MONTGOMERY COUNTY, MARYLAND TELECOMMUNICATIONS TRANSMISSION FACILITY COORDINATING GROUP RECORD OF ACTION

APPLICATION NUMBER: 200508-11 DATE: 14 September 2005

Application Review:	
Applicant:	T-Mobile
Description:	Construct a 120' monopole and attach three 54" panel antennas at the 120' level.
Site Location:	Oakview Recreation Association 1101 Corliss Street, Silver Spring
Property Owner:	Oakview Recreation Association
Group Comments:	

TTFCG Action

Recommended ☐ Not recommended ☐ Recommended with Conditions ☒

Recommendation conditioned on: This recommendation is conditioned on approval of a Special Exception for this facility in a residential zone and a waiver of the setback requirements from the Board of Appeals for this monopole.

Vote on recommendation of approval: For: Against: Abstain:

Signature Date: 9/14/05

MONTGOMERY COUNTY, MARYLAND
TOWER COORDINATOR
RECOMMENDATION

APPLICATION NUMBER: 200508-11 DATE: 24 August 2005

Application Information:	
Applicant:	T-Mobile
Description:	Construct a 120' monopole and attach three 54" panel antennas at the 120' level.
Site Location:	Oakview Recreation Association 1101 Corliss Street, Silver Spring
Property Owner:	Oakview Recreation Association

Classification in accordance with Zoning Ordinance: R-90

Private Property: ☒	By right: ☐	Special Exception: ☒
Public Property: ☐	Mandatory Referral: ☐	Special Exception Modification: ☐

Impact on land-owning agency: N/A

Existing or future public safety telecommunications facilities and plans: N/A

Co-location options: The monopole will accommodate antennas for up to two additional carriers.

Implications to surrounding area: Based on our site visit, it appears that the monopole will be visible to some residents in the immediate vicinity of the site to the southeast. The site backs to wooded parkland to the west and north and the MCPS land adjacent to the site to the east is under construction. The GIS image below shows the site (circled) and surrounding vicinity.

The monopole is a "unipole" design with flush mount antennas to minimize the visual impact of the facility. If there are objections to the unipole design, T-Mobile may also consider a tree pole design for this site that may better disguise the monopole and conceal the antennas. Since the trees in the wooded areas appear to be approximately 60' to 80' tall a tree pole design would fit in with the surroundings when viewed from the residential area. The applicant provided photo simulations of the site from a number of locations around the site (copies attached).

Attachments: Application

Comments: The monopole does not meet setback requirements. The applicant reports that T-Mobile will seek a variance from the setback requirements as part of their request for a Special Exception. The nearest dwelling shown on T-Mobile's plan is 301' from the monopole.

The equipment cabinets will be installed on a 10' x 20' concrete pad and enclosed within a 54' x 16' chain link fence to be constructed within the existing chain link fenced swimming pool area. A line of 6' high pine trees will be planted to screen the equipment cabinets from the pool area.

T-Mobile's coverage objectives for this site are to offload traffic from its adjacent site to the east to provide coverage along the I-495 beltway in that area. T-Mobile submitted RF contour maps that show the coverage with and without the site. Based on our review of those maps, it appears that there is a need for antennas to meet the target signal level along the beltway in this area and that antennas as proposed could provide the desired coverage.

We asked for RF maps showing coverage with antennas at a lower elevation to determine if the monopole could be shorter to minimize the visual impact of the new facility. T-Mobile submitted maps showing antennas at the 95' and 75' levels. We asked for maps with antennas at 75' because at that height the monopole would meet setback based on the distances shown on T-Mobile's plans. Based on our review of that map the expected coverage did not appear to meet the desired signal levels along parts of the beltway. This is likely due to the terrain in that area and the tall trees that are between the site and the beltway that would likely diminish coverage in that direction.

Based on our review of the map showing expected coverage with antennas at the 95' level, it appears that there are some sections of the beltway that do not meet the target signal level, although coverage may still be considered adequate for "in-car" coverage. However, a monopole at that level may limit interest in co-location on the monopole because a carrier with antennas at a lower elevation may also expect diminished coverage because of the terrain and tree height on the parkland.

Tower Coordinator Recommendation:	Recommended: ☐ Recommended with conditions: ☒ Not recommended: ☐
This recommendation is conditioned on approval of a Special Exception for this facility in a residential zone and a variance from setback requirements for this monopole.	
Signature	Date 9/7/05

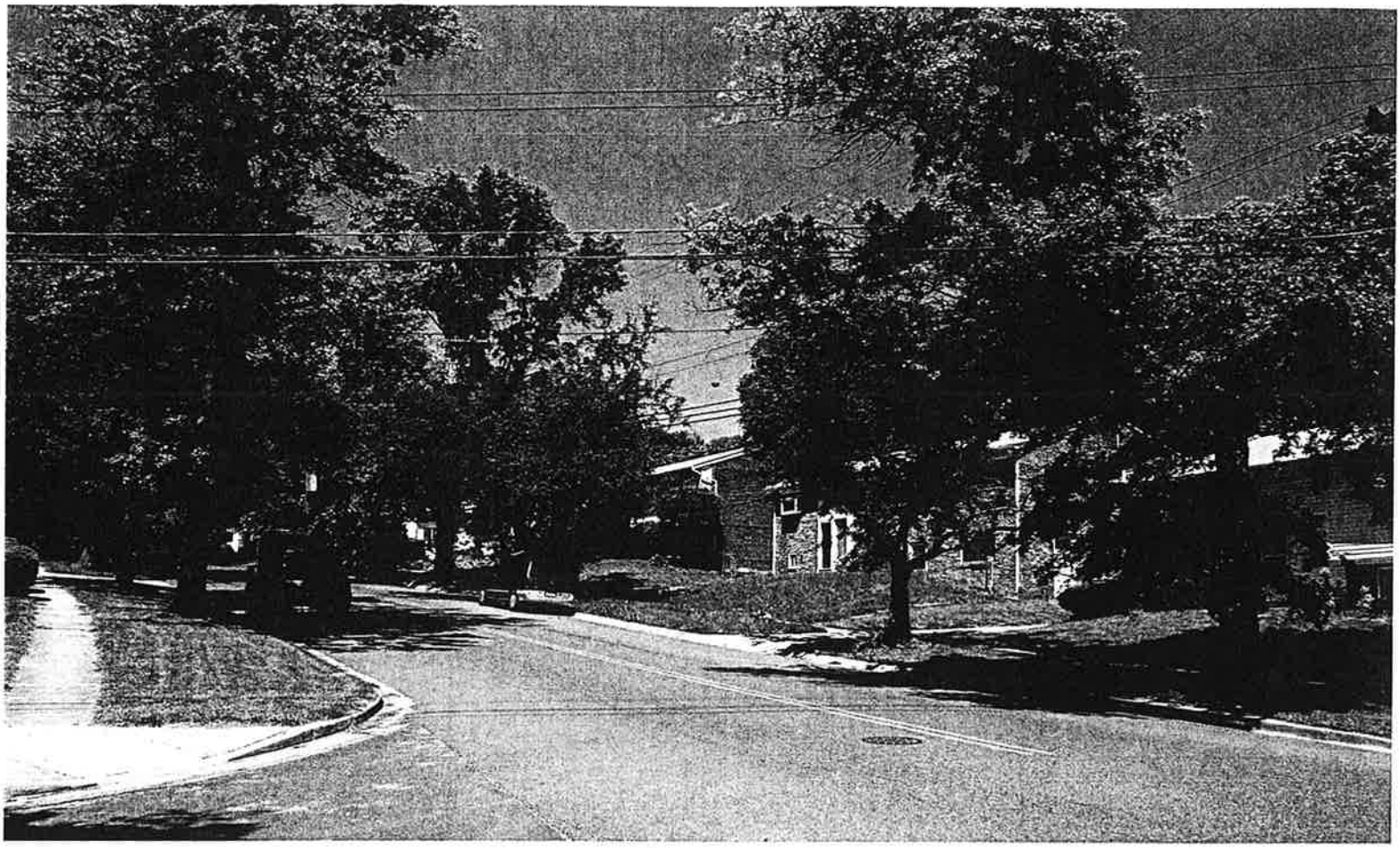


PHOTO - 1

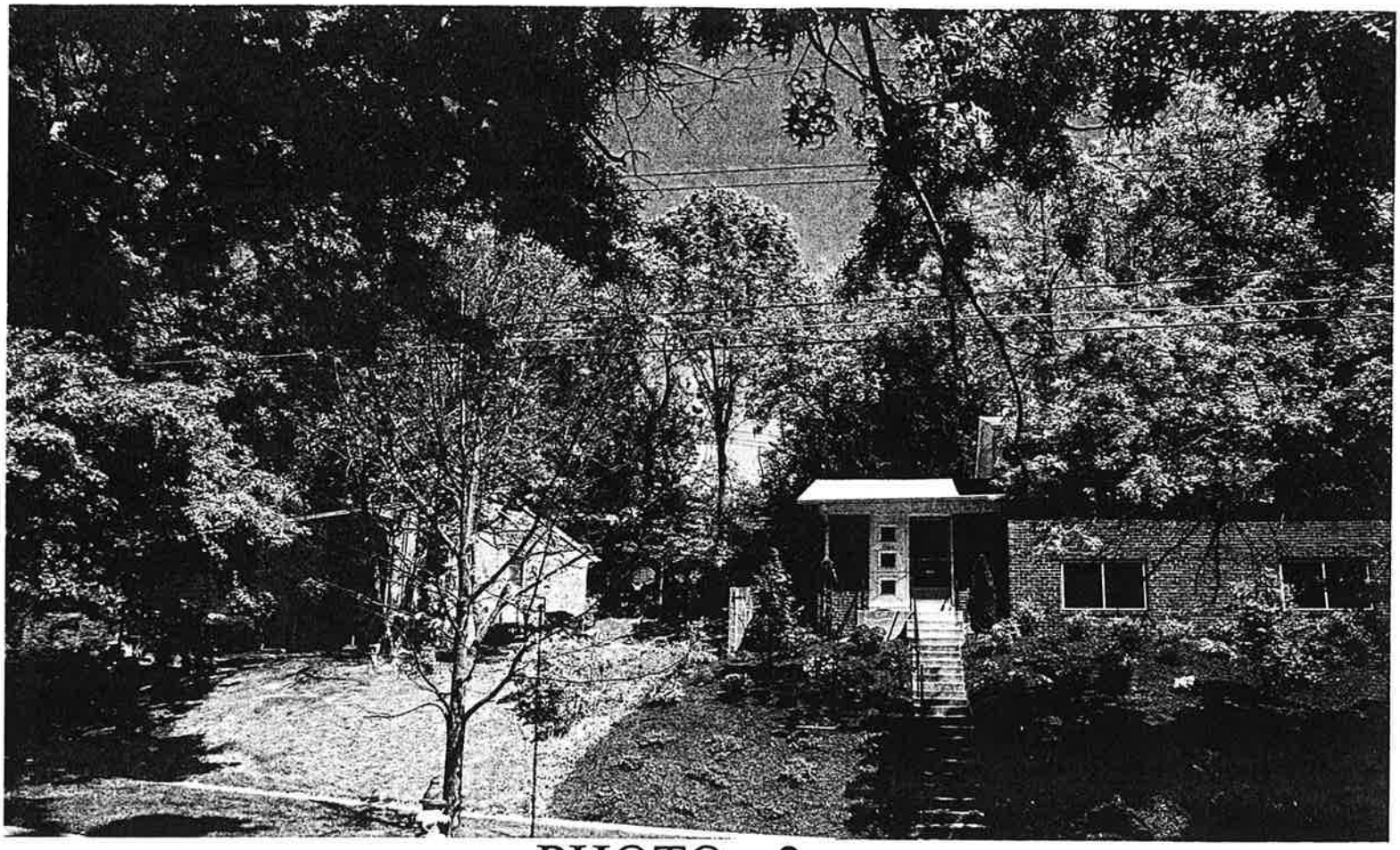


PHOTO - 2

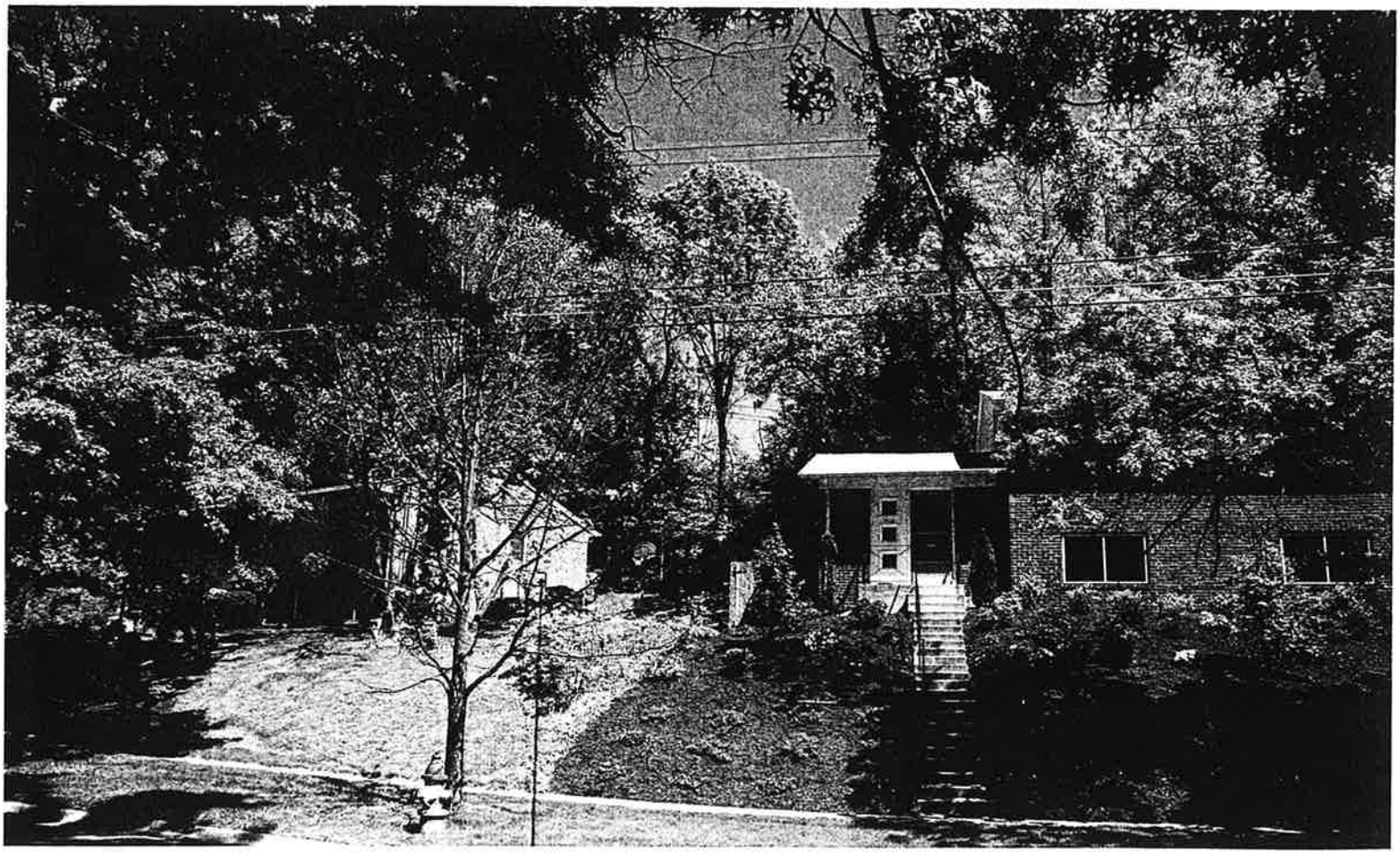


PHOTO - 3

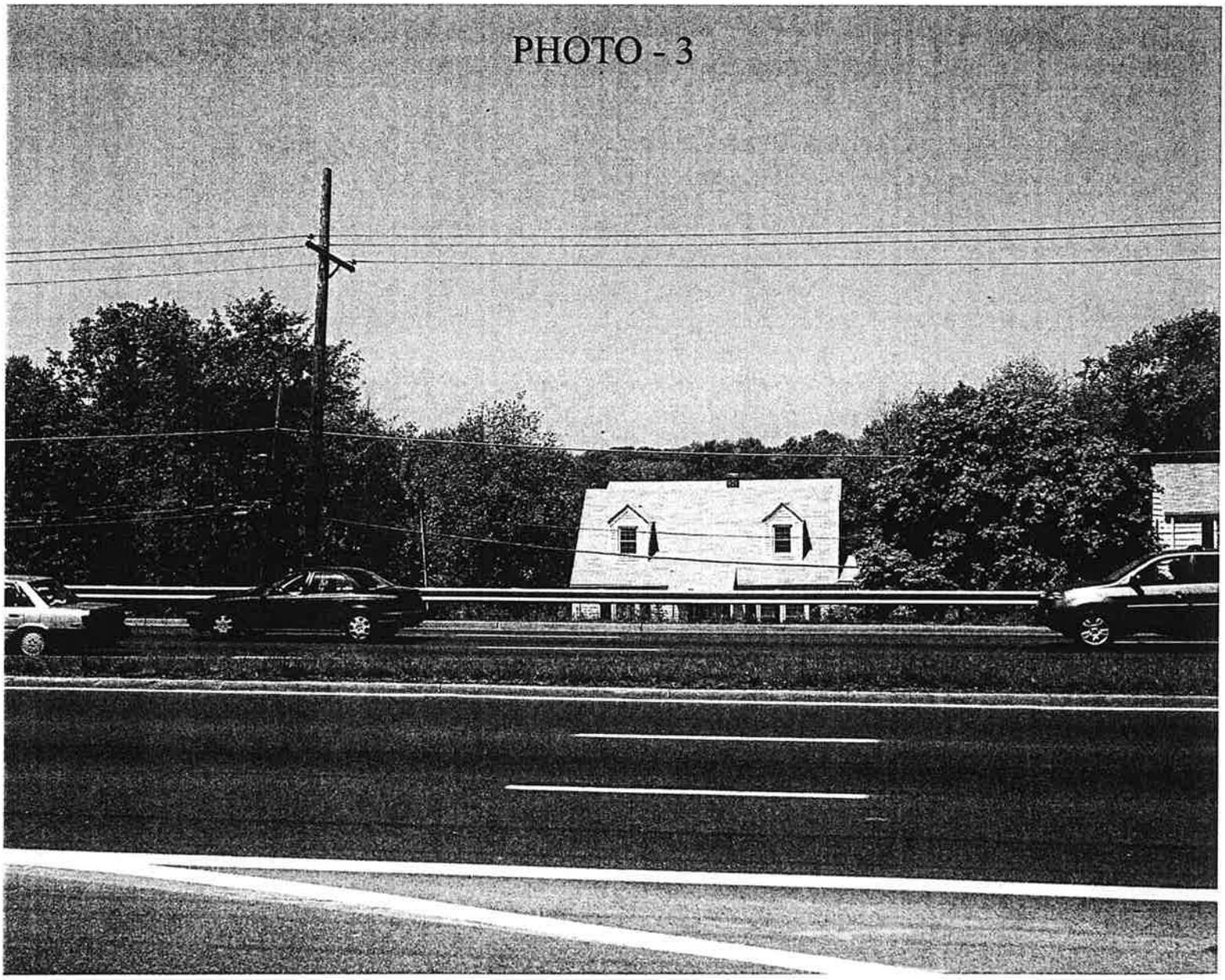
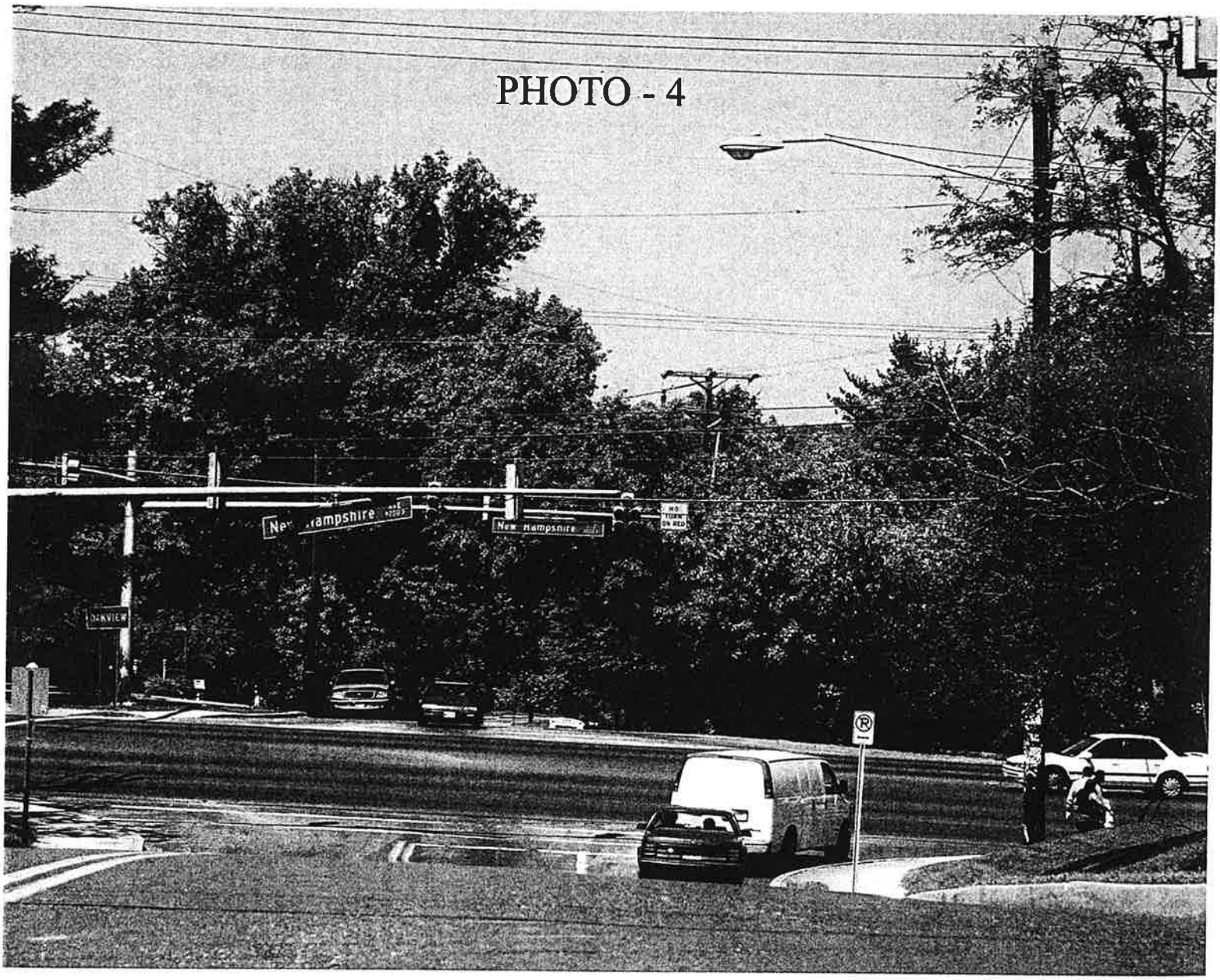


PHOTO - 4



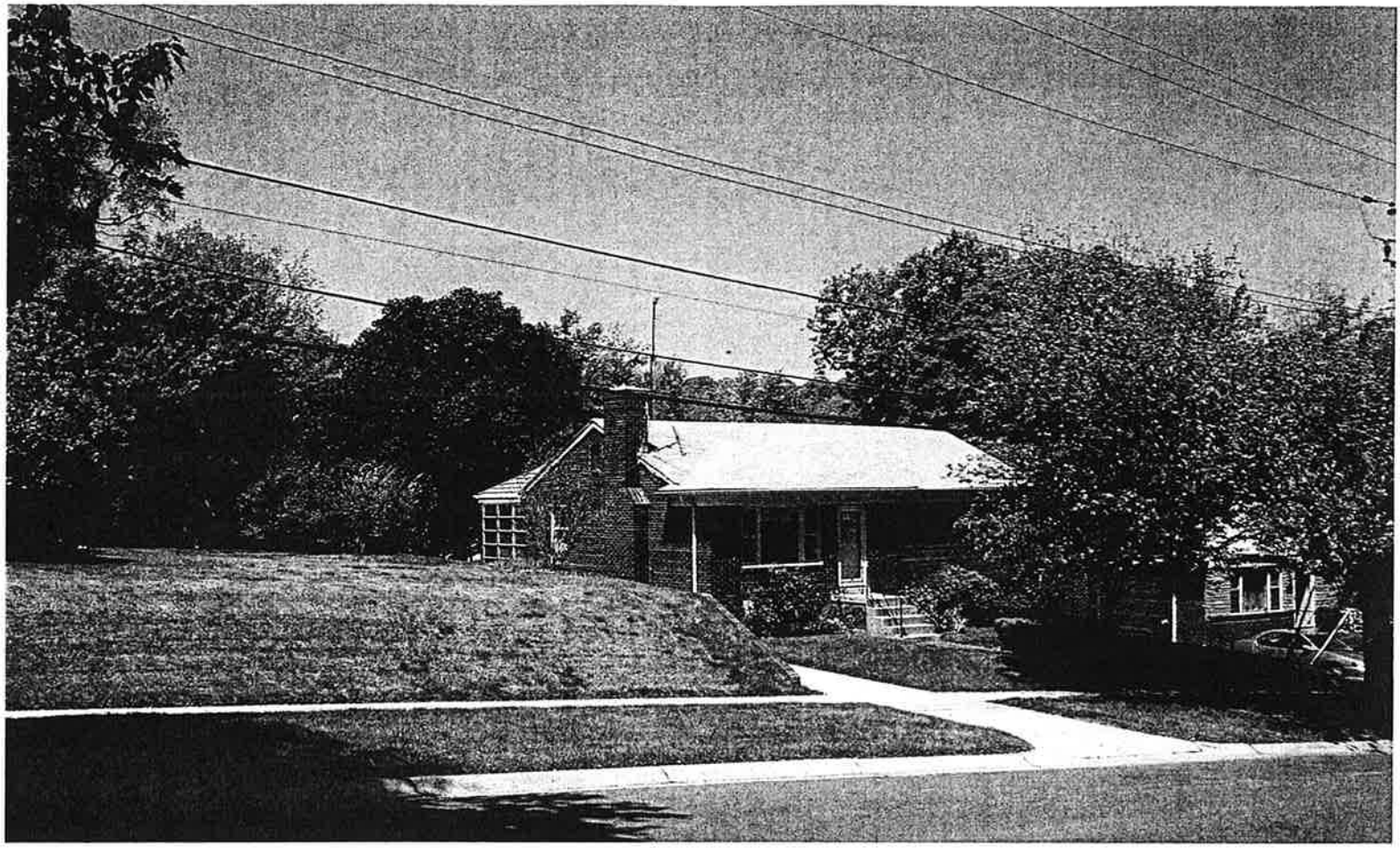
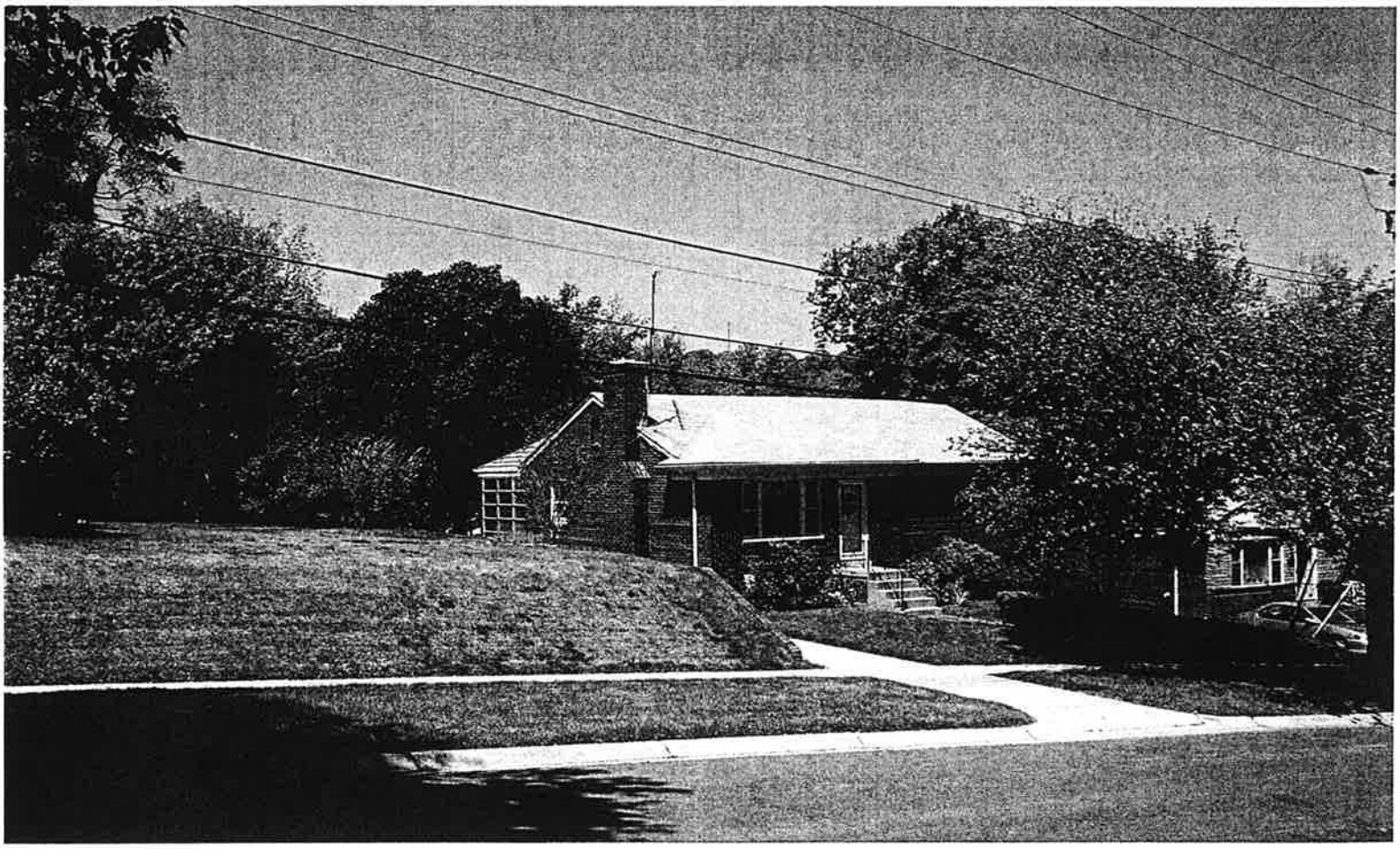


PHOTO - 5



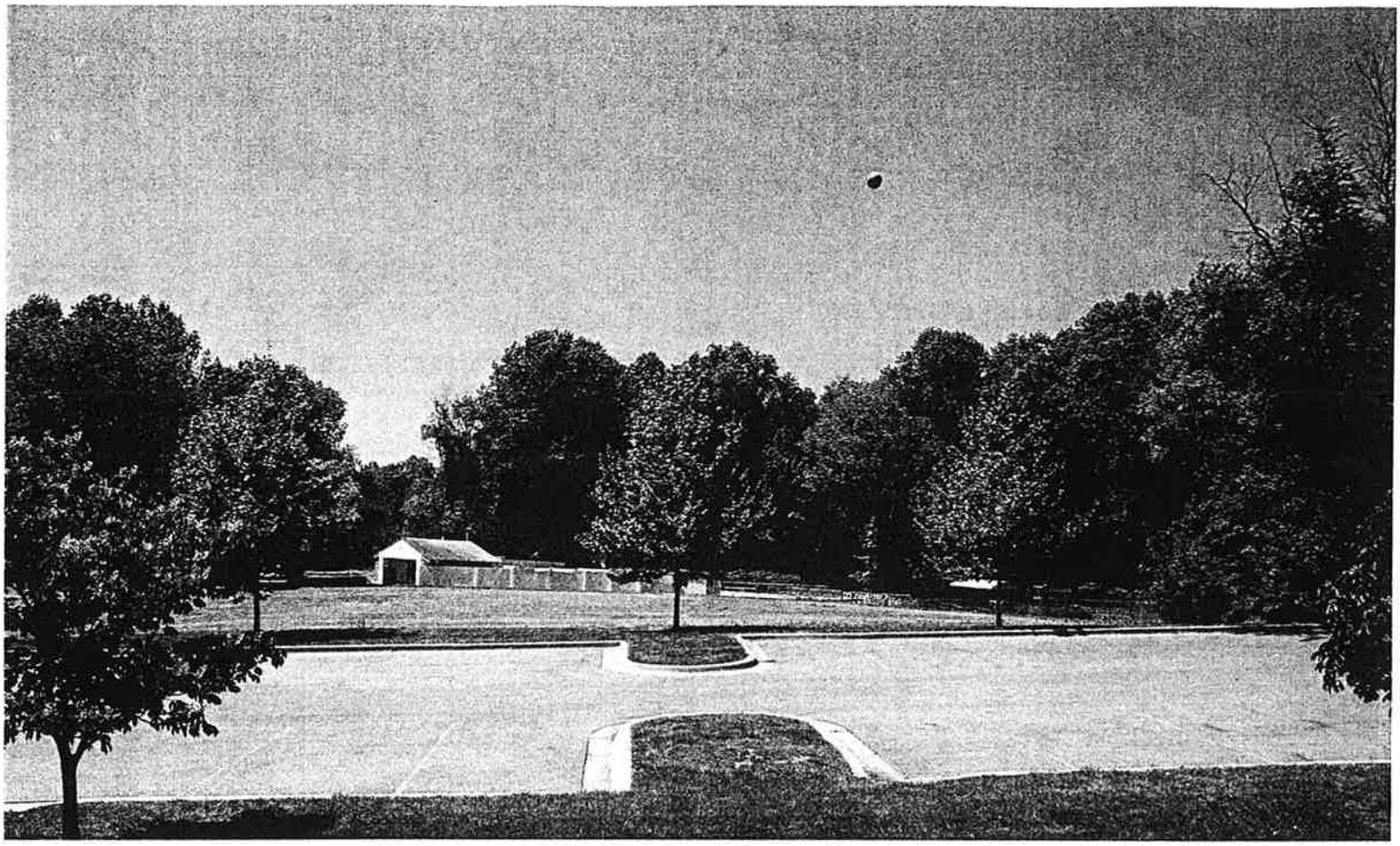
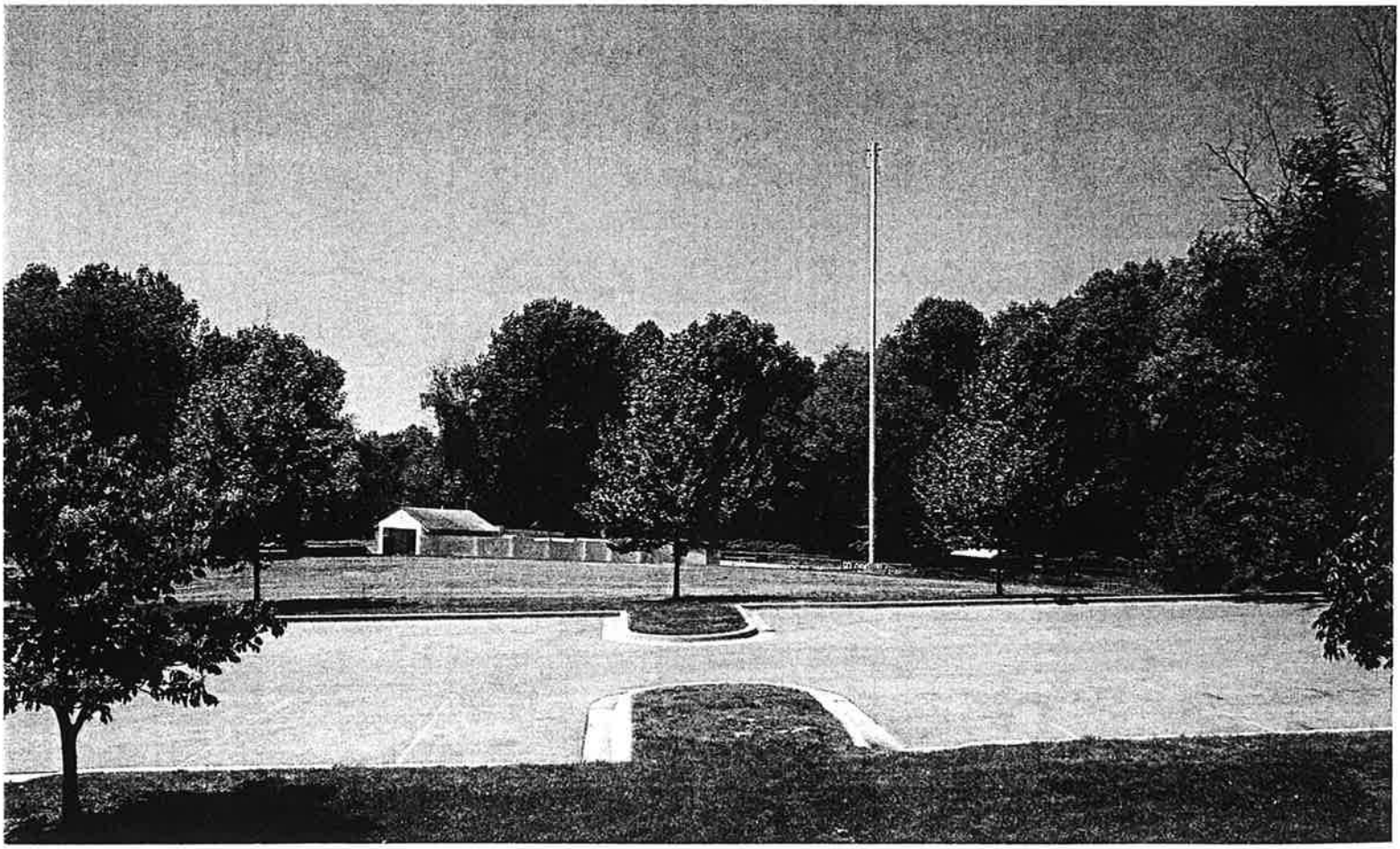


PHOTO - 6



MONTGOMERY COUNTY, MARYLAND
APPLICATION FOR WIRELESS COMMUNICATIONS SITE COORDINATION

DATE: 8.24.05 **NUMBER:** 200508-11
(To be filled in by County)

Applicant Name: Omnipoint Communications CAP Operations, LLC

Address: 12050 Baltimore Avenue, Beltsville, MD 20705

Contact Person and Phone No: Gregory S. Tully, 443-992-3450 GREG.TULLY@T-MOBILE.COM

Provide a description of the proposed installation, including the type and height of the structure (i.e. monopole, rooftop, water tank, guyed tower, self-support tower, etc.) and whether it is existing, modified, or new. Describe any modifications that will be made to existing structure.

Installation of a 120 ft. monopole telecommunication tower with three (3) panel antennas flush-mounted at 120 ft (10 ft. over the tree line). A 10' X 20' concrete foundation with three (3) equipment cabinets will be placed within a 15.5' X 54' fenced equipment compound. Additionally, a GPS antenna will be installed.

Address/City: 1101 Corliss Street, Silver Spring, MD 20903 Zone: R-90

Site Name: WAN272C

Site Owner/Landlord: Oakview Recreation Association

Structure Owner: NA

Latitude/Longitude (NAD27 Degrees/Minutes/Seconds): 39-01-0.97 / 76-59-25.26

Ground Elevation AMSL in feet: 294.46

Antenna Height AGL in feet: 120 ft.

Frequency bands to be used: 1885-1895 Mhz (Rx) ; 1965-1975 Mhz (Tx)

Maximum Effective Radiation Power (EFP): 500 watts

Federal Communications Commission (FCC) Emission Designator: KNLH327 KNLG276

FCC Antenna Structure Registration Number: N/A

Description of antenna(s), including physical size, patterns, gain and orientation (include copy of spec sheet or drawings):

3 EMS model DR65-18-xxDLP2 antennae; Size: 54" x 12" x 4". Gain: 17.3 dBi (15.2 dBd). Orientation: 3 sectors with 1 antenna per sector; 15 degrees, 135 degrees and 255 degrees.

Describe area to be served by the proposed installation. Attach a map of the general area showing the location of the site. Upon request, attach RF propagation studies showing service area coverage surrounding the proposed site with and without the proposed site.

The objective of this site is to add coverage along I-495 and to offload WAN043 which is dropping 94 calls per day.

Will antennas be installed on an existing structure? No

Doug Brown

If not, describe results of investigation about possible co-location. Include a listing of alternative sites considered and an explanation as to why each possible alternative was not selected. If a site was ruled out because of radio frequency (RF) issues, provide RF propagation maps documenting inadequate coverage:

Please note ring on ADC map attached to application. Area is predominantly residential with the proposed site as only possible raw land candidate

Justification of why this site was selected:

Please see attached RF propagation studies.

Will site be used to support government telecommunications facilities or other equipment for government use?
No_____

If yes, describe: _____

N/A_____

Attach a site plan of the proposed facility showing location of monopole, tower, or structure on the property, location of existing and proposed equipment buildings or cabinets, and distance of any new structures or buildings from property lines and other buildings or residences within 300 feet. Clearly identify existing versus proposed facilities. Also provide an elevation sketch of the structure showing major dimensions, existing attachments, and mounting height of proposed antennas. If a balloon test has been performed, please provide copies of the photographs.

Will the antenna installation be in compliance with the maximum permissible RF exposure limits set forth in §1.1310 of the FCC Rules and Regulations? Yes __XX____ No _____
If the answer is no, please attach an explanation.

Type of compliance study required under §1.1307 of the FCC Rules and Regulations:

Categorically Excluded	___XX_
Routine Environmental Evaluation	_____
Environmental Assessment	_____

If antennas will be located on a rooftop, please attach a description of any steps that have been or will be taken to prevent the aggregate RF from exceeding exposure limits.

Montgomery County Code, Chapter 2-58E requires applicants to submit a facility location plan indicating the location of every existing telecommunications transmission facility and the general location of facilities that are anticipated to be built in the near future. Has a new or updated plan been filed with the County within the last year?
Yes ___XX___ No _____. If the answer if no, please submit a plan with this application.

If an application for an FAA review has been submitted or an FAA determination has been issued, please attach a copy.

Application fees have been paid to Montgomery County Government on January 18, 2005.

Submit this application to:
Columbia Telecommunications Corporation
c/o Montgomery County Tower Coordinator
5550 Sterrett Place, Suite 200
Columbia, MD 21044
Phone: (410) 964-5700

T-Mobile

August 24, 2005

RECD AUG 2 4 2005

Mr. Robert Hunnicutt
Montgomery County Tower Coordinator
5550 Sterrett Place Suite 200
Columbia, MD 21044

Dear Mr. Hunnicutt:

Enclosed please find an application to the Montgomery County Telecommunications Transmission Facilities Coordinating Group (MCTTFCG) for recommendation of a proposed facility for Omnipoint Communications CAP Operations, LLC (T-Mobile USA Inc.) at the following location:

Oakview Recreation Association
1101 Corliss Street
Silver Spring, MD 20903

This proposal is to erect a new 120 ft. monopole telecommunication tower with three (3) flush-mounted antennas mounted at 120 ft., located in an R-90 zone. A 15.5' x 54' fenced equipment compound (6 ft. chain-link fence) will house both the monopole and a 10' X 20' concrete pad on which will be placed three (3) RBS 2100 equipment cabinets.

T-Mobile USA, Inc., respectfully requests consideration of this application at the next meeting of the MCTTFCG, if possible. We trust that the application and attachments are inclusive; however if additional information is required feel free to contact me at 443-992-3450. Thank you for your consideration.

Sincerely,

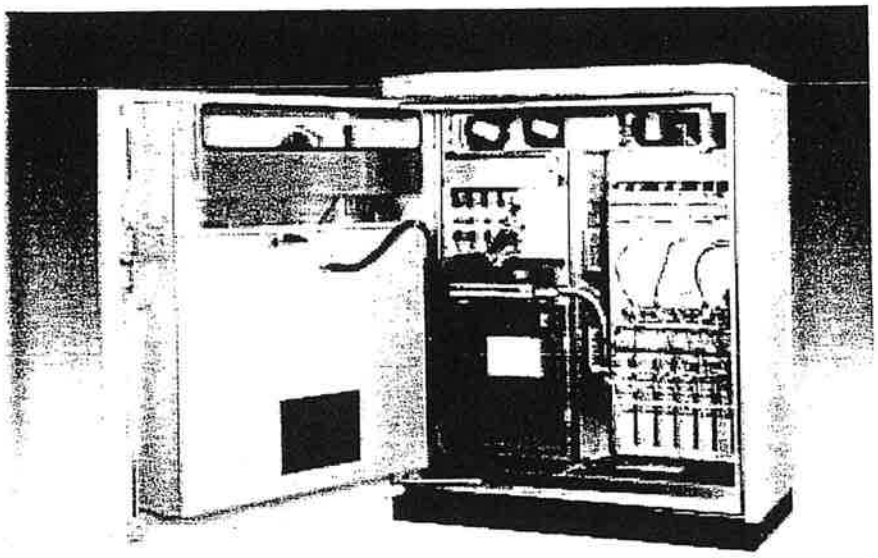
Gregory S. Tully
Zoning Manager

/enc.

12050 Baltimore Avenue
Beltsville, MD 20705

RBS 2106

The GSM Macro Outdoor Base Station



RBS 2106 is a high capacity, compact outdoor macro radio base station supporting up to twelve transceivers per cabinet. It is possible to build one, two and three sector configurations including dual band configurations in one cabinet.
Being the latest member in the RBS 2000 family, RBS 2106 is to date the most powerful outdoor RBS in the world. Keeping the successful characteristics of the existing RBS 2000 portfolio and improving functionality as well as operation and maintenance makes the RBS 2106 a very cost-effective solution for growing GSM operators.

The RBS 2000 family supports a wide range of applications ranging from extreme coverage to extreme capacity. Being a RBS 2000 member guarantees coexistence with the installed base of RBS 200 and RBS 2000 products. Ericsson's synchronization based BSS features ensure that transceivers from different generations of radio base stations can easily form common cells. Operators can therefore bridge the past with the future. By making existing sites futureproof, investments are protected while migrating to 3G.

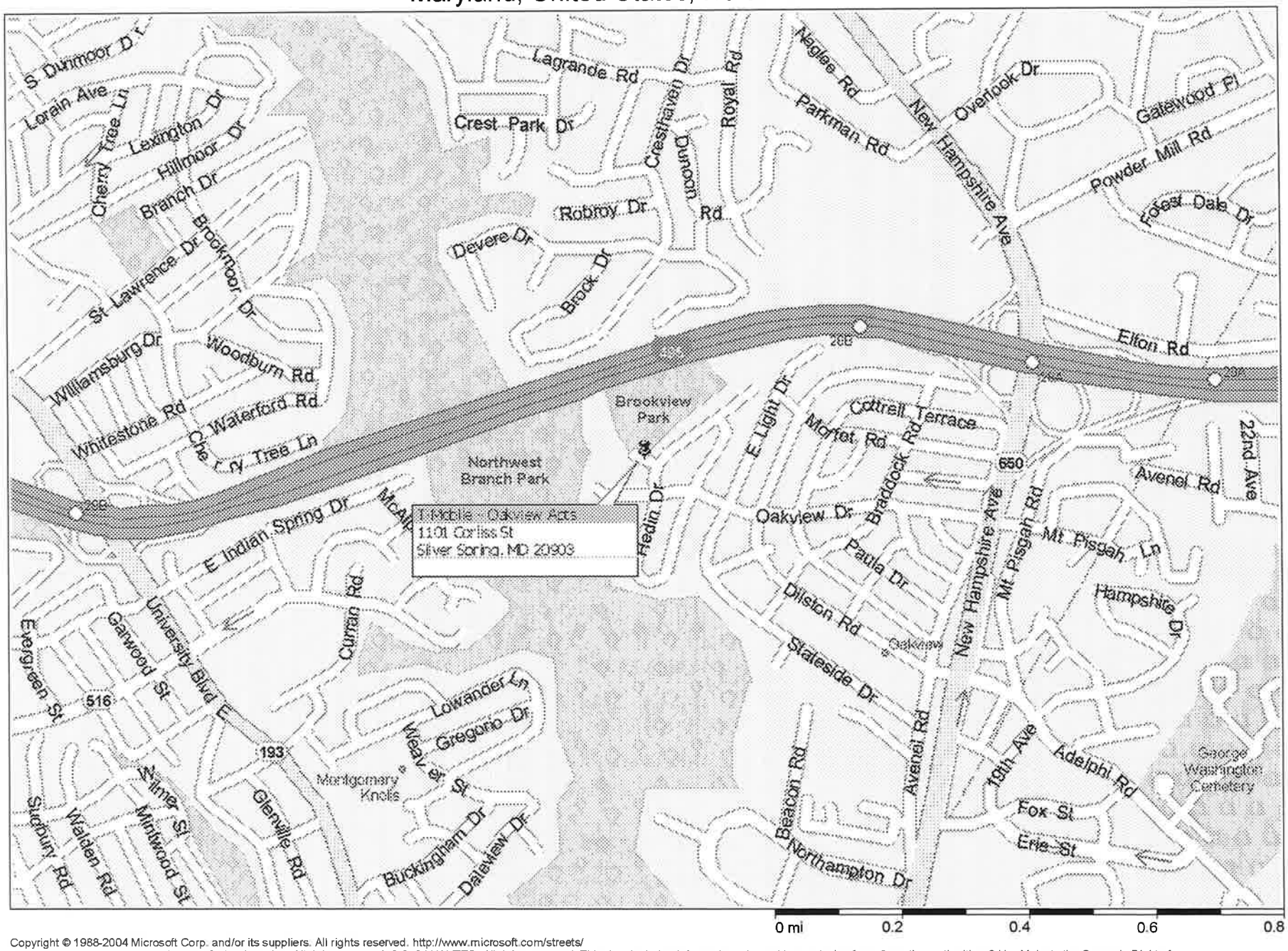
Part of the grow-on-site concept

Since it is becoming increasingly difficult to find new base station sites, it is of great interest to remain on the existing sites as long as possible. Site space is often a limiting factor for capacity growth. The powerful RBS 2106, included in Ericsson's grow-on-site toolbox, addresses this problem. On many sites, two or more existing cabinets can be replaced by one RBS 2106. This is of major importance, since it makes it possible to reuse the space to rollout WCDMA equipment. The RBS 2106 will pave the way for WCDMA.

Also interesting for new locations, the RBS 2106 offers a complete solution in stand-alone cabinet which rapidly can be implemented outdoors. All the units to run the RBS are included in this single cabinet, there is no need for an extra product.

ERICSSON

Maryland, United States, North America



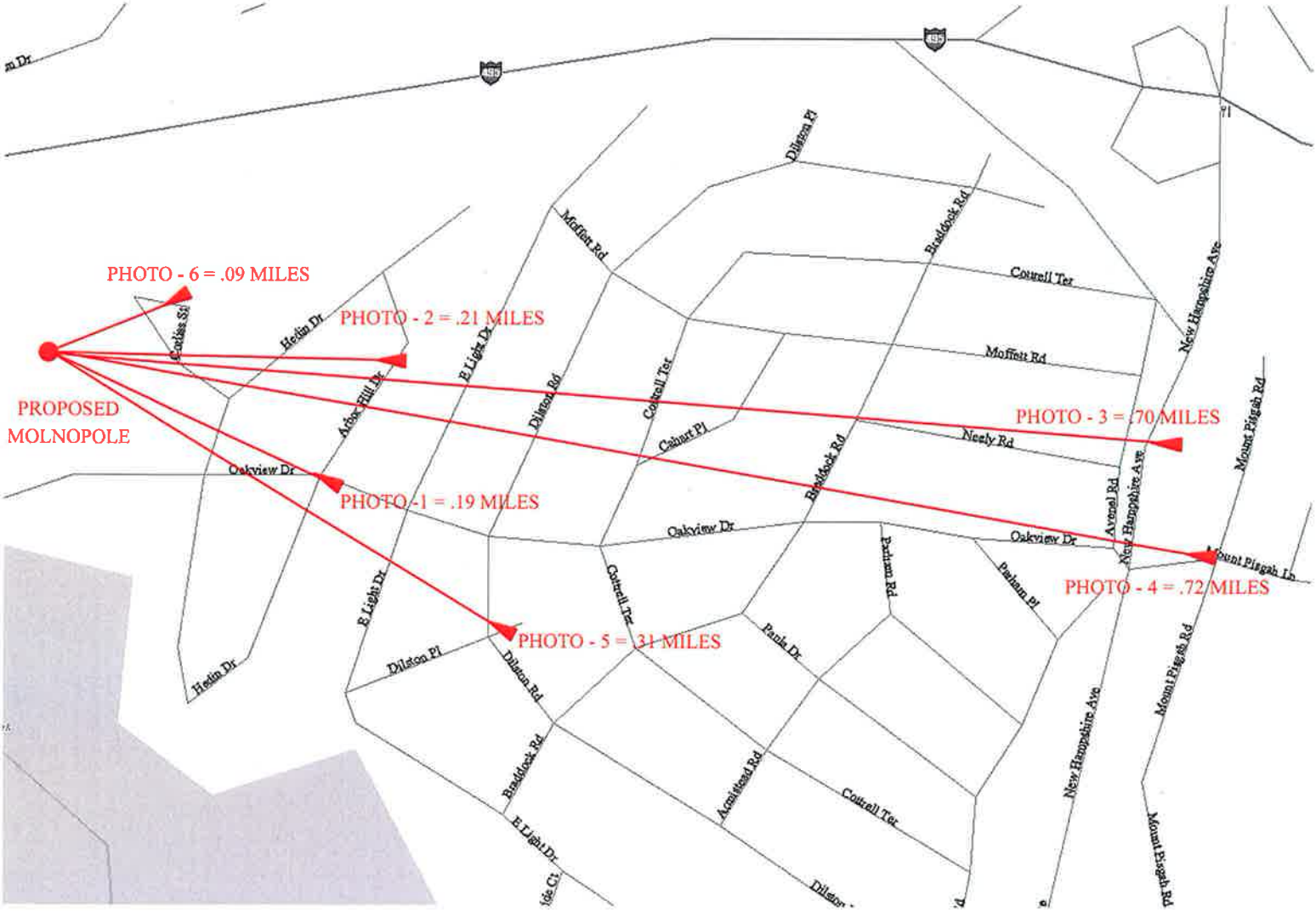


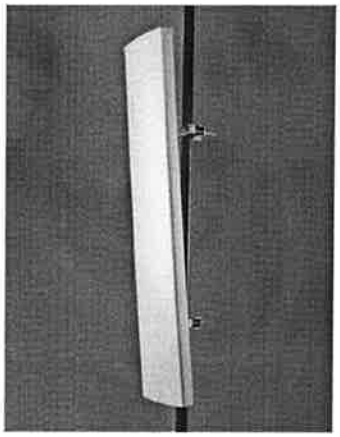
PHOTO - 6 = .09 MILES
PHOTO - 2 = .21 MILES
PROPOSED
MOLNOPOLE
PHOTO - 3 = .70 MILES
PHOTO -1 = .19 MILES
PHOTO - 4 = .72 MILES
PHOTO - 5 = .31 MILES
Heslin Dr
Arbor Hill Dr
E Light Dr
Moffett Rd
Dilston Rd
Colwell Ter
Cabart Pl
Braddock Rd
Cottrell Ter
Neely Rd
Oakview Dr
New Hampshire Ave
Mount Pisgah Rd
Avenel Rd
Parham Rd
Parham Pl
Paula Dr
Dilston Pl
Acmistead Rd

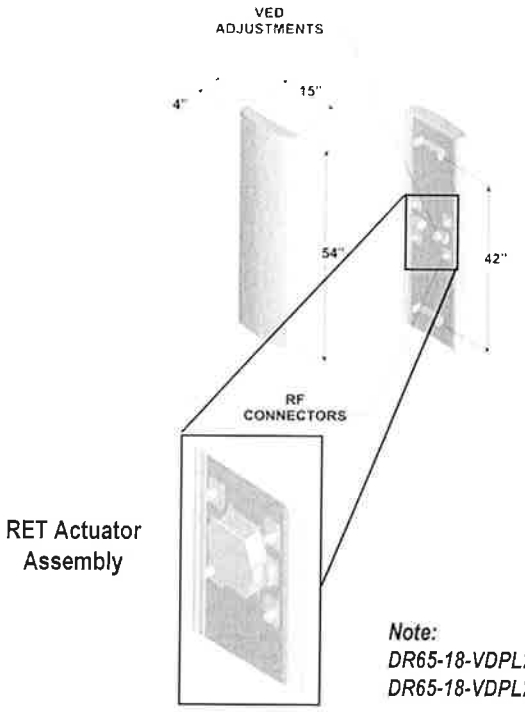
DR65-18-VDPL2Q/-R

Dual DualPol® Polarization

1850 MHz - 1990 MHz

Cobra™
MET/RET
OptiRange™
Suppressor™



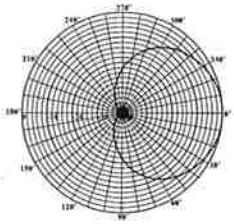


MET Mechanical
Knob Assembly

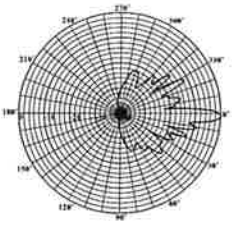
RET Actuator
Assembly

Note:
DR65-18-VDPL2Q represents MET;
DR65-18-VDPL2Q-R represents RET

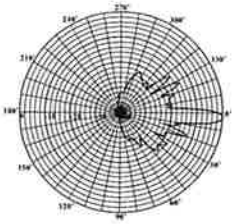
Patterns



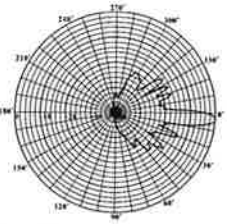
Azimuth



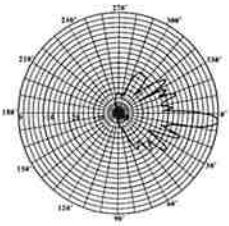
Elevation
2° Downtilt



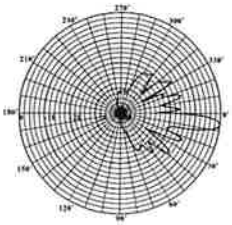
Elevation
3° Downtilt



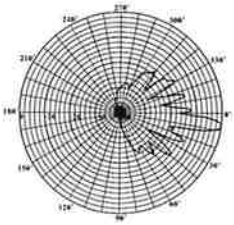
Elevation
4° Downtilt



Elevation
5° Downtilt



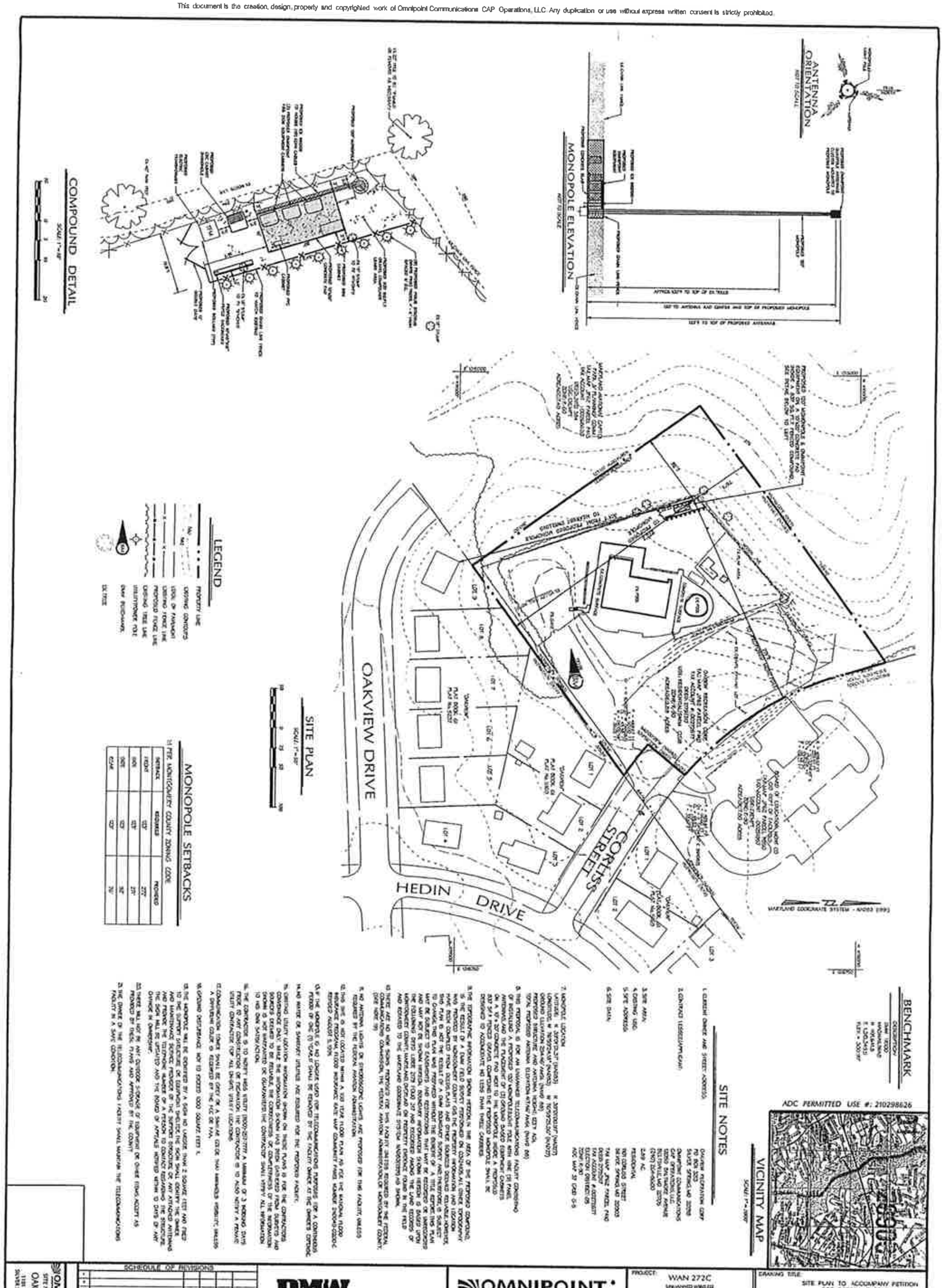
Elevation
6° Downtilt

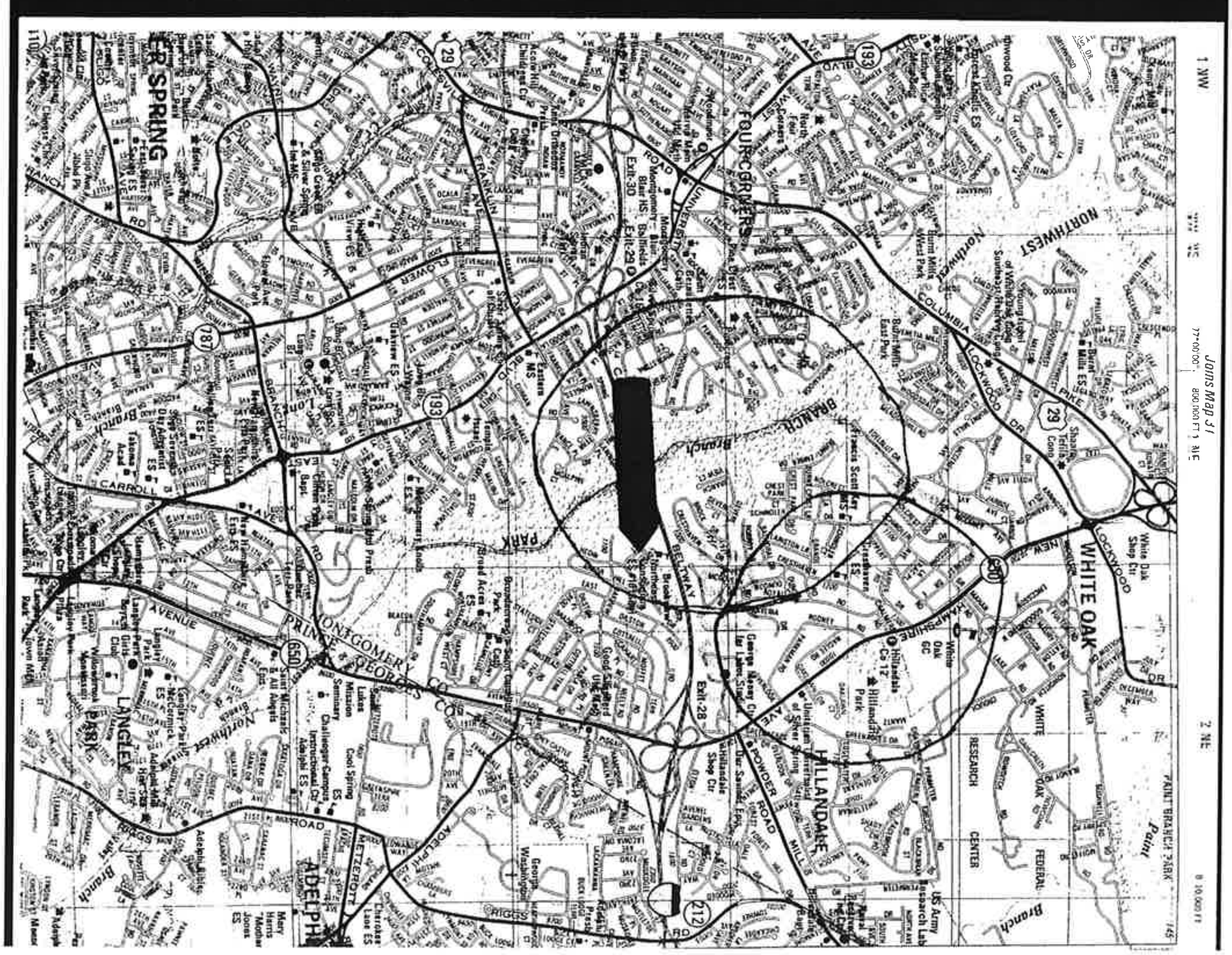


Elevation
7° Downtilt

Revised 07/19/04

+1 770.582.0555 ext. 5310 • Fax +1 770.729.0036
www.emswireless.com





Joins Map 31
WHITE OAK
FOUR CORNERS
HILLANDALE
LANGLEY PARK
ADELPHI
NORTHWEST
WHITE OAK FEDERAL RESEARCH CENTER
PRINCE GEORGES CO
MONTGOMERY CO
BELTWAY

EMS Wireless

AISG

Cobra™ MET/RET OptiRange™ Suppressor™

DR65-18-VDPL2Q/-R

Dual DualPol® Polarization

1850 MHz - 1990 MHz

Electrical Specifications

Azimuth Beamwidth (-3 dB)	65°
Elevation Beamwidth (-3 dB)	6.5°
Elevation Sidelobes (Upper)	≥ 15 dB
Gain	16.2 dBi (14.1 dBd)
Polarization	Quad Linear, Slant (± 45°)
Port-to-Port Isolation	≥ 30 dB
Front-to-Back Ratio	≥ 36 dB
Electrical Downtilt Options	2° - 7° Variable
MET	1° Increments
RET	0.1° Increments
VSWR	1.35:1 Max
Connectors	4; 7-16 DIN (female)
Power Handling	300 Watts CW
Passive Intermodulation	≤ -150 dBc [2 x 20W (+ 43 dBm)]
Lightning Protection	Chassis Ground

Mechanical Specifications

Dimensions (L x W x D)	54 in x 15 in x 4 in (137.2 cm x 38.1 cm x 10.2 cm)
Rated Wind Velocity	130 mph (209 km/hr)
Equivalent Flat Plate Area	5.6 ft² (.52 m²)
Front Wind Load @ 100 mph (161 kph)	166 lbs (738 N)
Side Wind Load @ 100 mph (161 kph)	MET: 44 lbs (196 N); RET: 46.5 lbs (207 N)
Weight (Without Mounting Kit)	MET: 26 lbs (11.8 kg); RET: 30 lbs (13.6 kg)

Mounting Options

MTG-S02-10, MTG-DXX-20*, MTG-CXX-10*, MTG-C02-10, MTG-TXX-10*

*Note: Antenna ships with 15° mechanical downtilt kit. *Model number shown represents a series of products. See Mounting Options section for specific model number.*

Revised 06/08/05

+1 770.582.0555 ext. 5310 • Fax +1 770.729.0036
www.emswireless.com