SECTOR PLAN**

THE MONTGOMERY COUNTY PLANNING BOARD

FIGURE 29



- Area of Change Boundary
- • • Sector Plan Boundary

**Proposed
Zoning
Changes**

SHADY GROVE
SECTOR PLAN
 THE MONTGOMERY COUNTY PLANNING BOARD

It is recommended that, because of the proximity to Washington Grove, development plans be reviewed with the town to ensure the proper coordination of land uses prior to development. Buffering between the industrial area and Washington Grove is recommended. Existing site conditions that should be taken into account when preparing development plans include, but are not limited to, the existence of wet worsham silt loam soil; protection of the natural drainage system; and the retention and protection of mature trees.

Area 7 (79 Acres)

Area 7 is bounded by the B & O Railroad, the proposed outer beltway, the Metro access road, and Shady Grove Road. The site is bisected by the northward extension of Crabb's Branch Way. Sufficient distance, approximately 150 feet, is required between this area and the proposed outer beltway to allow for an access road to the remaining I-1 section of the area. The C-1 area delineation will be developed in further detail in the sectional map amendment. An approximately 8-acre portion of this area is required for the Shady Grove Road/Metro access road interchange.

Area 8 (114 Acres)

Area 8 includes approximately 169 homes, located within an area bounded by the proposed outer beltway, the proposed Metro access road, and Shady Grove Road. Approximately 20 acres will be required for the Metro access road and associated interchanges. The proposed zoning is R-90--single-family residential use.

Area 9 (194 Acres)

Area 9 bounded by Shady Grove Road, Redland Road, the proposed outer beltway, and a large vacant parcel of land to the west, contains approximately 264 homes. Approximately 17 acres of land is required for the proposed outer beltway and adjacent Stream Valley Park. The proposed zoning is R-200--single-family residential development.

Area 10 (184 Acres)

Area 10 east of Redland Road and north of Needwood Road, contains approximately 296 homes. It is proposed for R-200--single-family residential zoning.

Area 11 (75 Acres)

Area 11 is north of Needwood Road and immediately east of Area 10, and is vacant. The proposed zoning is RE-2--rural estate (2-acre) development.

Area 12 (138 Areas)

Area 12 is under development as the county service park. The existing zoning pattern for I-1, light industrial, and R-200, single-family residential uses, is to be retained.

Area 13 (135 Acres)

Area 13 is bounded by the Metro access road, Shady Grove Road, Redland Road, and Area 9, and is vacant. Approximately 40 acres are required for a local park, the Shady Grove Road/Metro access road interchange, the Metro access road, and the extension of Crabb's Branch Way. Additional acreage may be required for the provision of storm-water management facilities at Redland Road to serve the public uses within this watershed. Land necessary for the proposed Blueberry Hill Elementary School in this area will be obtained when construction of the school is necessary. The proposed zoning is R-90--single-family residential development. The cluster option should be exercised so as to gain flexibility to orient the homes away from the Metro access road and to facilitate the retention of natural features, such as the rock outcrop and tree stand at the southern portion of the area.

Area 14 (70 Acres)

Area 14 is immediately west of the Lake Needwood golf course south of Needwood Road, and is vacant. The proposed zoning is RE-1--rural estates (one-acre).

Area 15 (94 Acres)

Area 15 is bisected by Oakmont Avenue and is bounded by Shady Grove Road, the B & O Railroad, Md. 355, and area 16. It has six homes and a number of commercial/industrial operations, primarily warehousing. Approximately 20 acres will be required for the proposed outer beltway. Due to the proximity to the railroad and the proposed outer beltway, the recommended zoning is I-1--light industrial development.

Area 16 (28 Acres)

Area 16, immediately southeast of Walnut Hill, is vacant. The proposed zoning is R-90--single-family residential development.

Area 17 (0.5 Acres)

Area 17, fronting on Md. 355, is the location of a number of commercial uses. The proposed zoning is a continuation of the existing C-2 zoning--general commercial.

Area 18 (8 ACres)

Area 18, fronting on Md. 355, is vacant. The proposed zoning is R-T--residential town-house development.

Area 19 (182 Acres)

Area 19, bounded by Shady Grove Road, the B & O Railroad, Fields Road, and Md. 355, is the location of a number of industrial and commercial uses. Approximately 146 acres will be required for the county solid waste central

processing facility and the Metro rail station with its storage and inspection yards. The proposed zoning is I-1, light industrial use, to preempt the possibility of the construction of strip commercial development along Md. 355. I-1 is preferred since it is felt light industrial uses would be more compatible with the Central Processing Facility and Metro storage yards proposed for this area.

Area 20 (25 Acres)

Area 20 northeast of the B & O Railroad and Fields Road, is vacant. The proposed zoning for the 14 acres immediately adjacent to the B & O Railroad is I-1, light industrial; for the 11 acres adjacent to that it is R-90, single-family residential zoning. Virtually all 25 acres will be required for the Metro Transit station and the extension of Crabb's Branch Way.

Area 21 (22 Acres)

Area 21 is southeast of the B & O Railroad and Fields Road. It is the location of a Potomac Electric Power Company storage yard and power station. Approximately 5 acres will be required for the recommended relocation of Redland and Fields Road. The proposed zoning for the area adjacent to the Railroad is I-1, light industrial, and for the area east of that, R-90--single-family residential.

Area 22 (76 Acres)

Area 22 is bounded by Md. 355, Fields Road, Gude Road, and the B & O Railroad, and is bisected by Redland Road. There are four homes and a number of commercial and industrial uses in the area. This area is proposed for I-1, light industrial zoning.

Area 23 (19 Acres)

Area 23 is east of the B & O Railroad, between Redland and Derwood Roads. Area 23 is proposed for R-200, single-family residential zoning.

Area 24 (443 Acres)

Area 24 extends from Redland Road to Gude Drive, and from the B & O Railroad to Crabb's Branch Creek. It includes the Mobley tract and Gude Nursery. One hundred-eighteen acres along the B & O Railroad and Gude Drive are proposed for I-1, light industrial zoning. Moving northward from Gude Dr., the Gude property is relatively flat. Halfway to the northern property line the land falls off into rolling hills with small tributaries draining into Crabb's Branch Creek. The industrial zoning on this property extends from Gude Dr. northward toward the fall-off or ridge line. The industrial/residential zoning boundary is drawn along the flat portion of the property sufficiently set back from the fall-off to screen the view of the industrial development from the residential development. The remaining areas to the east and north are proposed for R-200, single-family residential zoning.

This area contains Crabb's Branch Creek and four tributaries cutting across the residential area and creating a series of rolling hills. It is recommended that a

residential area be constructed in Planned Development 2 (PD-2, 2 dwelling units per acre) to retain the existing topography and to create conservation areas along the tributaries to Crabb's Branch Creek. If the two tracts of land are consolidated into a unified development plan, the zoning should be PD-3 (3 dwelling units per acre).

Area 25 (11 Acres)

Area 25 fronts on Shady Grove Road, approximately 500 feet west of Md. 355. It has 12 homes and a small commercial area. The area is proposed for C-3, highway commercial zoning.

Area 26 (4 acres)

Area 26 which is located on the southwest corner of Md. 355 and Shady Grove Road is designated as a transit station development area. This corner property has a high degree of visibility and access very close to the intersection. Uses for this area should be limited to convenient commercial type of uses which would serve the area but would not attract significant traffic to the area. This area also has a stand of oak trees purported to be the original "Shady Grove." To obtain these types of uses and protect the stand of trees, Transit Station Mixed zone (TSM) is recommended for the area. TSM zone allows for convenient commercial type of uses and requires site plan review which will aid in protecting the original "Shady Grove." The Sector Plan, therefore designates this area as a Transit Station Development area for the purpose of zoning the area TSM.

Area 27 (10 Acres)

Area 27 is west of Md. 355 and south of Area 26. It is the location of an auto dealership and is proposed for C-3, highway commercial zoning.

Area 28 (461 Acres)

Area 28 is bounded by Md. 355, Shady Grove Road, I-270, and Fields Road. It is in use for a dairy farm and a number of homes. It is assumed that the area will not develop prior to 1984; therefore, the present R-200 zoning, single-family residential, should continue for the next 10 years. The ultimate zoning, however, should be for I-3, industrial park.

Area 29 (26 Acres)

Area 29, southwest of Redland and Needwood road, is developed with 16 homes. The proposed zoning is RE-1, rural estates (one acre).

Area 30 (29 Acres)

Area 30 is south of Area 29 and north of Crabb's Branch Creek. It is owned and occupied by the Carnegie Institute of Washington. The proposed classification is RE-2, rural estate (2 acre) zoning.

TABLE 4
ZONING PROFILE

<u>ZONING CLASSIFICATION</u>	<u>APPROXIMATE ACREAGE</u>	
	<u>EXISTING</u>	<u>PROPOSED</u>
TSM Transit Station Mixed		4.0
C-1 Convenience Commercial	4.5	15.0
C-2 General Commercial	23.0	0.5
C-3 Highway Commercial	7.0	21.0
I-1 Light Industrial	519.0	679.0
I-3 Industrial Park		461.0
R-T Residential-Townhouse		8.0
R-90 Single-Family Residential	365.0	576.0
R-200 Single-Family Residential (includes Planning Development 2)	1,372.0	876.0
RE-1 Rural Estate-one acre	280.0	96.0
RE-2 Rural Estate-two acre (includes Cluster RE-2C)	270.0	104.0
TOTAL AREA	<u>2,840.5 Ac.</u>	<u>2,840.5 Ac.</u>

TABLE 5 - PLANNING ANALYSIS AREAS: SUMMARY

PLANNING AREA	TOTAL AREA (AC.)	EXISTING ZONING ZONE	EXISTING ZONING AREA (AC.)	PROPOSED ZONING ZONE	PROPOSED ZONING AREA (AC.)	AREA REQUIRED FOR PUBLIC USE	DEVELOPABLE AREA	ADDITIONAL DWELLING UNITS	EXISTING DWELLING UNITS	TOTAL DWELLING UNITS
# 1	165	R-90	165	R-90	165	-	165	707	-	707
# 2	33	R-90	33	R-90	33	20	-	-	47	47
# 3	91	RE-2	9	R-200	87	23	64	142	-	142
		R-200	78							
# 4	17	R-90	4	R-90	4	-	4	14	-	14
# 5	62	R-200	17	R-90	17	-	-	-	12	12
# 6	45	R-200	62	R-90	62	14	48	200	-	200
# 7	79	I-1	45	I-1	45	6	39	-	-	-
		R-200	26	I-1	69	8	61	-	-	-
		R-90	13							
# 8	114	I-1	40	C-1	15	-	15	-	-	-
		RE-2	3	R-90	114	20	42	173	169	342
		R-200	7							
# 9	194	R-90	104	R-200	194	17	3	6	264	270
		RE-2	1							
		R-200	190							
		R-90	3							
# 10	184	R-200	184	R-200	184	-	13	24	296	320
# 11	75	RE-2C	75	RE-2C	75	-	75	30	-	30
# 12	138	R-200	67	R-200	67	-	67	-	-	-
		I-1	71	I-1	71	-	71	-	-	-
# 13	135	RE-2	120	R-90	135	40	95	393	-	393
# 14	70	R-90	8	R-90	70	-	-	-	-	-
		RE-1	7	RE-1	70	-	-	75	-	75
		R-200	54							
# 15	94	I-1	40	I-1	94	20	74	-	-	-
# 16	28	R-90	28	R-90	28	-	28	117	-	117
# 17	0.5	C-1	0.5	C-2	0.5	-	-	-	-	-
# 18	8	R-90	8	R-1	8	-	8	112	-	112
# 19	182	I-1	182	I-1	182	146	36	-	-	112
# 20	25	RE-2	11	R-90	11	-	-	-	-	112
		I-1	14	I-1	14	25	-	-	-	-
# 21	22	RE-2	7	R-90	7	4	3	-	-	-
# 22	76	I-1	15	I-1	15	1	14	-	-	-
# 23	19	R-200	76	I-1	76	-	49	-	4	4
		RE-2C	13	R-200	19	-	-	-	24	24
# 24	443	RE-1	184	R-200	325	-	325	721	-	721
		R-200	213							
		I-1	31	I-1	118	-	118	-	-	-
# 25	11	R-200	9	R-200	9	-	-	-	-	-
# 26	4	C-3	2	C-3	11	-	-	-	12	12
# 27	10	C-1	4	TSM	4	-	4	-	-	-
		C-3	5							
		I-1	5	C-3	10	-	10	-	-	-
# 28	461	R-200	438	R-200	461	-	461	-	-	-
# 29	26	C-2	23	I-3	26	-	-	-	3	3
# 30	29	RE-1	26	RE-1	26	-	-	-	16	16
		RE-2C	29	RE-2C	29	-	29	17	-	17
TOTALS	2,840 Ac.				482 Ac.	1,976.5 Ac.	2,731 D.U.	847 D.U.		3,578 D.U.