

MCPB
Item # 4
9/13/01

MEMORANDUM

DATE: September 7, 2001
TO: Montgomery County Planning Board
VIA: John Carter, Chief, Community-Based Planning Division *JC*
Sue Edwards, I-270 Team Leader, Community-Based Planning Division *Sue*
FROM: Nellie Maskal, Planner, Community-Based Planning Division *NM*
(301) 495-4567

REVIEW TYPE: Mandatory Referral
APPLYING FOR: Construction of Radio Repair Shop
APPLICANT: Montgomery County Department of Public Works and Transportation
PROJECT NAME: Montgomery County Fire and Police Radio Repair Shop
CASE NUMBER: 01303-DPW&T-1

ZONE: I-1
LOCATION: 16551 Crabbs Branch Way
MASTER PLAN: Sector Plan for the Shady Grove Transit Station Area

FILING DATE: June 27, 2001

PLANNING BOARD
REVIEW: September 13, 2001

STAFF RECOMMENDATION: APPROVAL with comments:

1. Develop a flex-time work shift program to mitigate the traffic impact by the radio repair shop. The workshift program would have all employees not arrive between 7:00 a.m. and 9:30 a.m. to prevent traveling during the morning peak period (7:00 to 9:00 a.m.).
2. Another alternative to mitigate the traffic impact would be to coordinate with the Montgomery County Department of Public Works and Transportation (DPWT) to further analyze its Capital Improvements Program (CIP) Project No. 500010. This CIP project includes construction of improvements at the intersection of Crabbs Branch Way and Redland Road. However, based on the most recent information, the improvements would not increase the intersection capacity of the peak-directional movements during the morning peak period and necessitate the first recommendation. Based on the available information regarding DPWT's CIP project, Transportation Planning staff's position is that this alternative would be easier to implement.

EXISTING CONDITIONS:

The proposed radio repair shop is located on Crabbs Branch Way in the 130-acre County Service Park (CSP). The CSP includes multi-public agencies that serve countywide needs. Agencies that are located at the CSP include the Montgomery County Public Schools (MCPS) Food Services Division and School Bus Management, DPWT Equipment and Vehicular Management, Bureau of License Commissioners, and M-NCPPC Central Maintenance Division. The County Service Park also includes the Solid Waste Transfer Station and Shady Grove Metro Station with storage and inspection yards and parking facilities. The United States Postal Service facility, Grove Shopping Center and former Sears Warehouse (currently under renovation as the "Great Indoors") are located nearby.

The adjacent neighborhood includes Park Overlook, King Farm development and the historic Derwood community. The Walnut Hill community, which lies west of I-370 near North Westland Drive, is located nearby.

The proposed radio repair shop will have no impact on the general character of the neighborhood. The CSP, as well as the Solid Waste Transfer Station and Metro Transit Station and related facilities are the predominant development in the Shady Grove Area.

PROJECT DESCRIPTION:

The DPWT has submitted a request to construct a new radio repair shop for the fire and police departments. The proposed project consists of the construction of a 14,000 square foot, one-story, slab on grade, masonry block building within the County Service Park. The building site is located on Crabbs Branch Way in the rear of the MCPS Bus Depot. See Figures 1 and 2 - Vicinity Maps. The site was selected by the Montgomery County Council due to coordination required for the reuse of the old police radios by the MCPS buses. The existing radio repair shop is located on Gude Drive as shown on Figure 3.

The proposed building will house a 6,000 square-foot shop, capable of performing vehicular radio repairs on as many as eight vehicles at one time. It will have overhead entry doors, storage and vehicular exhaust extraction systems. The remaining 8,000 square feet will be utilized for warehouse storage of road components, administrative and engineering spaces, personnel training, lockers, and lunchrooms. See Figures 4 and 5.

MASTER PLAN:

The subject property is covered by the Approved and Adopted 1977 Sector Plan for the Shady Grove Transit Station Area. It is currently zoned I-1 (Light Industrial) and designated as part of Area 12 in the Sector Plan as shown in Figures 6 and 7. The Sector Plan states the following:

"Area 12 (138 acres) is under development as the County Service Park. The existing zoning pattern for I-1 (Light Industrial) and R-200 (Single-Family Residential use) is to be retained.

Area 19 (182 acres), 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 147 acres will be required for the County Solid Waste Central Processing Facility and the Metrorail 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. The I-1 Zone 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."

The Sector Plan notes that the County Service Park is a primary focus point in the Shady Grove area. It is important, therefore, that facilities located in the CSP meet the Sector Plan urban design, so as to enhance and not jeopardize the existing and future image of the Shady Grove area. For example, the facilities should be attractively landscaped with appropriate signs and lighting.

TRANSPORTATION:

Site Location and Access

The existing County Service Park is located on the south side of Shady Grove Road on both sides of Crabbs Branch Way. The radio repair shop is proposed to be located within the MCPS Bus Depot near its eastern boundary and opposite Shady Grove (Metrorail Station) Access Road's southbound entrance ramp. The site access is through the MCPS Bus Depot access from Crabbs Branch Way.

Master Plan Roadways and Bikeways

According to the *Sector Plan for the Shady Grove Transit Station Area*, the nearby roadways are classified as follows:

- Crabbs Branch Way is classified as an industrial roadway, I-6, with an 80-foot right-of-way.
- Shady Grove Road is classified as a major highway, M-42, with a 120-foot right-of-way and a Class II bikeway, PB-45.
- Shady Grove Metrorail Station Access Road is classified as a major highway, M-94, with a 150-foot right-of-way.

Local Area Transportation Review

Additional Site-Generated Traffic

The proposed radio repair shop could nominally increase the number of site-generated trips from the overall County Service Park. Using the general trip-generation rates from the Institute of Transportation Engineer's (ITE) Trip Generation Report, the proposed radio repair shop facility of 14,000 square feet would generate ten peak-hour trips during both the weekday morning peak period (7:00 and 9:00 a.m.) and the evening peak period (4:00 to 6:00 p.m.). The proposed radio repair area of 6,000 square feet, as a light industrial use, would generate six peak-hour trips. The proposed warehouse/storage of 8,000 square feet would generate four peak-hour trips.

The actual number of additional site-generated peak-hour trips would be equal to the 16 employees proposed to work in the radio repair shop with the following assumptions:

1. All the employees travel during the morning and evening peak hours.
2. The vehicles requiring radio repairs are already on the site or pass-by/diverted trips.

The ten trips projected using general ITE trip-generation rates are fewer than the 16 new employees working in the radio repair shop (as stated in the August 14, 2001, telephone conversation between Nellie Maskal and Michael Lowe, project manager).

The Need to Submit a Traffic Study

If the proposed radio repair shop, by itself, were a subdivision case, a traffic study would not be required for Local Area Transportation Review, because the site would generate fewer than 50 total peak-hour trips during the morning and evening peak periods. As a shop within the overall County Service Center, the site is projected to generate 50 or more total peak-hour trips during the morning and evening peak periods. Therefore, a traffic study may be required to analyze the impact of site-generated traffic on adjacent intersections for the entire site under control by the same owner.

However, Transportation Planning staff's position is that a complete traffic study is not warranted for the subject mandatory referral because the 16 additional site-generated trips represent a minimal percentage of the total trips generated by the County Service Park. A traffic statement would be useful to document the following:

1. The site-generated trips from the proposed radio repair shop's unique land use.
2. Employee work hours starting at 7:00 a.m. and ending at 3:30 p.m. which is before the morning and evening peak periods, respectively.

3. The congestion levels (or the calculated CLV values) analyzed at the nearest intersections along Crabbs Branch Way at Shady Grove Road to the north and at Redland Road to the south.

In lieu of a traffic statement, Transportation Planning staff projects impact of site-generated traffic using traffic data gathered from other available sources. The congestion analyses are available from a two traffic studies. At the intersection of Crabbs Branch Way and Shady Grove Road, the CLV values were calculated in the traffic study being prepared for a nearby pending Board of Appeals case on the north side of Shady Grove Road. At the intersection of Crabbs Branch Way and Redland Road, the CLV values were calculated in a recently submitted traffic study for a preliminary plan application to the south side of Redland Road.

Congestion Levels at the Nearest Intersections

The congestion levels at the two nearest intersections are as follows:

1. Crabbs Branch Way and Shady Grove Road:

The traffic count was collected on June 26, 2001. For the existing traffic condition, the CLV values were calculated as 1,146 during the morning peak period and 1,354 during the evening peak period. The CLVs during both peak hours are less than the congestion standard of 1,800 for the Shady Grove Policy Area.

2. Crabbs Branch Way and Redland Road:

The traffic count was collected on June 13, 2001. For the existing traffic condition, the CLV was calculated as 1,806 during the morning peak period and 1,699 during the evening peak period. The CLVs during the morning peak hour exceeds the congestion standard of 1,800 for the Shady Grove Policy Area.

DPWT has funded improvements at the intersection of Crabbs Branch Way and Redland Road. The improvements are funded under DPWT's Congested Intersection Initiative (CII) as DPWT CIP Project No. 500010 and include the following:

- Add a second left-turn lane on the southwest-bound approach of Redland Road.
- Add an exclusive right-turn lane on the northeast-bound approach of Redland Road and convert the existing right-turn lane to a through travel lane. The right-turn lane was added since January 1999 plans were printed. An exclusive right-turn lane on the northwest-bound approach of Crabbs Branch Way, proposed in January 1999 plans, was later deleted from the plans.

The DPWT plans are under design and construction is projected to start in March 2003. Because of construction funding through 2002, the improvement can be used in LATR. (Jon Hutchings is the project manager for DPWT.)

However the two improvements add capacity to the intersection only for the peak-directional movements during the evening peak period. The CLV value during the morning peak hour is not reduced and remains over the 1,800 congestion standard because intersection capacity is not increased for the peak-directional movements during the morning peak period.

If the site-generated traffic by the 16 employees were distributed on the roadway network, Transportation Planning staff projects that the CLV value would increase by only two during the morning peak hour. The CLV increase is small because most employees arriving from the south would be traveling in the non-peak-direction through the intersection.

Policy Area Review/Staging Ceiling Condition

The Shady Grove Policy Area has 998 jobs remaining in the staging ceiling as of July 31, 2001, under the *FY01 Annual Growth Policy*. The traffic generated by the existing County Service Park was already considered as generated by an existing land use when the staging ceiling numbers were determined.

From the overall Policy Area Review perspective, the 16 employees would be transferred from the Gude Drive facility located in the Derwood Policy Area to the Shady Grove Policy Area (both are *not* in a moratorium).

ENVIRONMENT:

The stormwater management concept consists of an on-site water quality control via an infiltration trench and a waiver request for water quantity control. The Department of Permitting Services Review staff has granted a waiver of on-site water quantity control.

COMMUNITY CONCERNS:

Staff has notified neighboring civic and homeowners associations regarding the proposed radio repair shop. No comments have been received regarding this proposal, as of the date of this report.

CONCLUSION:

Staff finds that the proposed radio repair shop will not have a detrimental impact on the subject site or the surrounding area. The mandatory referral is consistent with the recommendations of the Shady Grove Sector Plan. Staff, therefore, recommends approval of the mandatory referral, subject to the comments on page 1.

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VICINITY MAP FOR
RADIO REPAIR SHOP (222NW08)

FIGURE 1



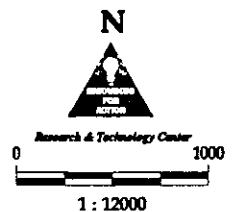
Map compiled on September 06, 2001 at 12:51 PM | Site located on base sheet no - 222NW08

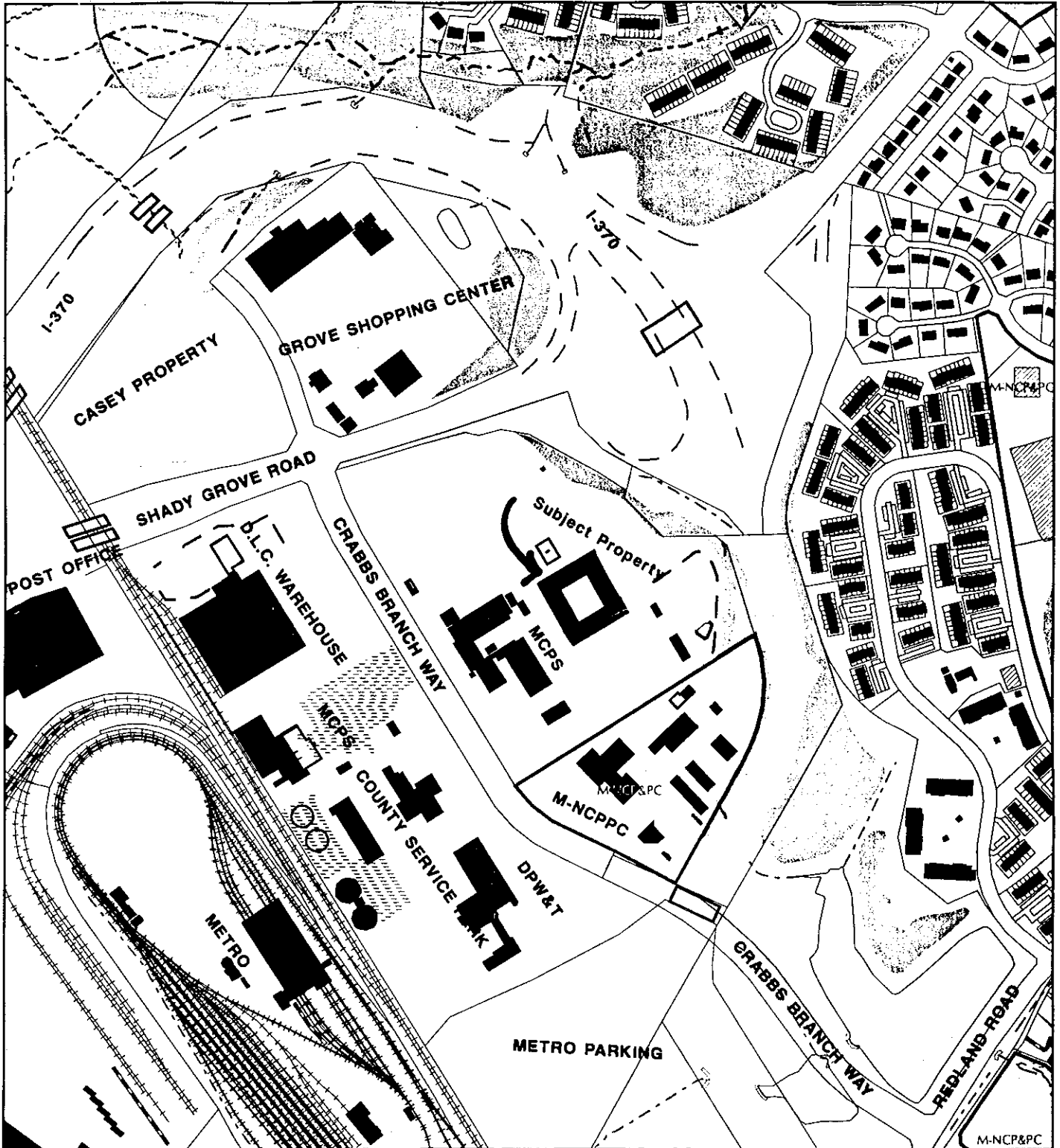
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RADIO REPAIR SHOP (222NW08)

Map compiled on September 06, 2001 at 9:32 AM | Site located on base sheet no - 222NW08

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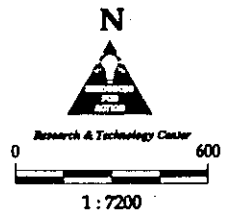
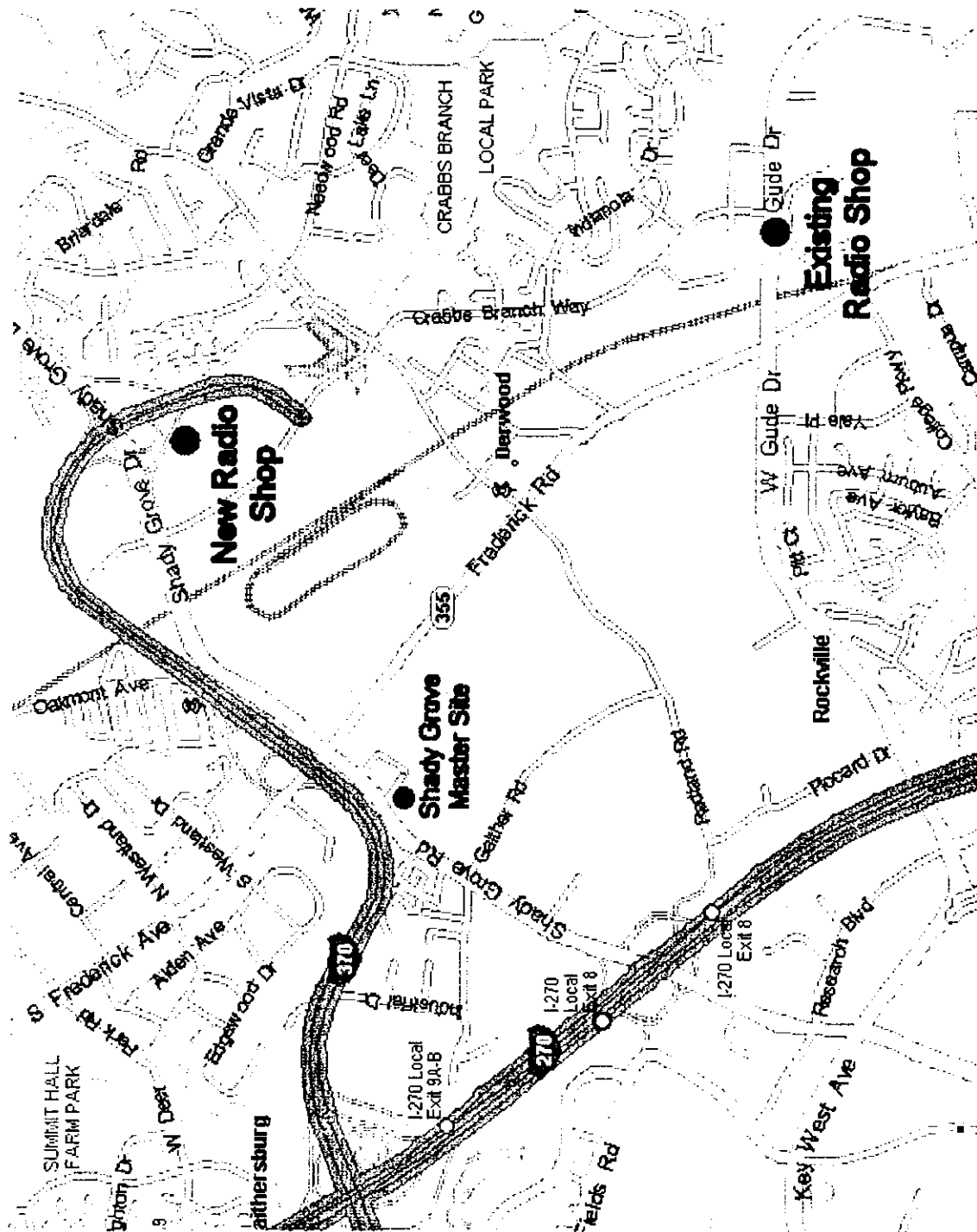
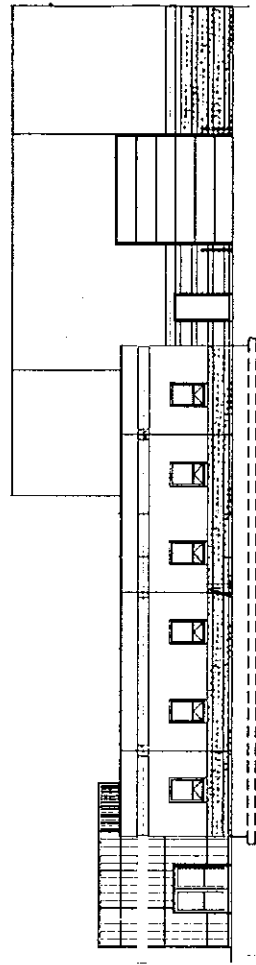


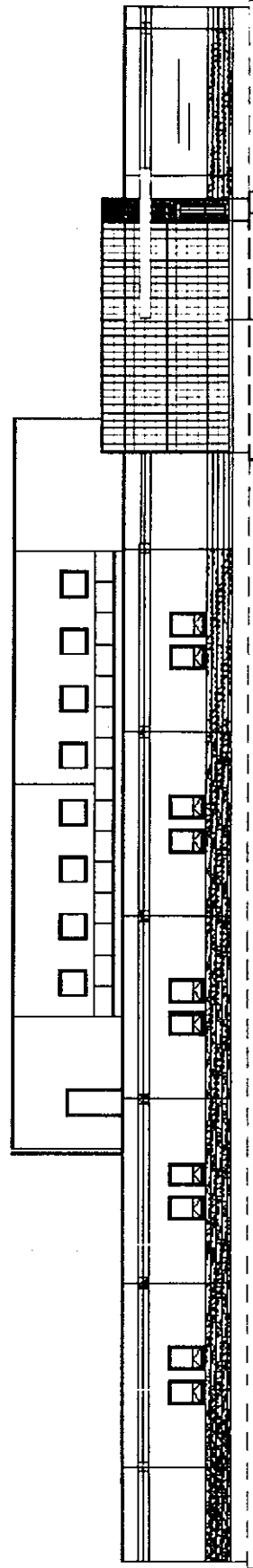
FIGURE 3



New Radio Shop



EAST ELEVATION



SOUTH ELEVATION

FIGURE 4

FIGURE 5

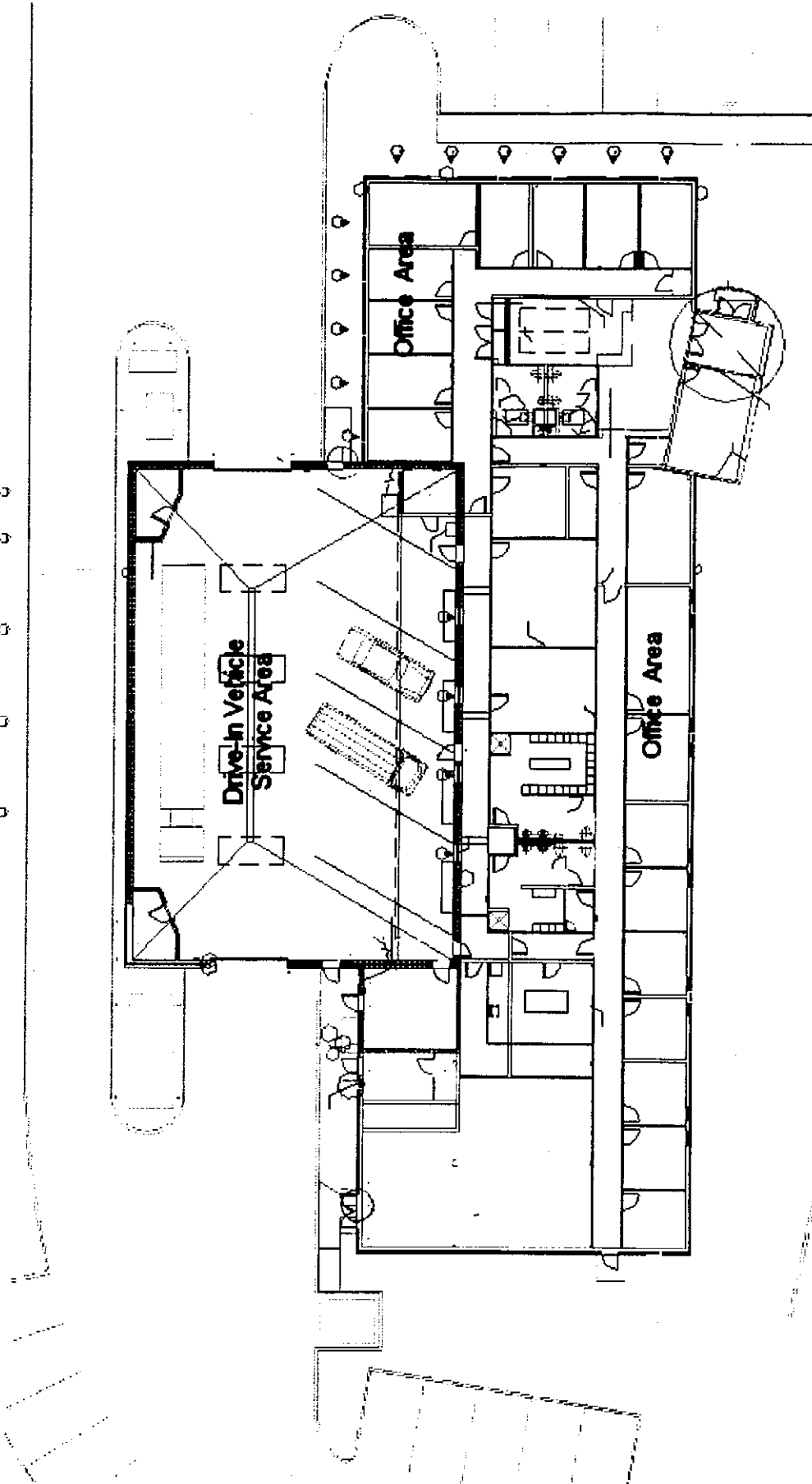
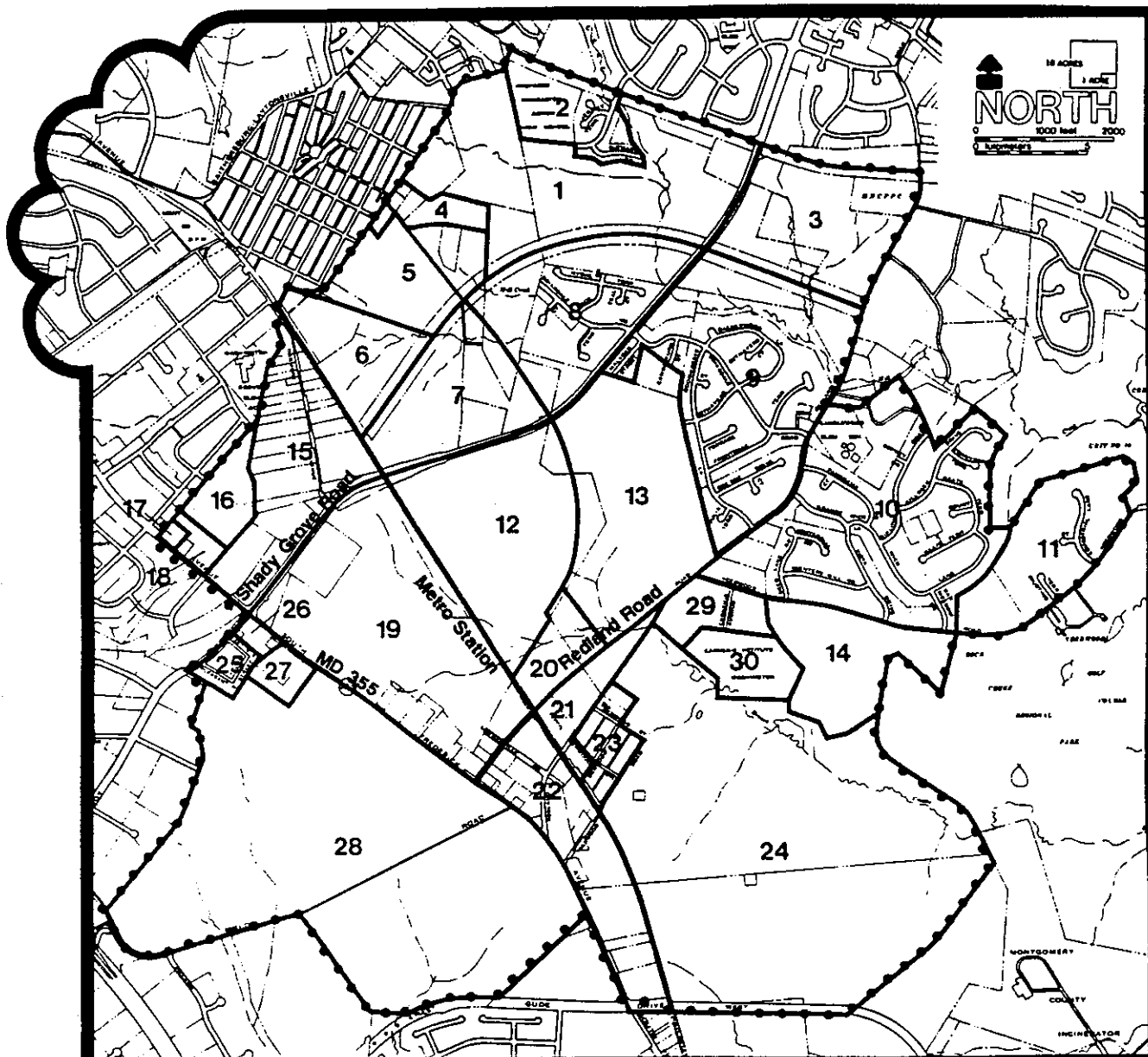


FIGURE 6



..... Sector Plan Boundaries

14 Analysis Area Number

— Analysis Area Boundary

* Subject Site

**Planning
Analysis
Areas**

SHADY GROVE
SECTOR PLAN

THE MONTGOMERY COUNTY PLANNING BOARD

FIGURE 7



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

Subject Site

**Proposed
Land
Use
1984**

**SHADY GROVE
SECTOR PLAN**

THE MONTGOMERY COUNTY PLANNING BOARD

See text regarding possible PD3 in Area 24