

ORDINANCE NO. 3576

AN ORDINANCE (a) to adopt the 1992 Master Plan for the City of Alexandria, Virginia, by adopting and incorporating therein the fourteen small area plan chapters and the six text chapters on master plan goals, objectives, policies and strategies, land use, transportation, urban design, historic preservation and demographics, or any part thereof, which have already been adopted and certified by the planning commission and approved or approved and adopted by City Council as amendments to the 1974 Adopted Consolidated Master Plan of the City of Alexandria, Virginia, and (b) to repeal the 1974 Adopted Consolidated Master Plan of the City of Alexandria, Virginia, as amended.

WHEREAS, the City Council of Alexandria finds and determines that:

1. In April 1987, city council directed that the 1974 Adopted Consolidated Master Plan of the City of Alexandria, Virginia, be updated and revised.

2. On November 10, 1987, city council appointed a master plan task force to assist the department of planning and community development, other city agencies and departments, the planning commission and city council in this endeavor. In December 1988 the master plan task force transmitted to the city council and planning commission its Report On Goals and Objectives and On Development Potential Areas, which has been considered by the planning commission and city council in updating and revising the master plan.

3. Pursuant to the directive of city council, the department of planning and community development has held a series of meetings with residents and property owners throughout the city, for the purpose of identifying land use and other master plan issues within the entire city and each area comprising the fourteen small area plan chapters of the master plan, and for the purpose of soliciting public comment and suggestion as to such issues.

4. At the conclusion of these community meetings, the department of planning community development has prepared, and has submitted to the Planning Commission of the City of Alexandria, the fourteen small area plan chapters of the master plan.

5. After full opportunity for comment and public hearing, the planning commission has heretofore revised the said small area plan chapters, and by resolution adopted and certified each such revised small area plan chapter to city council for adoption as an amendment to the 1974 Adopted Consolidated Master Plan of the City of Alexandria, Virginia, as amended.

6. City council has heretofore conducted informational public hearings on each small area plan chapter, as certified by the planning commission, and has approved each such small area plan, as amended by the city council.

7. In addition, city council has heretofore adopted each such small area plan chapter, except the Potomac Yard/Potomac Greens' small area plan chapter, by ordinance as an amendment to the 1974 Adopted Consolidated Master Plan of the City of Alexandria, Virginia.

8. With respect to the Potomac Yards/Potomac Greens small area plan chapter:

(a) The 14 million square feet development proposal advanced as the basis for a small area plan by the owners and developers of the Potomac Yard/Potomac Greens sites (1) is overly dense and incompatible with the existing residential character of the city, (2) will have unacceptable disruptive impacts on the existing residential neighborhoods to the east, west and south of the sites, and (3) will, apart from traffic congestion generated by 20 years of regional growth, result in the unacceptable levels of traffic congestion and the unacceptable lengthening of traffic congestion beyond the peak hour to include other hours in the peak period and the lengthening of the peak period itself; and

(b) No credible evidence contrary to the findings and conclusions of the planning commission expressed in its resolution adopting the Potomac Yard/Potomac Greens' small area plan has been presented to the city council and the planning commission's findings and conclusions are ratified, confirmed and adopted by city council; and

(c) Based upon present and reasonably foreseeable conditions and trends, the plan of development set forth in the Potomac Yard/Potomac Greens' small area plan chapter accomplishes a coordinated, adjusted and harmonious development of the geographic portion of the city within such small area plan, preserves and protects the existing residential character of the city as a whole, preserves existing neighborhoods, allows an appropriate level of economic growth within the geographic area encompassed by the small area plan that is consistent with the general welfare of the residents of the city, and is economically viable.

9. The process of amending the 1974 Adopted Consolidated Master Plan has been completed with the approval of the fourteen small area plan chapters, encompassing all areas within the corporate jurisdiction of the City of Alexandria, together with the six associated text chapters on master plan goals, objectives, policies and strategies, land use, transportation, urban design, historic preservation, and

demographics, which small area plan and text chapters are herein referred to as the 1992 Master Plan of the City of Alexandria, Virginia.

10. The planning commission has reviewed and considered as a whole the 1992 Master Plan of the City of Alexandria, Virginia, and, on the 27th day of May 1992, conducted a duly advertised hearing thereon with all public testimony and written comment considered, and has approved and certified same to the city council.

11. The 1992 Master Plan of the City of Alexandria, Virginia, is necessary and desirable to guide and accomplish a coordinated, adjusted, and harmonious development of the city as a whole and of the geographical divisions thereof encompassed within each small area plan chapter.

12. The 1992 Master Plan of the City of Alexandria, Virginia, establishes a cohesive and comprehensive plan to preserve and protect the existing residential character of the city, to preserve existing neighborhoods, and to direct economic growth to appropriate locations consistent with the general welfare of the residents of the city.

13. Based upon the foregoing findings and all other facts and circumstances of which city council may properly take notice in its capacity as the legislative body of the City of Alexandria, adoption by this ordinance of the 1992 Master Plan of the City of Alexandria, Virginia, is necessary and desirable to protect the public health, safety and general welfare of the residents of the City of Alexandria; now, therefore,

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That the findings and conclusions expressed by the planning commission in its resolution adopting the 1992 Master Plan of the City of Alexandria, Virginia, which resolution is attached hereto and incorporated fully herein by reference, are ratified, confirmed and adopted by the Council of the City of Alexandria.

Section 2. That the 1992 Master Plan of the City of Alexandria, Virginia, comprised of the maps, plats, charts and descriptive matter attached hereto and incorporated by reference is hereby adopted in its entirety as the Master Plan of the City of Alexandria, Virginia, in accord with §§ 2.04(w) and 9.01 of the Charter of the City of Alexandria, Virginia.

Section 3. That the 1992 Master Plan of the City of Alexandria, Virginia, shall supersede the 1974 Adopted Consolidated Master Plan of the City of Alexandria, Virginia, which plan and all ordinances adopting and amending same are hereby repealed.

Section 4. That the city clerk shall transmit a duly certified copy of this ordinance to the Clerk of the Circuit Court of the City of Alexandria, Virginia, and the said Clerk of the Circuit Court shall file same among the court records.

Section 5. That this ordinance shall become effective upon the date and at the time of its final passage.

PATRICIA S. TICER  
Mayor

Final Passage: June 13, 1992

RESOLUTION  
NO. MP-92-3

WHEREAS, under the Provisions of Sections 9.04 and 9.05 of the City Charter, the City Planning Commission has heretofore adopted amendments to the 1974 Adopted Consolidated Master Plan of the City, and the City Council has heretofore approved such amendments; and

WHEREAS, the process of amending the 1974 Adopted Consolidated Master Plan has been completed with the approval of 14 small area plans, encompassing all areas within the corporate jurisdiction of the City of Alexandria; together with six associated text chapters on master plan goals, objectives, policies and strategies; land use; transportation; urban design; historic preservation and demographics, which small area plans and text chapters are hereinafter referred to as the 1992 Master Plan of the City of Alexandria, Virginia; and

WHEREAS, the planning commission has reviewed and considered the 1992 Master Plan of the City of Alexandria, Virginia; and

WHEREAS, a duly advertised public hearing on the 1992 Master Plan of the City of Alexandria, Virginia, was held on the 27th day of May 1992 with all public testimony and written comment considered; and

WHEREAS, the Commission finds that:

1. The Department of Planning and Community Development has made comprehensive surveys and studies of the existing conditions, trends of future developments and probable future requirements of the City as a whole and of each geographical division of the City comprising a small area plan which the Commission ratifies and adopts; and
2. The Planning Commission and City Council have heretofore conducted public hearings on, considered and approved each element of the 1992 Master Plan of the City of Alexandria, Virginia; and
3. The 1992 Master Plan of the City of Alexandria, Virginia, is necessary and desirable to guide and accomplish a coordinated, adjusted, and harmonious development of the City as a whole and of the geographical divisions thereof encompassed within each small area plan; and
4. The 1992 Master Plan of the City of Alexandria, Virginia, establishes a cohesive and comprehensive plan to preserve and protect the existing residential character of the city, to preserve existing neighborhoods, and to direct economic growth to appropriate locations consistent with the general welfare of the citizens of the City; and

5. Based upon the foregoing findings and all other facts and circumstances of which the Commission may properly take notice in making and adopting a master plan for the City of Alexandria, adoption of the 1992 Master Plan of the City of Alexandria, Virginia, will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the residents of the City;

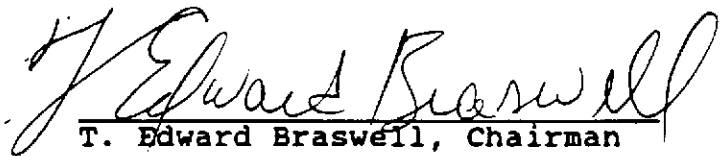
NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Alexandria, Virginia, that:

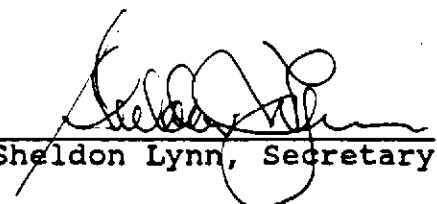
1. The 1992 Master Plan of the City of Alexandria, Virginia, comprised of the maps, plats, charts and descriptive matter attached hereto and incorporated by reference, are hereby adopted in its entirety as the Master Plan of the City of Alexandria, Virginia, in accord with Sections 9.04 and 9.05 of the Charter of the City of the City of Alexandria, Virginia.

2. The 1992 Master Plan of the City of Alexandria shall supercede the 1974 Adopted Consolidated Master Plan of the City of Alexandria, Virginia.

3. This resolution shall be signed by the Chairman of the Commission and attested by its Secretary, and a true copy of this resolution accompanied by the 1992 Master Plan of the City of Alexandria, Virginia, shall be forwarded and certified to the City Council.

ADOPTED THE 27th DAY OF MAY, 1992.

  
T. Edward Braswell, Chairman

ATTEST:   
Sheldon Lynn, Secretary

5. Based upon the foregoing findings and all other facts and circumstances of which the Commission may properly take notice in making and adopting a master plan for the City of Alexandria, adoption of the 1992 Master Plan of the City of Alexandria, Virginia, will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the residents of the City;

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Alexandria, Virginia, that:

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4. The 1992 Master Plan of the City of Alexandria, Virginia, establishes a cohesive and comprehensive plan to preserve and protect the existing residential character of the city, to preserve existing neighborhoods, and to direct economic growth to appropriate locations consistent with the general welfare of the citizens of the City; and

**PLEASE RETAIN**  
**POTOMAC YARD/POTOMAC GREENS**  
**SMALL AREA PLAN**

*As approved by City Council May 16, 1992*

**MASTER PLAN**  
**ALEXANDRIA, VIRGINIA**

# POTOMAC YARD/POTOMAC GREEN

## SMALL AREA PLAN

### ALEXANDRIA CITY COUNCIL

Mayor Patricia S. Ticer

Vice Mayor William C. Cleveland

Kerry J. Donley

T. Michael Jackson

Redella S. Pepper

Lonnie C. Rich

David G. Speck

### CITY MANAGER

Vola Lawson

### PREPARED BY:

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APPROVED BY COUNCIL MAY 16, 1992

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## **PURPOSE OF THE PLAN**

The purpose of this document is to update the Adopted 1974 Consolidated Master Plan for the Potomac Yard/Potomac Greens area and as a part of the City's new Master Plan. Once adopted, the Small Area Plan will serve as the basis for future City Council policy initiatives and actions affecting land use, zoning, capital improvements and programs in the Potomac Yard/Potomac Greens area.

## **ORGANIZATION AND CONTENTS**

The Small Area Plan is organized into two sections: Background and Issues and Recommendations. The first section reviews and analyzes existing conditions and trends in the study area including physical description, demographics, land use, zoning economic development activities and trends, transportation and urban design. This section also retraces past City policies in the area, including the 1974 Master Plan, rezoning, resolutions and capital improvement programs. Based on this analysis this section identifies issues which need to be addressed in the plan for the area.

The second section lists the goals, objectives and specific recommendations on land use, zoning, transportation and urban design.

## DESCRIPTION OF THE AREA

The Potomac Yard/Potomac Greens plan area (Map 1) is located in the northeastern section of the City along the Potomac Corridor. This area is bounded generally by Jefferson Davis Highway (U.S. Route 1) on the west; Four Mile Run on the north; the Potomac River on the east; and the eastern right-of-way of the RF&P Railroad tracks, Slaters Lane, and the northern property lines of Potowmack Crossing Apartments, the Towngate Office Development and Marina Towers to the south.

The George Washington Memorial Parkway runs north-south through the study area, physically separating two distinctly different sections of the study area. East of the Parkway on the Potomac River is the federally owned park area, Daingerfield Island. To the west of the Parkway are the Potomac Yard and Potomac Greens, properties of the RF&P Railroad.

### Daingerfield Island

Daingerfield Island is a 109 acre, federally owned park which is part of the George Washington Memorial Parkway System. The park is located east of the Parkway on the Potomac River and includes a sailing marina, a restaurant, several multi-purpose playfields and a wooded park area.

### Potomac Yard/Potomac Greens

Within the 264.2 acres comprising the Alexandria portion of the Potomac Yard are the RF&P Railroad tracks, the Amtrak service route and the Metrorail line. The Yard contains facilities for classifying, interchanging and servicing freight cars and engines. Along the southeastern portion of the Yard east of the Metrorail tracks is a piggyback facility involving the transport of truck trailers by flatbed rail cars.

North of the piggyback facility is the Potomac Greens site. This parcel is a 38.6 acre vacant tract of railroad property, adjacent to the Parkway, for which the RF&P Railroad has proposed to develop 2.4 million square feet of predominately commercial office uses.

## AREA HISTORY

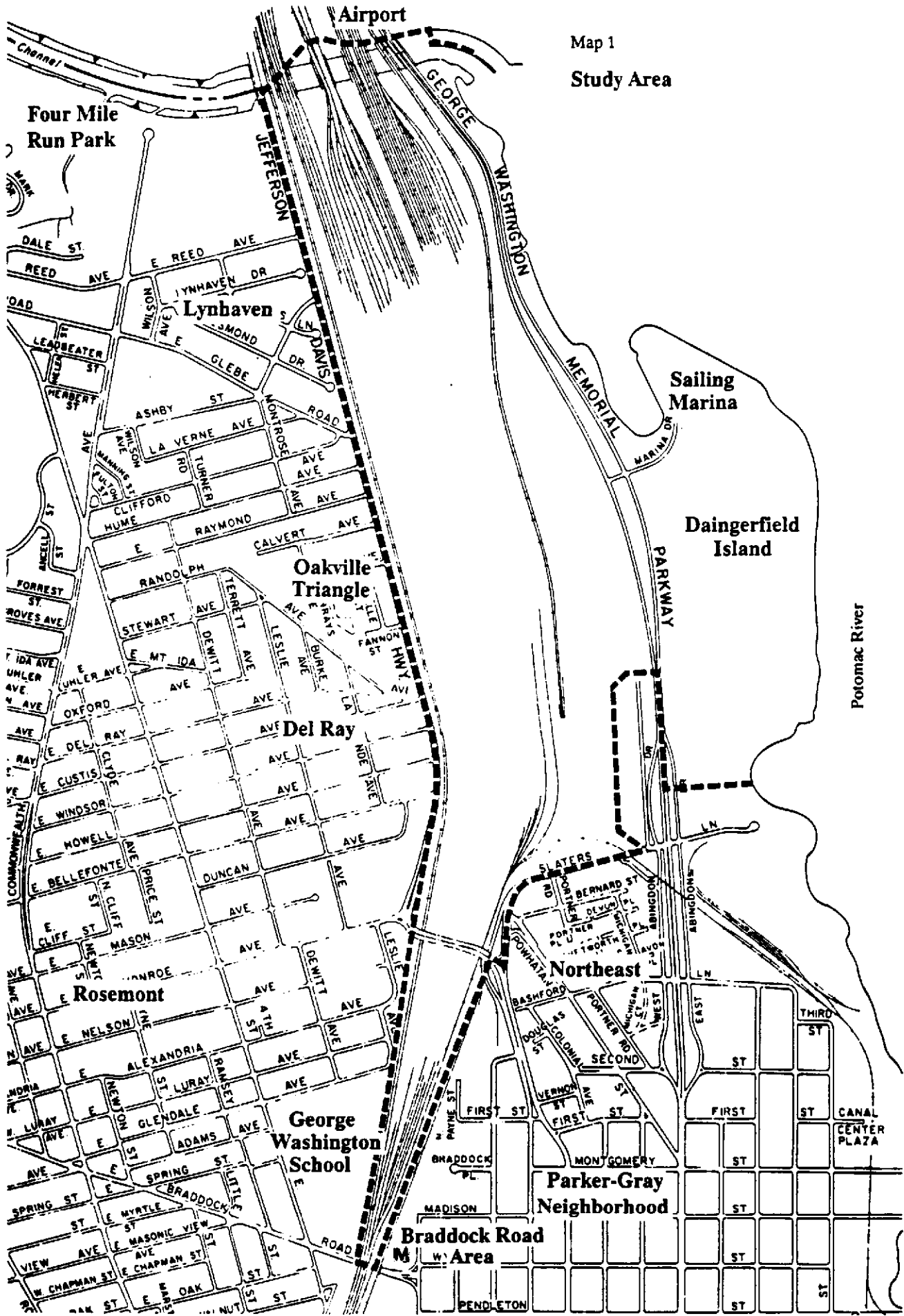
The Potomac Yard/Potomac Greens study area is part of the original 6,000 acre tract purchased by John Alexander, the founder of the City of Alexandria. When the cities of Alexandria and Georgetown were established in the 1700s, a transportation corridor was developed along the site. In 1843, the Alexandria Canal was completed through the site, running along the western edge of Potomac yard and providing a link to the C&O Canal at Georgetown. The Canal ceased operation in the late 1880s, as railroad use increased.

The first rail line on the Potomac Yard was completed in 1857 and connected Old Town Alexandria with South Arlington. Service was soon extended between Alexandria and Leesburg. The Potomac Yard opened in 1906 for the purpose of classifying the freight of six different railroads. Known as the "Gateway to the South," the new yard was one of the largest in the United States. Yard operations reached their peak during World War II.

The Railroad Yard provided a major impetus for the development of surrounding residential areas. The town of Potomac, now the Del Ray and Mt. Jefferson neighborhoods in Alexandria, was known as a railroad town; many of its residents were railroad workers.

Today, about 1,500 cars a day are processed by the Yard, down from a peak of almost 5,000 cars years ago. Half of the Yard has already been closed, and the RF&P Railroad now plans to close the remainder of the Yard and maintain just a rail corridor through the site.

Four Mile Run Park



Sailing Marina

Daingerfield Island

Potomac River

George Washington School

Northeast

Parker-Gray Neighborhood

Braddock Road

Potomac Yard / Potomac Greens



## DEMOGRAPHICS

### Population

There is no residential development, and therefore no population, in the Potomac Yard/Potomac Greens planning area.

### Employment

An estimated 266 persons were employed within the Potomac Yard/Potomac Greens Area in 1990. Over half of these persons (54%) are employed by the railroad at Potomac Yard. The number of persons employed at the railyard has been declining since the late 1970s as railyard operations have been declining; less than half the volume of freight cars are handled by the Potomac Yard compared to the late 1970s.

The remainder of the persons employed in the area work at Daingerfield Island, at the sailing Marina and restaurant; and in the commercial service buildings in the north side of Slaters Lane.

**Table 1**  
**Estimated Employment<sup>1</sup>**

<u>Area</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
Potomac Yard	388	323	143
Daingerfield Island	10	10	50
Slaters Lane Area	-	47	73
Total Employment	390	333	193

<sup>1</sup>Estimated by the Dept. of Planning and Community Development.

## EXISTING LAND USE

The Potomac Yard/Potomac Greens study area consists of approximately 412.9 acres. The major land uses within the tract are railroad transportation use and park use; there is also the large vacant Potomac Greens parcel and a small amount of service commercial use. Map 2 shows the existing land use.

### Transportation/Utility Land Use

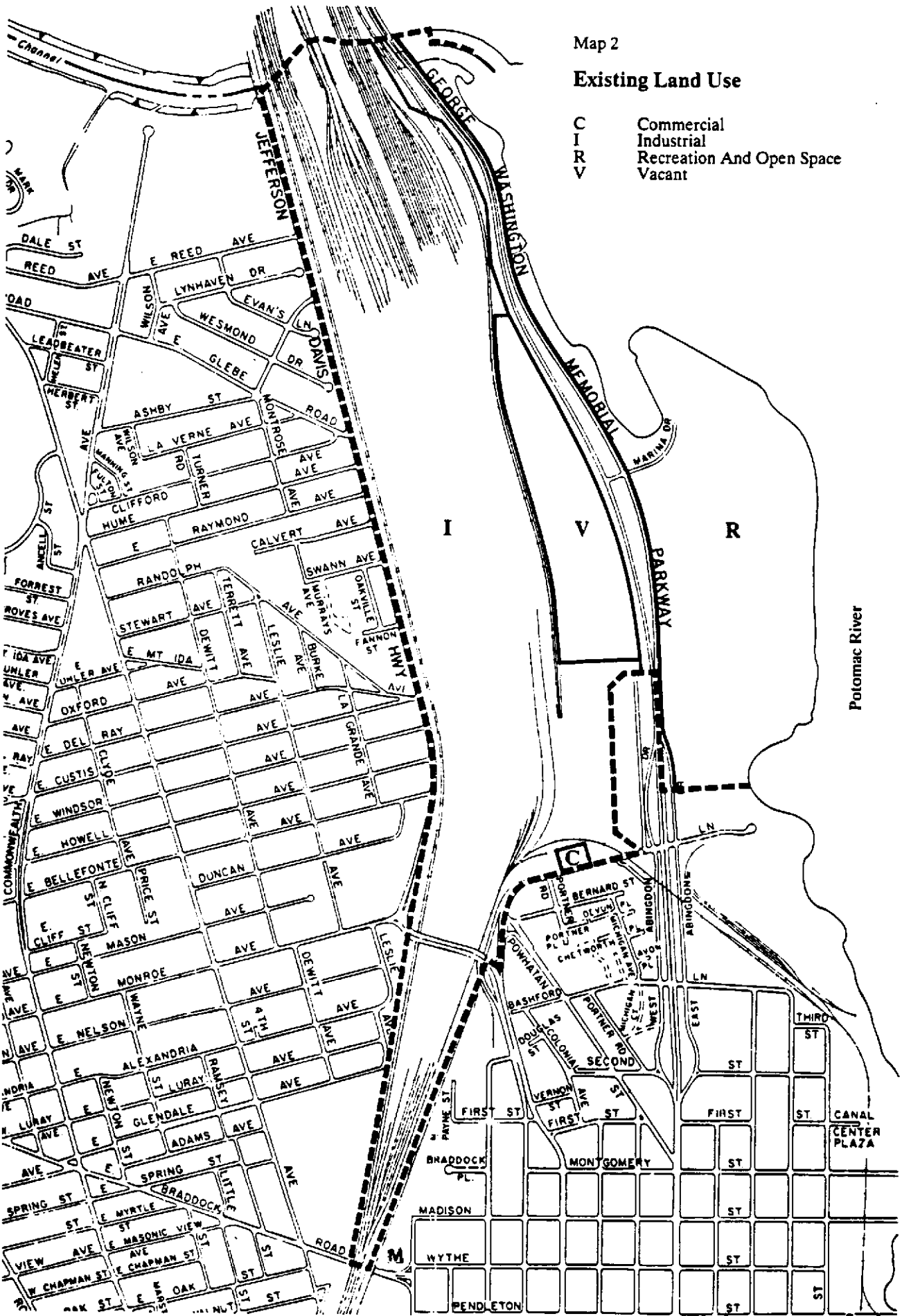
About 266 acres, over two-thirds of the total land area within the study area, is used for railroad use and is classified as transportation/utility (Table 2). The RF&P Potomac Yard is known as the "Gateway to the South" and provides terminal service to five different railroad companies. The basic function of the yard is to receive, classify and dispatch freight cars servicing the Eastern Seaboard. As indicated previously, this function is being phased out; trackage on the southbound hump is already being removed as of this writing. The railroad land use also includes the right-of-ways for passenger, freight, and Metro rail service.

### Park, Recreation and Open Space Land Use

Daingerfield Island is a 109 acre recreation area owned by the Federal Government which includes facilities for sailing, biking, hiking and field sports.

Existing Land Use

- C Commercial
- I Industrial
- R Recreation And Open Space
- V Vacant



Potomac Yard / Potomac Greens



A sailing marina is located at the northern tip, with slips for 185 boats and a dry storage area for about 450 boats. The marina also includes boat storage sheds, a repair and ramp area and a five-ton boat crane. A new restaurant, snack bar and concession shop were recently constructed in this area. Further south is a picnic area and a soccer field.

The center of Daingerfield Island includes a National Park Service tree research nursery and maintenance facility. This part of the site is not open to the public.

There is a natural zone occupying the remainder of the site. In accordance with the Master Plan for Daingerfield Island this portion of the site to be kept in its natural state.

The Mount Vernon Trail, a bike and pedestrian path, runs through Daingerfield Island adjacent to the Parkway. This is a 17 mile trail stretching between Roosevelt Island and Mount Vernon.

**Table 2**  
**EXISTING LAND USE<sup>1</sup>**

<u>Land Use</u>	<u>Square Feet</u>	<u>Acres</u>	<u>Percent</u>
Utility/Transportation	11,578,248	264.2	64.0
Recreation/Open Space	4,748,040	109.0	26.4
Service Commercial	41,213	0.9	0.2
Vacant	1,679,673	38.6	9.4
Total	18,047,174	412.9	100.0

<sup>1</sup>Land use area is estimated on data from several sources.

**Service Commercial**

A small amount of land (0.9 acres) on the north side of Slaters Lane is in service commercial use. There are three warehouse type buildings in this area, including two located on property leased from the RF&P railroad. These buildings are occupied by Domino's Pizza, an Avis garage and storage facility and a commercial firm, Staff Directories Ltd.

**Vacant Land**

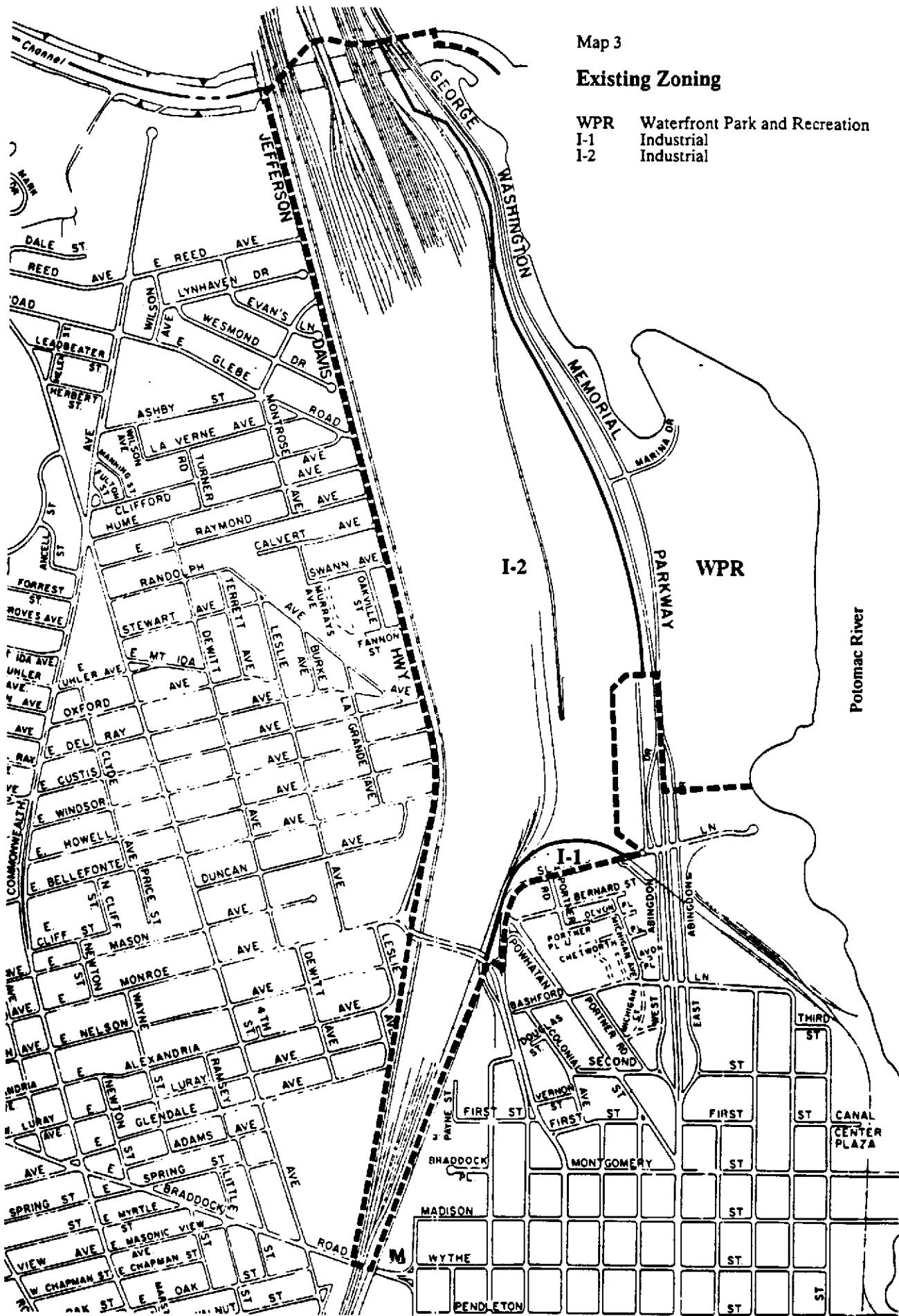
The only vacant parcel within the study area is the Potomac Greens site which comprises 9% of the study area.

**EXISTING ZONING**

Existing zoning within the area (Map 3) is generally I-2 Industrial west of the George Washington Parkway, on the Potomac Yard and Potomac Greens parcels; and WPR-Waterfront Parks and recreation east of the Parkway, on Daingerfield Island. There are also a few acres with I-1 Industrial zoning.

Existing Zoning

- WPR Waterfront Park and Recreation
- I-1 Industrial
- I-2 Industrial



Potomac Yard / Potomac Greens



## Industrial Zoning

In total, about 298 acres are zoned industrial, and all but 3.4 of these acres are zoned I-2 Industrial. The I-2 zone allows heavy industrial uses such as railroad yards, warehouses and truck terminals, but also allows high density commercial development up to a Floor Area Ratio (F.A.R.) of 3.0. Commercial and residential development up to a 5.0 F.A.R. is allowed under the I-2 zoning with a Planned Unit Development. The small amount (3.4 acres) of I-1 Industrial is located on the north side of Slaters Lane. The I-1 zone is similar to the I-2 zone but does not allow heavy industrial uses; it also allows high density commercial development up to a 2.5 F.A.R. by right or a 5.0 F.A.R. with a Planned Unit Development.

## Waterfront Park and Recreation

The 109 acres of Daingerfield Island are zoned WPR-Waterfront Park and Recreation. The WPR zone limits the use of property to waterfront activities such as boating and docking facilities, restaurant use, public buildings and public parks. This zone does not have a F.A.R. limitation, but limits a building's lot coverage to a maximum 30 percent and requires that a minimum of 25 percent of the area be open space.

**Table 3**  
**Existing Zoning**

<u>Zone</u>		<u>Square Feet</u>	<u>Acres</u>	<u>Percent</u>
Industrial	I-1	148,104	3.4	0.8
	I-2	13,150,764	301.9	73.0
Waterfront, Park & Recreation	WPR	<u>4,748,040</u>	<u>109.0</u>	<u>26.2</u>
Total		18,046,908	414.3	100.0

## EXISTING HEIGHT LIMITS

Height limits in the area are determined by the Old and Historic Alexandria District and by zoning restrictions (Map 4.) The Old and Historic Alexandria District limits height to 50 feet within 500 feet of the center line of the George Washington Memorial Parkway. To the east of the Parkway, on Daingerfield Island, the WPR zoning restricts heights to a maximum of 30 feet.

West of the Parkway and outside of the Old and Historic District, development rights are limited by the industrial zoning to 77 feet by right. Additional height, up to 200 feet is possible with a special use permit under the existing Industrial zoning.

Heights in the area are also subject to FAA height limitation because of this area's location relative to National Airport. These FAA regulations are discussed below in the section on development constraints.

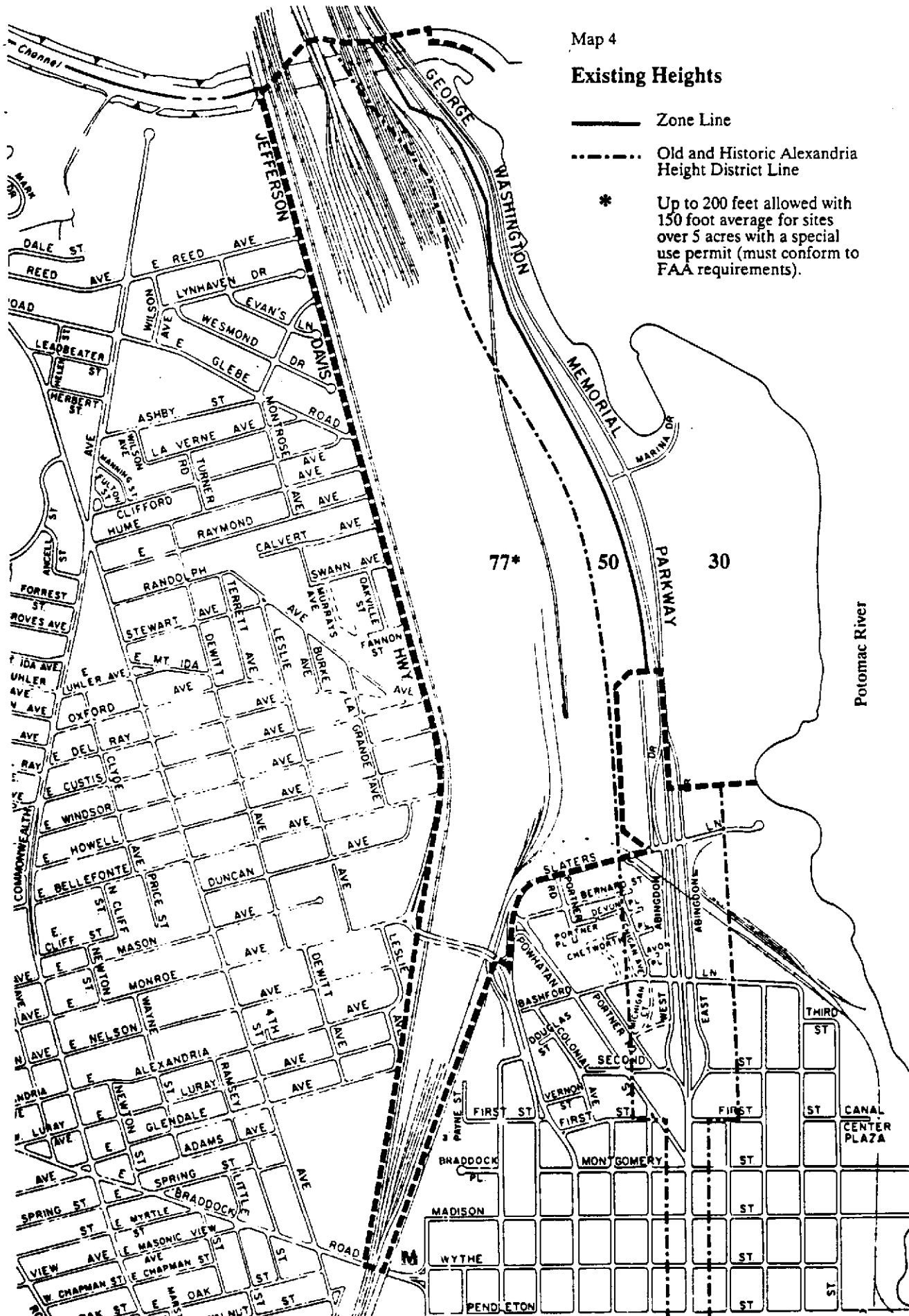
Map 4

### Existing Heights

— Zone Line

- - - Old and Historic Alexandria Height District Line

\* Up to 200 feet allowed with 150 foot average for sites over 5 acres with a special use permit (must conform to FAA requirements).



Potomac Yard / Potomac Greens



## **ENVIRONMENTAL CONDITIONS**

### **Topography**

The Potomac Yard/Potomac Greens Area's topography is flat to gently sloping, with elevations ranging from 2.5 to 49 feet. East of the Parkway, on Daingerfield Island, elevations range from 2.5 to 10 or 11 feet. The limited areas where the elevation drops below three feet consist of drainage areas which act as ponding areas during periods of heavy rain. These areas are in their natural state.

The land west of the Parkway, at Potomac Yard and Potomac Greens, is gently sloping. Elevations range from 10 to 49 feet, with most of the land between the elevation of 25 and 37 feet. The highest elevations are at the man-made hump used to switch railroad cars.

### **Flood Plain**

The City's 1991 Flood Plan Maps show that about half of the study area is located within the 100 year flood plain; that is, within the area likely to be partially or completely inundated by a level of flooding that occurs at least every 100 years.

The 100 year flood plain covers Daingerfield Island, the Potomac Greens site, and a small portion of the Potomac Yard located at the northern end of the site along Four Mile Run (Map 5).

The City code restricts development within the floodplain in accordance with Federal regulations. These regulations restrict residential development within the floodplain, unless the first floor of the structure is raised above the 100 year flood level. Non-residential development is allowed to be built within the flood plain provided that utility and sanitary facilities are flood-proofed up to the 100-year flood level and that other restrictions relating to electrical and mechanical systems are observed.

The City code also prohibits any kind of filling within the flood plain area that would increase the water surface elevation of the 100 year flood more than 0.5 feet.

### **Wetlands**



Currently, wetlands regulation in the City is developed and enforced by the Army Corps of Engineers and the Virginia Marine Resources Commission. Corps regulations require the protection and/or replacement of wetlands during the development process. The law requires that the Corps review all development projects involving either dredging or filling (i.e. any change in grade or land disturbance) within wetlands. Individual project permits are required for projects involving ten or more acres of wetlands disturbance. Projects with less than ten acres of disturbance may qualify for consideration under a general permit but the Corps retains the discretion to require a specific project permit according to the circumstances. In addition, all development in tidal wetlands requires a specific project permit from the Virginia Marine Resources Commission in accordance with the Virginia Wetlands Act. The Corps and other federal and state agencies define wetlands as those areas meeting all three criteria:

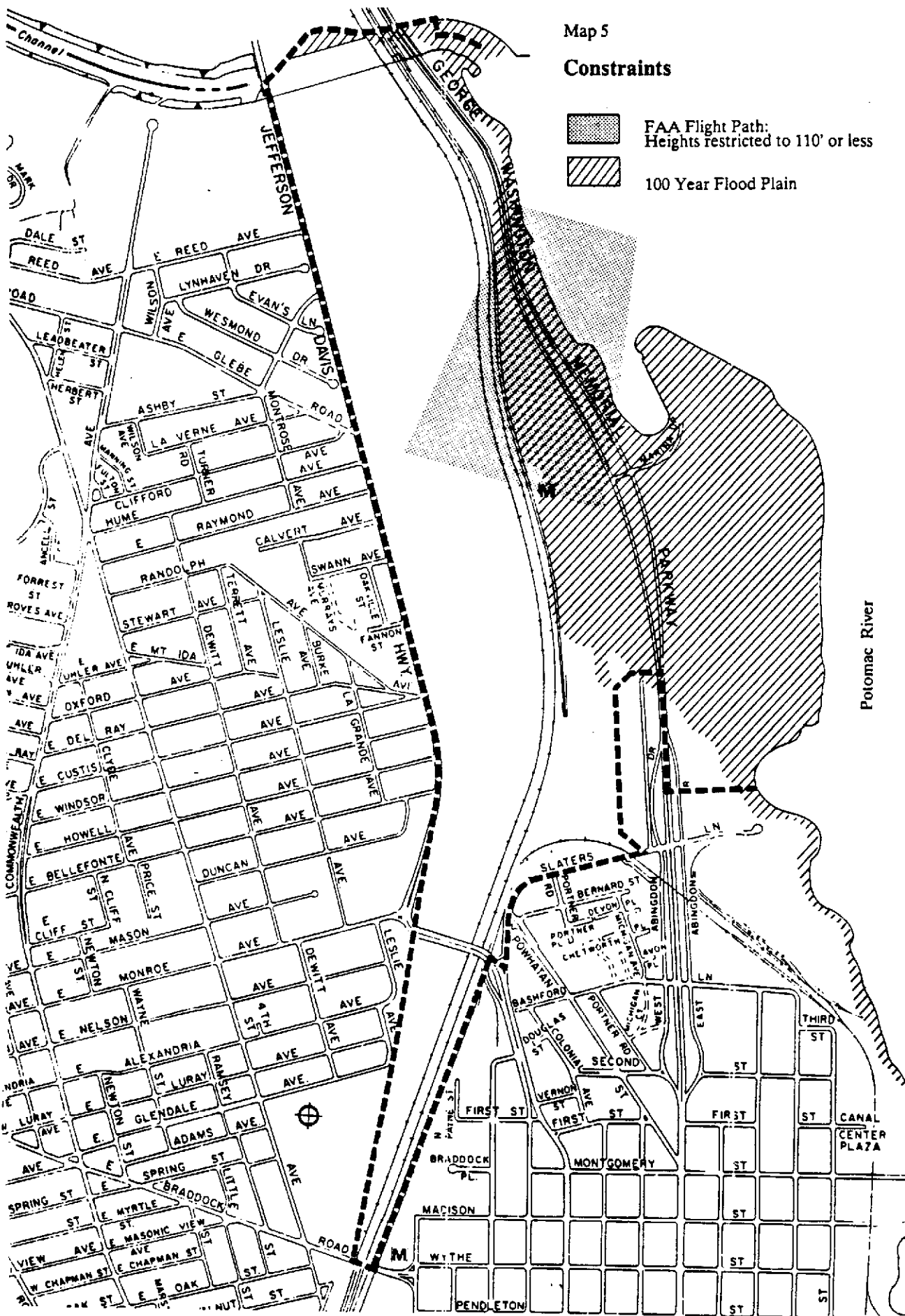
- the area must exhibit wetlands hydrology
- the predominant vegetation must be wetlands type vegetation
- it must have hydric soils.

Based on this definition and preliminary research, a consultant, working for the Northern Virginia Planning District Commission in conjunction with implementation of the Chesapeake Bay Preservation Act, has mapped existing wetlands within the study area. One wetland area is located on the east side of the George Washington Parkway in the south central part of Daingerfield Island. The other wetland area is located along the west side of the George Washington Parkway (see Map 6).

Map 5

Constraints

-  FAA Flight Path: Heights restricted to 110' or less
-  100 Year Flood Plain



Potomac Yard / Potomac Greens





### **Chesapeake Bay Preservation Act**

These wetlands in the study area will be affected by the Chesapeake Bay Preservation Act. This Act was enacted by the Virginia General Assembly in 1988 to initiate a cooperative state and local effort to protect the water quality of the Chesapeake Bay and its tributaries through land use control management.

Under the direction of the Chesapeake Bay Local Advisory Board, the City of Alexandria, like other jurisdictions throughout northern and eastern Virginia, formulated a local ordinance which implements the State's Chesapeake Bay Preservation Act. The Ordinance, which was adopted January 28, 1992, establishes policies that will protect the quality of water in the Chesapeake Bay and its tributaries through the control of non-point pollution.

Specific land management policies will apply to each class of land in the City. The most environmentally sensitive areas, including all wetlands, are classified as "Resource Protection Areas" and are limited to redevelopment and water dependent development as defined in the Chesapeake Bay regulations, except for specific exceptions contained in the act such as public roads and utilities. This ordinance will affect development within the study area, particularly on the Potomac Greens site where there are wetlands.

### **Hazardous or Toxic Soil Conditions**

A 1977 City map of areas in the City which are exposed to possible contamination of soils indicates that the study area is free of arsenic contamination, methane gas generation and other hazardous soil conditions. As the draft Environmental Impact Statement for the Potomac Greens site prepared by the National Park Service notes, there is a possibility, based on past uses of the RF&P rail yard, that some of the soils in the study area are contaminated with hazardous materials, including PCBs and heavy metals. However, there is no evidence to confirm this.

A preliminary analysis of soils on the Potomac Yard section of the site was conducted by Hydrosystems, Inc. in 1988 and was reviewed by the Virginia Department of Waste Management. Soil or water samples were collected from ten locations on the Potomac Yard. The soil analysis showed no particular problems on the site with PCB, volatiles, metal or arsenic concentrations. Extensive additional testing, and remediation in the event of adverse findings, would be required under Federal and State regulations prior to any development of the area. The site is also currently under review by the U.S. Environmental Protection Agency Region III Superfund program.

The 1988 Hydrosystems study states that the northern part of the Potomac Yard is composed of marshland that was filled some time ago with fly ash. The Potomac Greens Draft EIS indicates that there is also a 6 to 16 foot layer of fly ash on much of the Potomac Greens site.

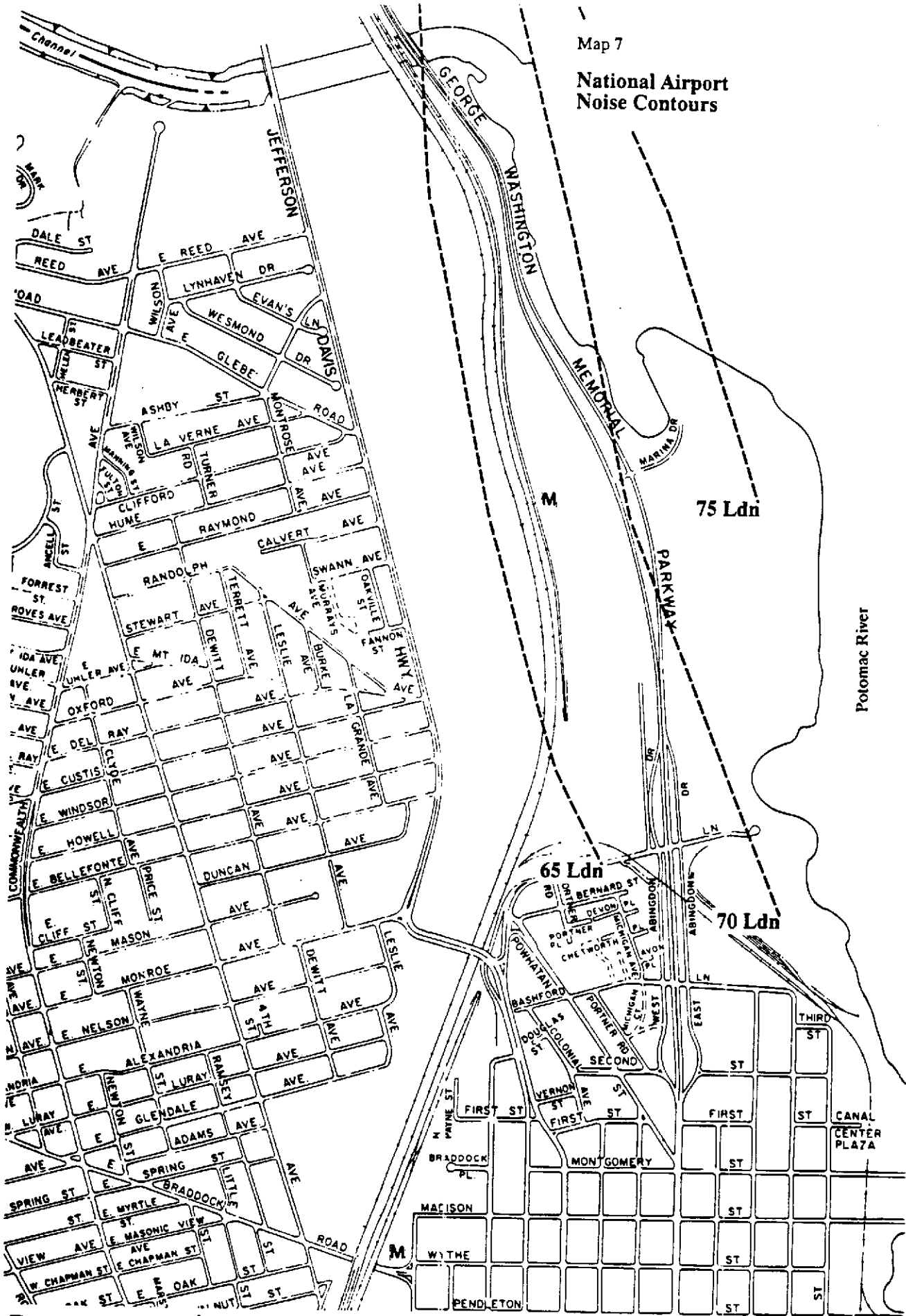
### **ADDITIONAL FACTORS AFFECTING DEVELOPMENT**

#### **Federal Aviation Administration Height Restrictions**

Heights within the study area are limited by Federal regulations because of the location relative to National Airport. The FAA regulations restrict heights in the area to 150 feet above the existing airport elevation. Since National Airport, which was built at 16 feet above sea level, no building can be built above 166 feet above sea level. This restriction applies to the entire study area.

In addition to the overall restriction of building height to 166 feet above sea level, the FAA limits heights of structures along the approach to airport runways. Because the flight path to one of the runways of National Airport passes directly over the Potomac Yard/Potomac Greens Study Area, building height along a portion of the center of the site is restricted to between 66 and 166 feet above sea level (see Map 5).

# National Airport Noise Contours



Potomac Yard /  
Potomac Greens



## Noise

Most of the land within the study area is impacted by noise from National Airport flight patterns. In addition, Metro and railroad noise have significant impacts in the area near the rail corridor.

The Federal Aviation Administration provides voluntary guidelines for noise levels in areas near airports. These guidelines establish a grid around airports which estimate decibel levels. The FAA grid estimates that most of Potomac Yard and Potomac Greens are in the 65-70 Ldn (Level Day Night noise, the standard measure of environmental noise) range, with the eastern section of Potomac Greens and all of Daingerfield Island in the 70-75 Ldn range (see Map 7).

A 1989 study conducted by Polysonics for Alexandria 2020 summarized generally recommended noise-land use compatibilities:

<u>Noise Level</u>	<u>Compatible Land Uses</u>
Less than 65 Ldn	Residential and all uses
65-70 Ldn	Residential, educational, hospital not recommended. Commercial acceptable.
70-75 Ldn	Residential, educational, hospital unacceptable. Commercial acceptable.
75 Ldn	Airport, railroad functions only

A preliminary noise analysis of the Potomac Yard conducted by Polysonics for Alexandria 2020 in 1989 showed Ldn levels ranging from 67-68 Ldn on the southern and western portions of the Potomac Yard site to 78 Ldn on the eastern portion of the site. The noise level will be reduced when the Potomac Yard closes.

1. Commercial uses are compatible with the noise levels over the entire site
2. Residential uses should be set back from railway tracks, metro tracks, U.S. Route 1, and the east side of the northern portion of the Potomac Yard site because of aircraft noise; should be buffered from the rail and aircraft noise by commercial uses; and should be designed acoustically to reduce interior noise.

Noise measurements on the Potomac Greens site taken in conjunction with the EIS showed sound levels of 68 Ldn to the west and 65 Ldn to the east.

## Railroad Services

The RF&P classification yard is planned to be phased out over time, leaving only a rail corridor. In addition to freight service, this corridor must serve Amtrak rail service, which currently passes through the western edge of the site. Commencing in the Fall of 1991, commuter rail service from Fredericksburg and Manassas to Washington D.C. will also make use of this rail corridor. According to RF&P, two rail lines are needed to maintain service. This rail corridor will require a 90 to 120 foot wide area through the site. Any structures built over the rail lines must provide a clearance of at least 27 feet.

In addition to the rail service that traverses the rail yard, there is a rail spur line that services the Pepco power plant at Slaters Lane and Robinson Terminal at North Union Street between Pendleton and Oronoco Streets. This spur line is used in the evening or night on a daily basis to resupply coal to Pepco and is used to supply newsprint paper to Robinson Terminal. This spur line may need to be maintained.

### **Easements and Right-of-Ways**

A number of easements and right-of-ways traverse the Potomac Yard, as described below.

#### **Metrorail Right of Way**

The Washington Area Metro Transit Authority right-of-way traverses the Potomac Yard area. The line runs above ground along the eastern edge of the Yard on the northern portion of the site, then goes underground and crosses under U.S. Route 1, emerging above ground again for the remainder of the service route.

#### **Electric Transmission Line Easements**

There are currently two PEPCO electric power transmission line easements that are within the Potomac yard rail facility. One easement contains a 230,000 volt overhead transmission line that is located along the east side of Jefferson Davis Highway. A second easement is located just north of the Monroe Avenue Bridge and contains a 69,000 volt cable underground. The high-voltage line will have to be undergrounded as development on the site occurs.

#### **Jet Fuel Pipe Line**

A jet fuel pipe line, which provides fuel to National Airport, is located along the eastern side of the Potomac Rail yard property just west of the Washington Metro right-of-way. This pipeline must be maintained, but its location could be shifted to accommodate development, if necessary.

#### **Telephone Company Easements**

Easements containing underground MCI fiber optic cables and C&P lines are located near the Monroe Avenue Bridge. These facilities must be accommodated through the site; however their location could also be shifted if necessary to accommodate development.

## **LAND USE POLICY HISTORY**

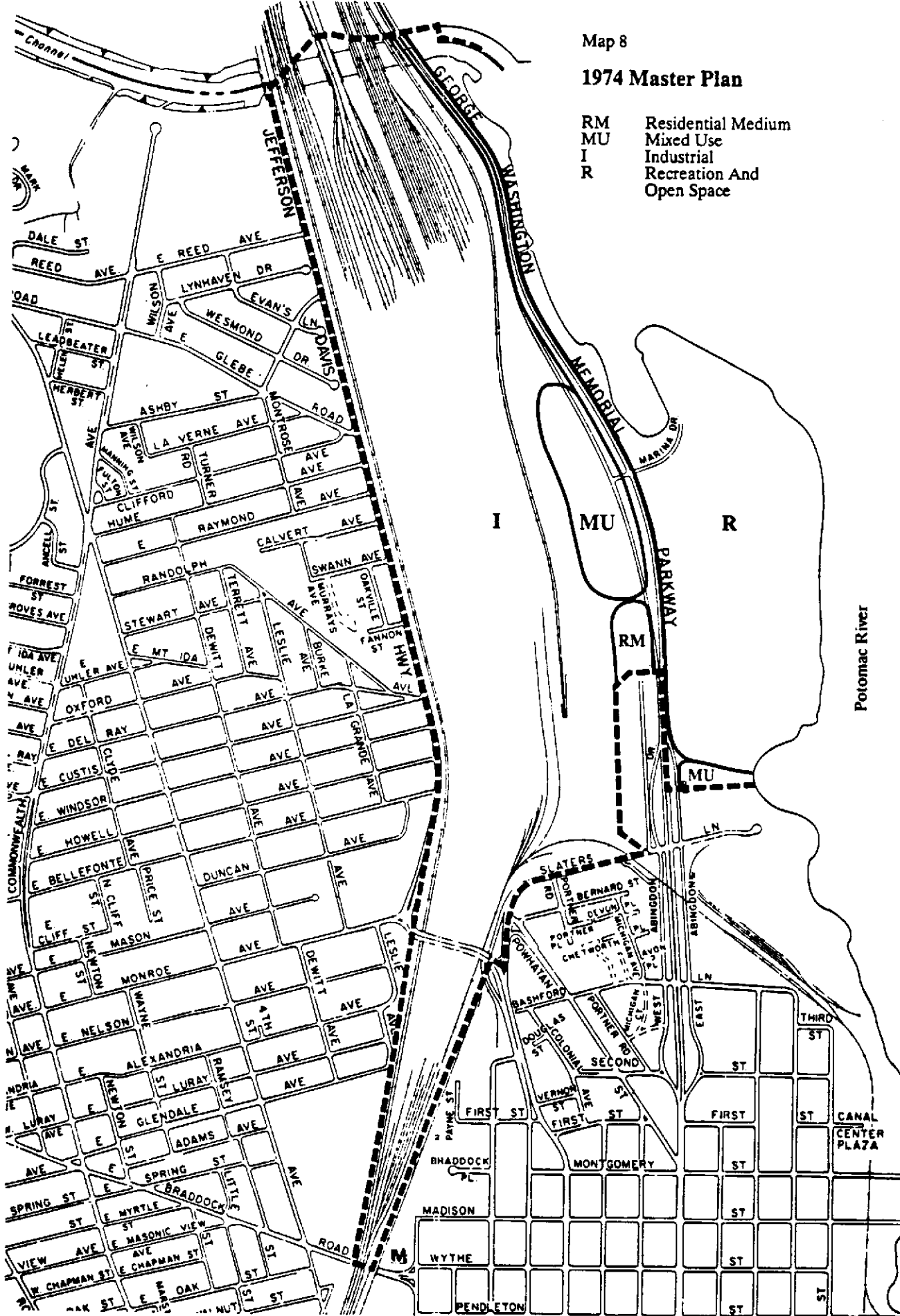
### **1974 Consolidated Master Plan**

The 1974 Land Use Plan (see Map 8) designated the railroad yards Industrial, for continuing industrial use, and Daingerfield Island Park, for continuing recreation and open space use (see Map 17).

The vacant Potomac Greens tract was the only site within this study area that was envisioned for development in the 1974 plan. The 1974 plan designated the Potomac Greens site as a "development potential" area in recognition of the vacant site's convenient location to the National Airport and downtown Washington and away from single family residential areas. The 1974 plan noted that full development of the site was contingent on the resolution of access problems. The 1974 plan recommended that the site be developed for a mix of uses with the intensity of the development governed by the overall design of the project and the impact of projected traffic levels on the surrounding areas.

1974 Master Plan

- RM Residential Medium
- MU Mixed Use
- I Industrial
- R Recreation And Open Space



Potomac Yard / Potomac Greens



## **Rezoning**

Since the adoption of the 1974 Consolidated Master Plan, the only rezoning in the study area has been the rezoning of Daingerfield Island and the Parkway from RA Residential to WPR Waterfront Park and Recreation. This rezoning was consistent with the existing and planned use of the area for water-related open space and recreation purposes.

## **Potomac Greens Site**

The potential development of the vacant Potomac Greens site has been the focus of substantial debate since 1970, when the National Park Service traded access rights from the George Washington Parkway to the Potomac Greens site in exchange for a 28 acre site in Fairfax County known as Dyke Marsh.

The exchange agreement was made between the Park Service and Charles Fairchild, who at that time held a long term lease for the Potomac Greens site from the RF&P Railroad. The agreement expressly restricts access to the interchange to include only the Potomac Greens site.

Between 1973 and 1977, Mr. Fairchild made several development proposals for what was then called the Potomac Center site; one with almost 15 million square feet of mixed use development and a second with about half that amount of development. However, the only formal site plans filed with the City were two different applications for a single office building on a portion of the site. The first site plan was denied by the Planning Commission in November 1973 because no comprehensive development proposal for the site was presented and because the proposed building appeared to encroach on planned Metrorail right-of-way. The second site plan, for a single office building of 124,000 sq.ft., was approved by the City in 1975. However, the Fairchild Company did not commence construction and the site plan expired in 1977.

Mr. Fairchild submitted no additional development plans to the City, but he did pursue approval of an interchange design with the National Park Service, submitting concept plans for the interchange to the Park Service in 1975. Although Mr. Fairchild was able to get an interchange concept approval from the Park Service, he was not able to get all of the other federal approvals required to construct the interchange, and in January 1982, the RF&P Railroad Company terminated Mr. Fairchild's lease on the property.

Following its termination of Mr. Fairchild's lease, RF&P pursued the federal approvals for construction of the interchange. RF&P secured approvals for the interchange from the Fine Arts Commission and the National Capital Parks and Planning Commission in 1983. In September 1986, the Savage Fogarty Company, in joint venture with RF&P, submitted a special use permit application to the City for the construction of a mixed use, planned unit development of 2,004,000 sq.ft. of office space, 107,000 sq.ft. of retail space, a 300 room hotel and 202 residential units on the old Fairchild leasehold and renamed the project Potomac Greens.

When the City deferred action on the proposal, Savage Fogarty withdrew the application and the Potomac Greens Associates submitted a site plan for 2,343,300 sq. ft. of office space and 107,100 sq.ft. of retail space. This second plan was rejected by the Planning Commission in May 1987 and, on appeal, by the City Council in June 1987. After approval of the development had been denied, Potomac Greens Associates filed a civil suit against the City in July 1987.

In February 1988, in an agreement with the City, Potomac Greens Associates withdrew their law suit and resubmitted a second mixed use, planned unit development plan for 1,990,000 sq.ft. of office space, 106,500 sq. ft. of retail space, a 300 room hotel and 448 residential units.

This submittal was under review, pending the publication of a final Environmental Impact Statement by the U.S. Park Service for the U.S. Congress, when Potomac Greens Associates refiled their lawsuit against the City for denying the previous site plan. In April 1991, the U.S. District Court upheld the Potomac Greens Associates site plan for 2,413,000 sq.ft. of development. The City has appealed the District Court decision. A decision from the Court of Appeals is expected in the summer of 1992.

Historically, the proposed development of the Potomac Greens site has met with great opposition because of the concerns with the impact of the development and the construction of an interchange to serve that development on the historic integrity and memorial character of the George Washington Memorial Parkway, on the recreational facilities in the immediate area and on traffic congestion along a major north/south commuter route through the City.

In 1987, in recognition of these concerns, the U.S. Congress barred the National Park Service from issuing any construction permit for a parkway interchange until an Environmental Impact Statement (EIS) had been prepared. A Draft EIS was completed in November 1989 and a final EIS was filed with Congress in May 1991. The EIS reviewed the environmental, aesthetic, historic, recreational and traffic impacts of four alternative development scenarios. The first alternative included the 1986 site plan and the 1988 planned unit development proposal. Alternatives 2-4 assumed, respectively, purchase of the interchange rights, purchase of a visual buffer to protect the parkway and purchase of the entire site. The effect of these purchase alternatives was to limit or eliminate private development on the property.

#### **Save the George Washington Memorial Parkway Citizen Suit**

In 1987, a citizen group opposed to the construction of the Potomac Greens interchange, "Save the George Washington Parkway" filed a lawsuit against the National Park Service. This suit challenged the 1970 federal decision that gave the developers rights to the parkway interchange in exchange of the 28 acre Dyke Marsh in Fairfax County. The U.S. District Court ruled against the Citizens group in the Fall of 1989, saying that too much time had elapsed since the exchange for the interchange was made. The group appealed the decision, and in October 1990, the Court of Appeals reversed the U.S. District Court decision and remanded the case to the Court for further proceedings. In early 1991, the RF&P Railroad, which had earlier intervened in the suit, requested the U.S. Supreme Court to reverse the Court of Appeals decision. The Supreme Court refused to review the case which is now pending before the District Court.

#### **Park Service and RF&P Railroad Lawsuits**

The National Park Service claims that it holds an easement over a portion of the Potomac Yard located north of Four Mile Run in Arlington County. This easement would prevent private development on this part of the Yard. Negotiations between the National Park Service and the RF&P Railroad for a possible exchange under which the Park Service would relinquish the easement over the Arlington portion of the tract in return for RF&P relinquishing access rights to the Parkway were unsuccessful. The RF&P railroad filed two suits against the Park Service over the easement. RF&P filed the first suit in the Federal District Court for the Eastern District Court of Virginia to secure quiet title to the easement. The court barred the suit because of the length of time that had elapsed since the easement was granted. The RF&P is appealing this decision to the 4th Circuit in Richmond and the appeal is scheduled to be heard in July. RF&P's second suit was filed in the U.S. Claims Court in D.C.; discovery will continue throughout the summer.

#### **Potomac Yard - Alexandria 2020**

Working as a joint venture called "Alexandria 2020," the RF&P Railroad Company and CSX Realty, Inc. have been preparing a plan for the past two years to redevelop the Potomac Yard tract, including the Arlington portion of the site.

The preliminary concept plan envisions 17 million square feet of mixed use development on the site, with about half of the development in residential uses. The concept includes the provision of almost 4 million square feet of office space for the Navy Consolidation project on the Arlington portion of the tract. In the Alexandria portion of the project, the concept plan provides for predominately residential development, with commercial development around a proposed new metro station near the center of the Alexandria portion of the tract, adjacent to the Potomac Greens tract.

**Table 4**

**ALEXANDRIA 2020/POTOMAC GREENS PROPOSED DEVELOPMENT PROGRAM**

	-----2020-----			Potomac Greens	Gross Sq.Ft. Total
	Gross Sq.Ft. in Arlington	Gross Sq.Ft. in Alexandria	Gross Sq.Ft. Total	Gross Sq.Ft. Total	
Office	4,140,900	3,529,100	7,670,000	2,343,300	10,013,300
Hotels	180,000	527,500	707,500		707,500
Residential	340,000	7,322,500	7,662,500	107,100	7,769,600
Supporting Retail	70,000	440,000	510,000		615,000
Other	35,000	415,000	450,000		450,000
<b>Total</b>	<b>4,765,900</b>	<b>12,234,100</b>	<b>17,000,000</b>	<b>2,450,400</b>	<b>19,555,400</b>

SOURCES: Alexandria 2020 Potomac Yard Fact Sheet, Concept Plan II, February 15, 1990.  
Potomac Greens Site Plan Application, 1987.

**TRANSPORTATION**

The study area is located between two major north-south commuter routes that serve as key links between the residential areas of Fairfax County and Prince William County and the employment centers of Crystal City, the Pentagon and downtown Washington D.C. These two routes are the George Washington Memorial Parkway, which is located to the east and separates Daingerfield Island from the rest of the study area, and Jefferson Davis Highway (U.S. Route 1), which is located along the western edge of the Small Area Plan. Another major street, Slaters Lane, runs east-west along the southern edge of the study area connecting the Parkway and U.S. Route 1. The Monroe Avenue bridge serves as a major link in this system; the bridge was recently replaced by a new structure with greater capacity than the old bridge.

**George Washington Memorial Parkway**

The George Washington Memorial Parkway is a system of parkways and parklands located on both sides of the Potomac River which is maintained by the National Park Service. Although planned and constructed for a memorial function and to serve as a scenic gateway for visitors entering and leaving the National Capital Area, the Parkway has also become a major north-south commuter route. The Parkway is a four lane limited access divided arterial which is restricted from use by commercial vehicles. One-way frontage roads, East and West Abingdon Drives, run parallel to the Parkway from north of Slaters Lane to First Street. At First Street, the divided Parkway ends and becomes Washington Street, the major north-south street through Old Town Alexandria. Washington Street has six lanes, with the right lane reserved for high-occupancy-vehicles during peak periods and for parking in the off-peak periods. Within the study area, access to the Parkway is currently limited to Slaters Lane, Abingdon Drive, the Daingerfield Island entrance and Washington Street to the south.

### **Jefferson Davis Highway**

The Jefferson Davis Highway (U.S. Route 1) is a four-lane divided arterial road from Reed Avenue near the northern City limits south to the Monroe Avenue bridge, which provides access over the RF&P railroad tracks. The bridge itself is a four lane facility, with separate left turn lanes providing access to Monroe Avenue and Slaters Lane.

South of the Monroe Avenue Bridge, U.S. Route 1 is carried northbound on Patrick Street and southbound on Henry Street. These streets are operated as a one-way pair with three lanes each. The Patrick and Henry Street pair have one lane reserved for high-occupancy-vehicles during peak periods. There are HOV lanes only on this short section of U.S. Route 1 from the southern Alexandria boundary to the Monroe Avenue bridge; there are no HOV lanes on Route 1 in Arlington, in Fairfax County or in the portion of Alexandria north of the Monroe Street bridge.

Major improvements to U.S. Route 1 in Arlington County have been undertaken in the past decade in conjunction with development of Crystal City; these improvements include widening U.S. Route 1 to three through lanes in each direction in Arlington and increasing access from the corridor into Crystal City through new streets, ramps and improved intersections. As part of the project, Jefferson Davis Highway in Alexandria was widened to six lanes north of Reed Avenue.

### **Monroe Avenue Bridge**

The Monroe Avenue bridge connects U.S. Route 1 (Patrick and Henry Streets) to Jefferson Davis Highway over the Potomac Yard and also connects Slaters Lane to Monroe Avenue. In 1988, the old bridge was replaced by a new bridge located further south. The new bridge has the same number of through lanes as the bridge it replaced, two lanes in each direction; however, the new alignment of the bridge was altered significantly, changing the circulation patterns and improving traffic flow. The new alignment facilitates traffic movement from Slaters Lane on to U.S. Route 1, while discouraging the use of Powhatan Street. As part of the bridge project, the intersection of Bashford Lane and U.S. Route 1 was closed.

### **Slaters Lane**

Slaters Lane is a four lane undivided roadway which is the northernmost link in Alexandria between U.S. Route 1 and the Parkway. The replacement of the Monroe Avenue bridge improved access from Slaters Lane to U.S. Route 1 through the addition of turning lanes and slip ramps. The intersection of Slaters Lane and the Parkway is signalized. Slaters Lane also provides access to the RF&P piggyback yards and other commercial and industrial sites located along its length.

### **Public Transportation Facilities**

Although the Potomac Yard/Potomac Greens study area is not currently well served by transit, there is potential for excellent transit access. A new Metro station could be built in Alexandria between the Potomac Yard and Potomac Green tracts.

### **Metrorail**

The Braddock Road Metro Station is located toward the southern end of the study area, along the RF&P rail lines near Braddock Road. The Washington Metropolitan Area Transit Authority Metrorail right-of-way runs along the eastern edge of the Potomac Yard site. The rail system was planned and built so that a new station could be constructed on this right-of-way, about midway between the Braddock Road and National Airport stations, near the Center of the Potomac Yard and Potomac Greens tracts.

Currently, WMATA runs service between D.C. and Huntington along this corridor. The yellow line serves the Braddock Road, King Street, Eisenhower Avenue and Huntington stations to the south, and the National Airport, Crystal City, Pentagon City, Pentagon and downtown D.C. stations to the north. Additional blue line service from Maryland and D.C. extends through the site from D.C. to the Van Dorn Metro station to the south. Any new metrorail station on the site would be served by both the Blue and Yellow lines.

### **Commuter Rail Service**

Commuter rail service is scheduled to begin operation in early 1992 from Fredericksburg and Manassas to downtown D.C.. Since the rail lines will service commuter rail via Potomac Yard, there is potential for a commuter rail station to be located along with a future Potomac Yard Metrorail station. There is a planned commuter rail stop at the King Street Metro Station.

### **Bus Service**

WMATA Metrobus service in the area is limited to two lines. The Metrobus 9 line originates at Fort Belvoir to the South and follows U.S. Route 1 through Fairfax County to Washington Street in Alexandria and then crosses over to Route 1 at the Monroe Avenue Bridge, passing along the western edge of the Potomac Yard track. This line terminates at the Pentagon. The second bus line, Metrobus 11, also originates at Fort Belvoir but follows the Mt. Vernon Parkway/Washington Street/George Washington Parkway alignment. This line stops at National Airport and provides service to downtown D.C. The City's DASH bus system does not currently serve the study area.

### **Transportation Policy**

The City's overall transportation policy has been to protect the eastern portion of the City and its neighborhoods from through traffic emanating from Fairfax County, Maryland and from other jurisdictions south of the City. The City has a policy of maintaining constrictions at the portals to the City from the south and not widening arterial roadways serving north/south traffic.

While it has not encouraged the movement of additional cars through its eastern half, the City has encouraged increased movement of people through the city by its support of Metrorail, Metrobus, and DASH and of High Occupancy Vehicle lanes on Washington Street and on U.S. Route 1.

Nevertheless, traffic has steadily increased and there has been a persistent debate about what to do about the problem. The debate has included solutions ranging from doing nothing and hoping that increased congestion will discourage commuters, to constructing a billion dollar tunnel on U.S. Route 1 through the City, to hoping that traffic will quietly and invisibly flow through the City with minimum disruption to Alexandria's residents.

### **U.S. Route 1 and Other Improvements**

A very large part of the debate relates to U.S. Route 1. In 1977, Council established its position on the Route 1 corridor in a Resolution (#554) which stated Council's opposition to:

1. The replacement of the Monroe Avenue Bridge with a 6 lane bridge.
2. The widening of Jefferson Davis Highway to six lanes from a point 100 ft. north of Reed Avenue southward.
3. The Potomac Expressway (a new road along Four Mile Run).
4. The Northeast Expressway (a road from Washington Street on Powhatan Street and through the Potomac Yard Tract to the north)
5. Any Commonwealth Avenue-Eads Street connection
6. Any widening of Reed Avenue.

These policies have not been changed. In accordance with these policies, the new Monroe Avenue replacement bridge was restricted to four lanes. The bridge was designed to serve U.S. Route 1 traffic and to improve the connection between the corridor and the George Washington Memorial Parkway using Slaters Lane. However, the redesign removed the direct connection between the bridge and Powhatan Street and therefore afforded the Northeast neighborhood some protection from through traffic.

Similarly, the City has resisted pressure to improve Jefferson Davis Highway north of the Monroe Avenue Bridge to Four Mile Run, although the Virginia Department of Transportation has recently completed a major widening of Jefferson Davis Highway within Arlington County to six lanes from Crystal City to just north of Reed Avenue in Alexandria.

### **U.S. Route 1 Relocation**

Since the mid-1970's the City has considered eliminating the one way pairing of Patrick and Henry streets to serve as U.S. Route 1 through the older neighborhoods of the City. Most recently, in 1987, the City asked the Washington Metropolitan Council of Governments (WMCOG) to conduct a preliminary feasibility study on the relocation of the Route 1 corridor.

The WMCOG study reviewed four alternative alignments of U.S. Route 1, including a tunnel under Patrick and Henry Streets, a tunnel under Fayette Street, a four lane alignment along the RF&P railroad tracks and connecting to Huntington Avenue south of the Beltway, and a four lane alignment from Huntington Avenue into a tunnel in the Potomac paralleling the river bank. The study found that all of the new facilities would improve traffic conditions only temporarily; a new facility would attract new traffic and by the year 2010 Patrick and Henry Streets and any new facility would be severely congested. The costs of all of the alternatives were estimated to be prohibitively expensive.

WMCOG also analyzed several HOV alternatives for U.S. Route 1, including the HOV lanes on the new alignment alternatives, and the construction of an HOV-only facility. WMCOG found that the HOV alternatives kept congestion at or below 1988 levels while accommodating future growth in the corridor and recommended further study of the HOV possibilities.

### **George Washington Memorial Parkway Interchange**

Council has stated their opposition to construction of an interchange on the George Washington Memorial Parkway at the Potomac Greens site, because of the transportation impacts on surrounding areas and because of the visual impact along the Parkway, which is within the City's historic district. A citizen civil suit challenging the legality of the exchange which resulted in the railroad's right to build the interchange is also pending and could also determine whether or not the interchange is ultimately built.

### **Existing Traffic Conditions**

#### **Existing Intersection Level of Service By Approach**

The table below shows existing intersection levels of service. Key intersections on the Parkway near the study area are currently operating at level of service F during both the morning and evening peak hours. Conditions are better on the Washington Street portion of the Parkway system. The other major street serving through traffic, Route 1, is operating much better at key intersections, generally in the B-C range.

**Table 5  
1990 Intersection Level of Service**

<u>Intersection</u>	<u>PEAK HOUR</u>	<u>NB</u>	<u>SB</u>	<u>EB</u>	<u>WB</u>	<u>Overall</u>
GW Parkway/E. Abingdon Dr.	AM	F	-	-	F	F
	PM				F	F
GW Parkway/Slaters Ln.	AM	F	B	E	B	F
	PM	B	F	D	C	F
Washington St./First St.	AM	B	B	-	C	B
	PM	A	F	-	C	F
Washington St./Montgomery St. Powhatan St.	AM	C	B	D	C	C
	PM	B	C	D	C	C
Jeff Davis Hwy./E. Glebe Rd.	AM	C	B	D	-	C
	PM	B	F	C	-	F
Monroe St./Jeff Davis Hwy.	AM	C	B	D	-	C
	PM	F	F	C	-	F
Monroe St./Henry St.	AM	F	D	-	C	F
	PM	C	C	-	D	C
Patrick St./Montgomery St.	AM	D	-	-	C	D
	PM	B	-	-	C	B
Madison St./Patrick St.	AM	E	-	C	-	E
	PM	B	-	C	-	B
Henry St./Montgomery St.	AM	-	B	-	C	B
	PM	-	D	-	D	D

Source: Turning Movement Counts - 1990 Frederic R. Harris Inc.;  
Level of Service Calculations - Dept. of T&ES.

### Existing Traffic Volumes

The table below shows existing traffic volumes on the key streets near the study area. The Parkway carries about 2,300 northbound vehicles during the a.m. peak hour and 2,000 in the p.m. peak hour. Along the western edge of the study area, Route 1 carries about 2,000 vehicles northbound in the morning and southbound in the evening.

**Table 6**  
**Traffic Volumes on Key Links**

	<u>AM</u>	<u>PM</u>
GWM Parkway NB at Slaters Lane	2,321	1370
GWM Parkway SB at Slaters Lane	918	2000
Slaters Lane WB at GWM Parkway	61	136
Slaters Lane WB at Powhatan Street	58	233
Slaters Lane EB at GWM Parkway	842	376
Slaters Lane EB at Powhatan Street	851	399
Powhatan Street NB at Slaters Lane	239	276
U.S. Route 1 NB at Monroe Avenue	2170	1237
U.S. Route 1 NB at E. Custis Avenue	1983	984
U.S. Route 1 NB at Reed Avenue	1959	864
U.S. Route 1 NB at E. Glebe Road	1962	1020
U.S. Route 1 SB at Monroe Avenue	1282	1874
U.S. Route 1 SB at E. Custis Avenue	906	1710
U.S. Route 1 SB at Reed Avenue	756	1934
U.S. Route 1 SB at E. Glebe Road	756	2034
Monroe Avenue EB at U.S. Route 1	149	367
E. Custis Avenue EB at U.S. Route 1	183	42
Reed Avenue EB at U.S. Route 1	244	80
E. Glebe Road EB at U.S. Route 1	313	164

Source: 1990, Frederic R. Harris Inc.

### Frederic R. Harris Traffic Analysis

Information about future traffic conditions in the study area was developed using the City's computerized traffic model. The City commissioned the transportation consulting firm of Frederic R. Harris to do a transportation study of the area using outputs from the City's traffic model. The Harris study analyzed the transportation impacts of three development levels and different roadway and transit improvements. The assumptions for each of the scenarios are summarized in the table below:

Table 7

**Land Use and Network Assumptions  
Frederic R. Harris Traffic Analysis**

<u>Scenario</u>	<u>Land Use</u>	<u>Road Network</u>	
A.	No Growth in City; Full Regional Growth	No Development on Yard/Greens or in rest of the City beyond 1990 levels	2010 base network
B.	No PY/PG Growth; Full City Growth; Full Regional Growth	14 Million sq.ft. office development in the City, with none on Potomac Yard or Potomac Greens	2010 base network
C.	Low PY/PG Growth; Full City Growth; Full Regional Growth (Figure 3)	1.1 Million sq.ft. of office development in City on PY/PG (plus 2.0 sq.ft. in Arlington), 3,260 residential units in the City on PY/PG, plus 12.9 million sq.ft. of office development in the rest of the City	2010 base network plus Potomac Yard street improvements; No Metro station
D.	Medium PY/PG Growth; Full City Growth; Full Regional Growth (Figures 2&4)	3.8 Million sq.ft. of office development in the City on PY/PG (plus 2.8 million sq.ft. in Arlington), 6,750 residential units in the City on PY/PG plus 10.2 million sq.ft. of office development in the rest of the City.	2010 base network plus Potomac Yard street improvements plus Parkway interchange; With Metro station
E.	High PY/PG Growth; Full City Growth; Full Regional Growth (Figure 5)	5.6 million sq.ft. of office development in the City on PY/PG (Plus 4.1 million sq.ft. in Arlington), 6,750 residential units in the City on PY/PG plus 8.4 million sq.ft. of office development in development in the rest of the City	2010 base network plus Potomac Yard street improvements plus Parkway interchange; With Metro station

PY/PG: Potomac Yard/Potomac Greens

2010 Base Network includes these major roadway improvements:

- City:
  - a ramp connecting the Telegraph Rd. exit ramp from EB I-95 with Eisenhower Avenue
  - a collector/distributor road along WB I-95 between the Rte. 1 and Telegraph Rd. interchanges
  - an interchange on I-95 at Clermont Avenue
- Region:
  - the Eastern Bypass
  - the widening of the Woodrow Wilson Bridge from 6 to 10 lanes
  - the widening of the Capital Beltway in Virginia from 8 to 12 lanes
  - the extension of Crystal Drive North to I-395
  - all other roadway improvements in the MRCOG 2010 network and the Northern Virginia 2010 regional plan

Potomac Yard Improvements are:

- a four lane, two-way spine road from the Monroe Avenue Bridge to Crystal City Drive
- a grid of local streets within the Potomac Yard connecting to Route 1 and the "spine road"
- a realigned Monroe Avenue Bridge

The Harris findings are detailed in a separate report, and the major findings of the study are summarized below.

Future Traffic Conditions with No Additional Development in the City (Scenario A)

The most important conclusion of the Harris study is that regional growth will have a significant impact on peak hour traffic conditions in Alexandria. The Harris analysis shows that peak hour traffic conditions in the year 2010 within the City will be much worse than they are today because of regional growth, even if the City allows no new development anywhere in the City. Figure 1 shows congested links under this scenario. The report states:

Increases in projected regional growth will have a significant impact upon travel within the City of Alexandria, regardless of whether or not any new development is permitted within the boundaries of the City. Traffic volumes generated elsewhere in the region will continue to result in increased levels of traffic congestion on Alexandria's streets. In particular, increases in peak period traffic volumes on U.S. Route 1, the GWM Parkway, and the collector streets leading to these major commuter routes will account for much of this congestion. As peak hour and peak period traffic volumes continue to grow, alternative arterial routes, collector streets, and even local neighborhood streets will be affected as traffic seeks ways to avoid congested intersections and street segments (p. 41).

It is important to keep this finding in mind. The traffic impacts of the Potomac Yard/Greens site cannot only be measured relative to today's traffic conditions, because even if no additional development in the City occurs, traffic conditions will not stay as they are today; they will become considerably worse. The Harris screenline analysis shows that, overall, northbound and eastbound peak hour traffic within the Potomac West area can be expected to increase by almost 100 percent by 2010 and that northbound traffic within the Old Town area can be expected to increase by about 40-45%, compared to current levels. The predicted traffic impacts of the Potomac Yard/Potomac Greens development must be compared to the traffic conditions that are predicted for the year 2010 if no development occurs on the site.

Future Traffic Conditions with Potomac Yard/Potomac Greens Development

The number of trips generated during the a.m. peak hour under each of the Potomac Yard/Potomac Greens development scenarios is shown as follows:

**Table 8**

**Estimated Peak Hour Vehicle Trips  
Potomac Yard/Green Development  
(Alexandria and Arlington Portions)**

Scenario C	4,280
Scenario D	5,896
Scenario E	7,938

The actual volume of traffic that would be generated by the development could vary substantially depending on a number of factors, most notably the percentage of transit ridership and number of persons per auto that are achieved in the development and in surrounding neighborhoods. In the Harris report, the assumptions include moderate transit usage (15%) and carpooling rates (1.3 auto occupancy) for Scenario C, which would not have a Metrorail station, and higher target transit usage (30%) and



carpooling rates (1.4 auto occupancy) in Scenarios D and E, which would include a Metrorail station. These mode splits and auto occupancies also assume a stringent TMP program for the development; if less stringent TMP measures were enacted, more vehicles would be generated.

Figure 2 shows the estimated peak hour directional distribution of the traffic that would be destined for the Potomac Yard tract as forecasted by the City's traffic model for Scenario D. Slightly over one-fourth (26.2%) of the traffic to the project would come from the south on U.S. Route 1 and the George Washington Memorial Parkway, with most of this traffic on U.S. Route 1. Over half (52.1%) of the traffic would approach the project from the west, including traffic that originates from the south but comes up I-395 and approaches the project from the west. Almost half of the traffic approaching from the west is likely to be on S. Glebe Road in Arlington. Without preventative action by the City, the other traffic from the west would filter through on other streets such as E. Glebe Road and Monroe Avenue onto U.S. Route 1 and into the project. About 21.6% of the total traffic is estimated to approach the project from the north, including a very low percent (2.4%) coming southbound on the Parkway to Slaters Lane. Most of the traffic from the north is likely to approach the project from Jefferson Davis Highway southbound through Arlington.

#### Scenario C (Tests Council Members Plan)

Scenario C tests the impact of 1.1 million square feet of office space and 3,260 residential units on the Alexandria portion of the Yard (plus an additional 2.0 million square feet of office space on the Arlington portion of the site). This scenario assumes no Metrorail station. Figure 3 shows congested road segments (level of service F or worse) under development Scenario C. Substantial areas of congestion exist throughout the area, including the downtown area and Potomac West, U.S. Route 1 and the George Washington Memorial Parkway. However, there is actually less congestion City-wide than under Scenario A, where no development occurs on the Yard or in the rest of the City.

There are several processes occurring which explain this result:

1. Construction of the Potomac Yard Network provides substantial new roadway capacity in the area of the project, alleviating congestion on other roads.
2. The regional effect of a development the size of the Yard is substantial and existing trip patterns will eventually shift. For example, because the Yard is so close to D.C., many of the projected residents will have jobs in close-in D.C., Alexandria and Arlington. These shorter trips will replace longer trips from Fairfax, Prince William, etc., through Alexandria to Arlington and D.C, reducing traffic through Alexandria.
3. Some through trips on the City's streets will be displaced by local traffic destined for the Yard.

#### Scenario D

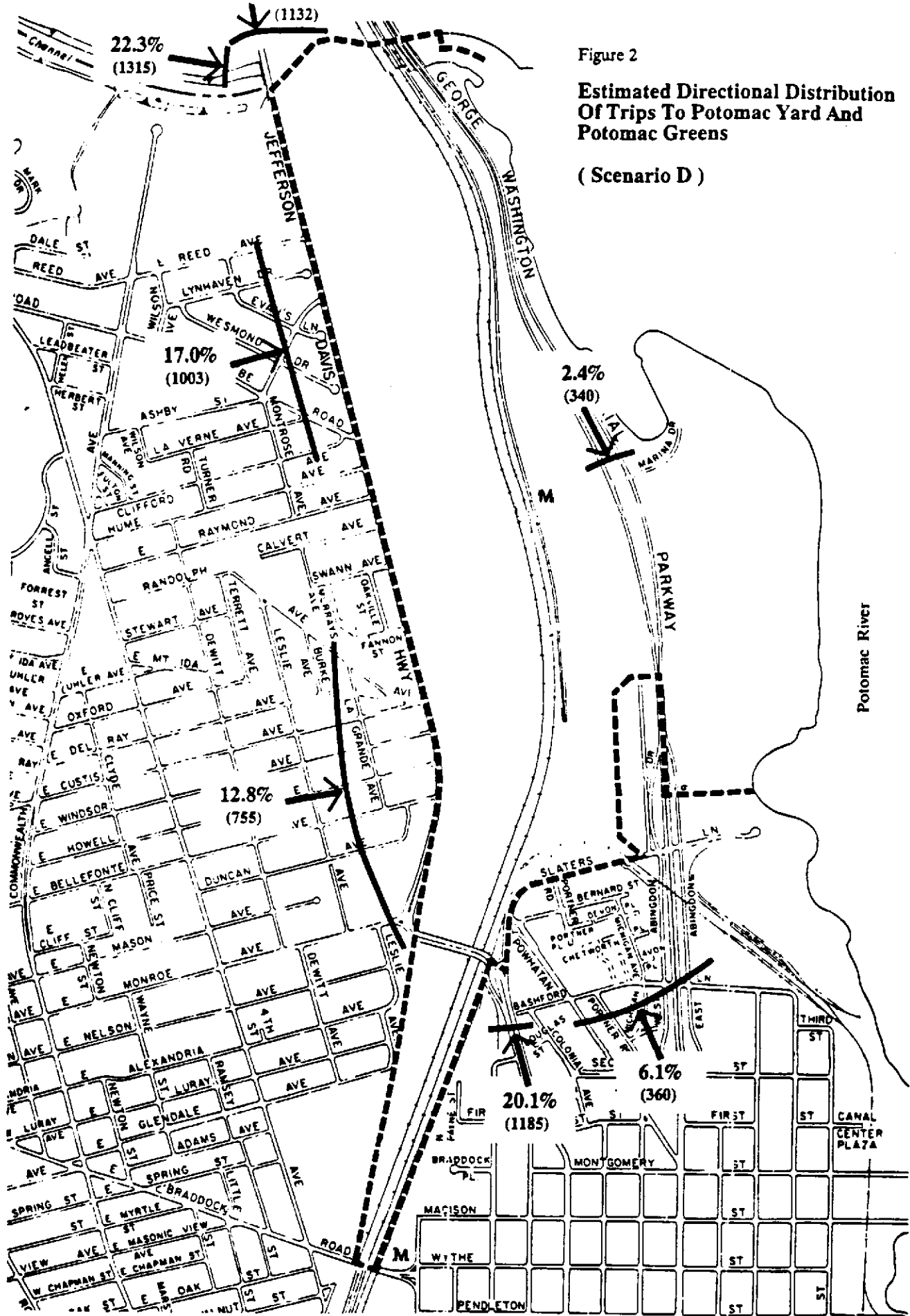
Scenario D tests the affect of 3.8 million square feet of office space and 6,450 residential units on the Alexandria portion of Potomac Yard and Potomac Greens (plus an additional 2.8 million square feet of office development and 300 residential units on Potomac Yard in Arlington). This scenario also includes a Metrorail station.

Figure 4 shows the impact of this development level in the study area. While Scenario C introduces an additional 3.5 million square feet of office development and several thousand residential units, the addition of the Metrorail station increases the percentage of non-auto trips, both within the development and within neighborhoods in the Potomac West area. Overall, there is very little difference in peak hour congestion levels between this scenario with moderate development, and the lower level of development shown in Scenario C.

Figure 2

### Estimated Directional Distribution Of Trips To Potomac Yard And Potomac Greens

( Scenario D )

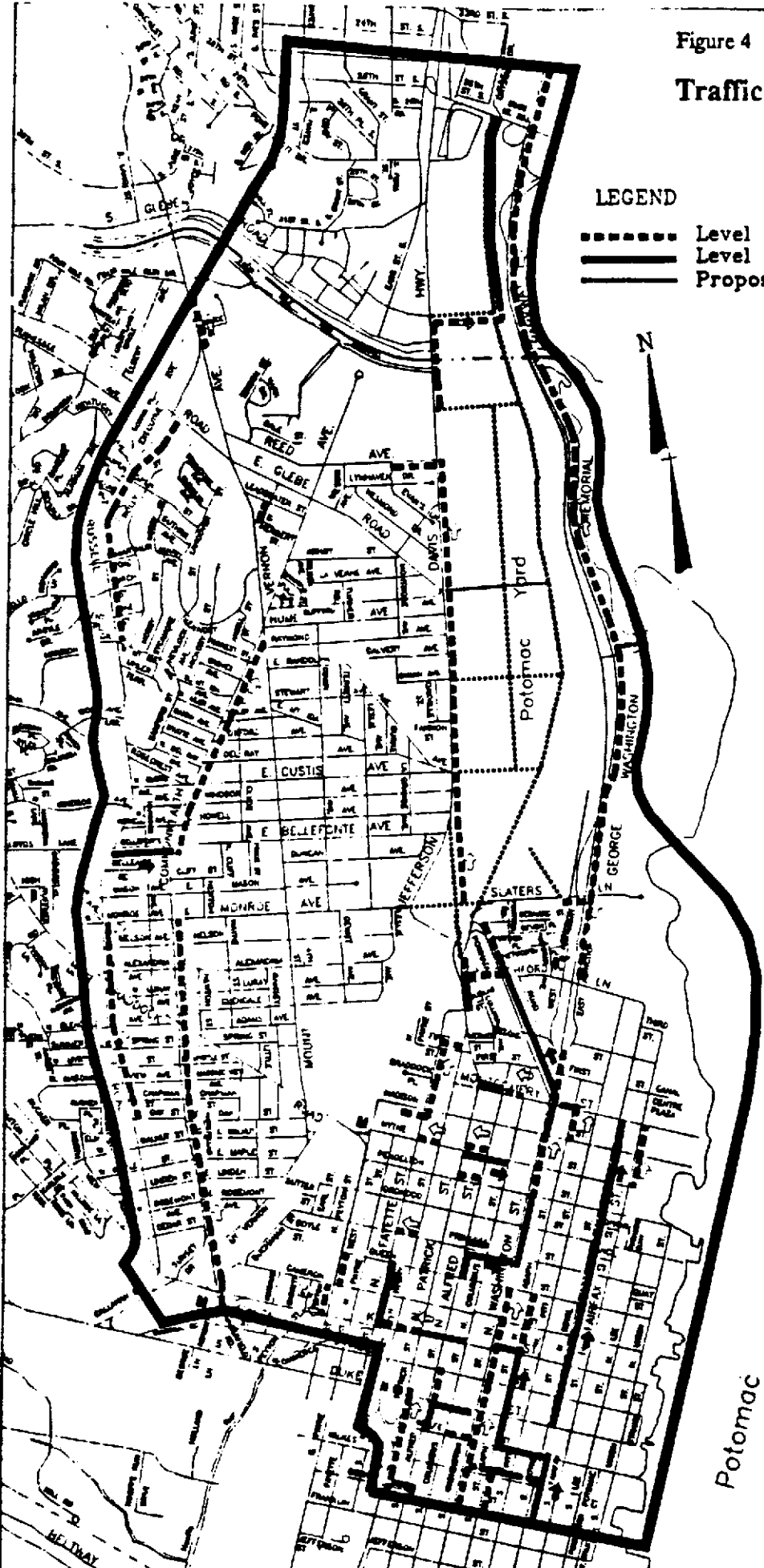


Potomac Yard /  
Potomac Greens





Figure 4  
Traffic Scenario D



2010 Market Level Development in the City  
 2010 Development in the Region  
 6.6 Million Square Feet of Office Development in Potomac Yard/Potomac Greens  
 6750 Residential Units in Potomac Yard/Potomac Greens  
 2010 Potomac Yard Network

# Alexandria Transportation Analysis Potomac Yard Transportation Study

Figure 4-3  
 Scenario D - A.M. Peak Hour Level of Service



**Frederic R. Harris, Inc.**

## Scenario E (Tests Alexandria 2020 and Potomac Greens Plan)

Scenario E tests full development of Potomac Yard and Potomac Greens: 5.6 million square feet of office development and 6,450 residential units on Potomac Yard in Alexandria and Potomac Greens (plus an additional 4.1 million square feet of office development and 300 residential units on the Arlington portion of Potomac Yard). Scenario E represents full build-out of the Potomac Yard and Greens sites as currently proposed by their owners compared with Scenario D. Although congestion does increase slightly when the additional development is added in this scenario, generally, peak hour congestion levels remain generally the same as under Scenario D; there is moderate congestion on north-south streets in the Potomac West area and more marked congestion within the Old Town and Braddock areas.

### Effect of Additional Road Improvements

The Harris report analyzed additional scenarios which tested the effect of various road improvements on congestion levels and concluded that the following improvements would offset some of the problems created by growth:

1. construction of streets proposed as part of the Potomac Yard project, especially the spine road connecting Route 1 at Monroe Street with Crystal Drive in Arlington,
2. construction of an at-grade, controlled access, two-lane, reversible roadway along the eastern edge of the RF&P railroad right-of-way from the proposed I-95 interchange at Clermont Avenue to the Potomac Yard development,
3. widening of U.S. Route 1 from 4 to 6 lanes between Monroe Avenue and Reed Avenue, with all the widenings to be done within the boundary of the Potomac Yards project, and
4. enhancement of the I-395 northbound exit ramp to Glebe Road and the widening of S. Glebe road to six lanes between the interchange and U.S. Route 1.

The Harris report finds that these proposed roadway improvements would not solve all of the traffic problems in the area, but that they would bring about a considerable reduction in traffic congestion, particularly on the Jefferson Davis Highway and on some east-west streets in the neighborhoods immediately west of Potomac Yard. However, none of these proposed improvements would contribute substantially to alleviating the congestion within Old Town.

### Conclusions from Report

- \* Peak hour traffic conditions within the City will continue to deteriorate and will be extremely congested by the year 2010, whether or not any development occurs on the Potomac Yard/Potomac Greens tract, because of the regional growth of traffic.
- \* With or without Potomac Yard/Greens development, the City will need to consider improvements to the transportation system that will reduce traffic impacts on residential neighborhoods near the tract.
- \* Based on the traffic study, the major opportunity to decrease peak hour future traffic congestion from what it might otherwise be in 2020 is to encourage the construction of the spine road and street grid proposed as part of the development of the Potomac Yard; those roads will be beneficial regardless of whether or not Alexandria 2020 is built.

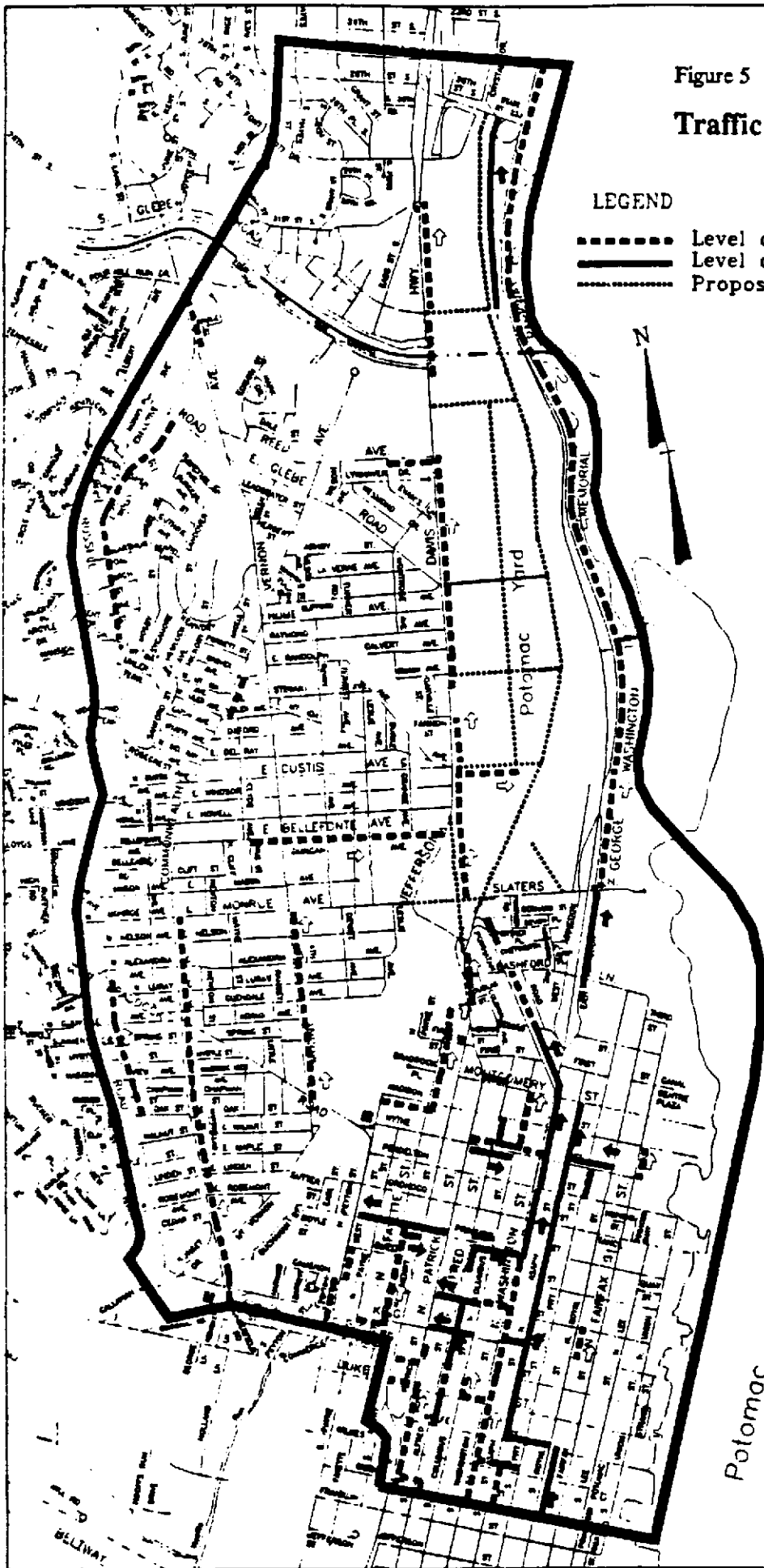


Figure 5  
Traffic Scenario E

LEGEND  
 - - - - - Level of Service F  
 \_\_\_\_\_ Level of Service G  
 ..... Proposed Improvements

2010 Market Level Development in the City  
 2010 Development in the Region  
 9.7 Million Square Feet of Office Development in Potomac Yard/Potomac Green  
 6750 Residential Units in Potomac Yards/Potomac Greens  
 2010 Potomac Yard Network + Enhanced I-395 N.B. ramp to S. Glebe Rd.

# Alexandria Transportation Analysis Potomac Yard Transportation Study

Figure 4-4  
 Scenario E - A.M. Peak Hour Level of Service



**HARRIS**  
 Frederic R. Harris, Inc.

- \* Development on the Yard and its associated road and transit improvements can improve transit and high occupancy vehicle use. A metro station, a commuter rail facility, and improved bus service feeding into rail transit can benefit the entire eastern portion of the City. By providing a network of streets, the development of the Yard can help distribute traffic along several streets thereby alleviating traffic congestion on Jefferson Davis Highway. The people moving potential of the U.S. Route 1 corridor could also be improved with construction of additional HOV lanes connecting Fairfax County and Arlington County.
- \* With development in Alexandria, locally destined traffic may begin to displace the peak hour through traffic. Although this displacement of through traffic does not necessarily diminish traffic problems, the City has a greater opportunity to mitigate local traffic impacts through the Transportation Management Program and the use of other traffic control measures than it does regional through traffic.
- \* In the Old Town and Braddock Road Metro areas, development of the Yard results in displacement of some peak hour through traffic; therefore, the peak hour impacts of the Potomac Yard development are not as great as might be expected, although conditions are still very congested. The construction of a two-lane reversible road along the RF&P right of way into the project does not help to alleviate congestion in the Old Town area, but does alleviate peak hour congestion in the Potomac West area.
- \* Large scale commercial development on the Potomac Greens site could not be accommodated without construction of an interchange and additional merge lanes along the Parkway at the interchange. Intense commercial development on the Greens site would also impact the Slaters Lane/Washington Street intersection more severely than would similar development on the Yard site.

**A Final Note Regarding The Transportation Analysis:**

~~The Planning Commission has considered the Frederic R. Harris report but does not endorse its findings or conclusions.~~ The analysis in the Harris report is based on the use of the City traffic model which is based on an analysis of traffic conditions only in the A.M. peak hour. Therefore, the study findings are relevant only for that peak hour; the model cannot accurately predict the peak period impacts, which might be far greater, or the impact on local streets.

The traffic model allocates peak hour traffic to the fastest route between two points. The computer may assign "traffic" to one route over another because the calculated travel time is 0.1 second faster. As a street reaches capacity, the model will search for alternate, less congested routes. However, the traffic model will continue to allocate peak hour traffic to streets even after those streets have reached their real capacity, if less congested alternative routes are not available. As a practical matter, however, as all of the available alternatives reach capacity, traffic will be displaced from the peak hour to adjacent hours in the peak period under all the scenarios tested.

Although the traffic model can predict that most major radial streets will be filled to capacity at peak hour with or without the Potomac Yard development, the model cannot predict the extent to which the peak period will be lengthened. Based on recent trends, we would expect congestion to increase significantly within the peak period.

Therefore, the model predicts that construction of the Potomac Yard/Greens development will have a limited additional impact on major radials in the peak hour over and above the congestion created by 20 years of growth in the region, if major road improvements are constructed. Still, development will very likely result in lengthening congestion beyond the peak hour to include at least other hours in the peak period, and lengthening the peak period itself.

## **LAND USE AND URBAN DESIGN ANALYSIS**

The prospect of development of the Potomac Area over the next 30 years has enormous implications for the City. Redevelopment of the railroad properties has the potential to physically transform these largely vacant sites into an urban center with homes, offices, shops, parks and roads. This redevelopment will also inevitably affect the City's image and character, and how it is perceived by its citizens and by others.

The railroad properties including Potomac Yard and Potomac Greens collectively constitute the largest contiguous tract of land available for development in the City of Alexandria, with an area of approximately 303 acres. It is one third of a mile wide by two miles long, comparable to an area in Old Town and Old Town North from Slater's Lane to the Capital Beltway and from St. Asaph Street to the Potomac River.

The redevelopment of this area is equivalent to creating an entirely new community within the City. It is unlikely that this new community will mirror the low density patterns of development which surround the site. Those areas were built in earlier times and in response to different historical patterns.

On the other hand, the City does not desire that this new community mirror the densities, heights or character of Crystal City or Pentagon City. Alexandria has consistently pursued development policies for moderate heights and densities (except near transit stations) to suit its land use objectives and to ensure that new development does not overwhelm surrounding residential areas.

This analysis explores the issue of appropriate development densities and heights for this area. The analysis is based on the City's overall land use objectives and the urban context, legal issues concerning the development of the site, and the physical opportunities and constraints attendant to that development. The purpose of the analysis is to develop specific land use and design principles which will serve as guidelines for redevelopment of the Potomac Yard and Greens sites. The intent of these guidelines is to create a new Potomac community that will add vitality and diversity to the City and strengthen and enhance adjacent neighborhoods.

### **Urban Context**

To the north, the study area is defined by Four Mile Run which flows from west to east under Jefferson Davis Highway and the George Washington Memorial Parkway and out into the Potomac River (Map 1). A very small area of Alexandria, approximately 1.6 acres, lies north of Four Mile Run. This area, and the rest of the Potomac Yard site in Alexandria constitute approximately 264 acres. The remainder of the Yard north of Four Mile Run is in Arlington County.

To the east, the Potomac Greens site, an area of approximately 39 acres, borders the George Washington Memorial Parkway. East of the Parkway is the Daingerfield Island Park and marina where the dominant visual features are the trees and occasional views of the Potomac River. The context for development of the Potomac Greens site is a natural and mostly undeveloped scenic environment.

To the west, Jefferson Davis Highway and a strip of commercial and industrial uses along the highway separates Potomac Yard from nearby residential neighborhoods. The commercial and industrial uses, although not generally compatible with the abutting residential area, act to buffer the residential neighborhoods of the Potomac West community from the heavily traveled Jefferson Davis Highway and from the railroad yard.

There are two large potential redevelopment sites along the Highway across from the Potomac Yard. One is a 30 acre site adjacent to Four Mile Run consisting of vacant, industrial land which is being considered for mixed use development under the guidelines of a Coordinated Development District. This site along with the northwest portion of the Potomac Yard forms a northern gateway to the City.

The other large redevelopment site is the 24 acre Oakville Triangle site, located along Jefferson Davis Highway between the former W&OD right-of-way and Swann Street, which consists of a large concentration of light industrial uses. While the Potomac West Small Area Plan calls for continued industrial development of this site, long term redevelopment of the site, possibly for mixed use development, could occur as the value of the land increases and as industrial uses become less viable within the city.

The southern portion of the Potomac Yard, including the piggyback yard, borders on the Braddock Road Metro station area and the Parker Gray and Northeast neighborhoods. These neighborhoods are predominantly residential with commercial and industrial uses generally providing the buffer between residences and the rail yard. North of Slater's Lane and along the Parkway is Potowmack Crossing, a garden apartment complex, and the only residential area immediately adjacent to the study area.

Along Monroe Avenue and west of the Yard is Simpson Field. South of Monroe Avenue is a mix of low scale residential and industrial uses along Leslie Avenue, the George Washington Junior High school and various softball and soccer/football fields and track.

### **Legal Context**

Two legal issues influence the development of the Potomac Yard and Potomac Greens sites: the court-approved Potomac Greens site plan and access from Potomac Greens to the George Washington Memorial Parkway. In determining the appropriate levels of development for the new Potomac community, each of these issues must be addressed.

The Potomac Greens site plan which was submitted in April, 1987 proposed 2,343,300 square feet of office and 107,100 square feet of retail development. This plan was not approved by the City. However, following a suit by the developer, the site plan was upheld by the Federal District Court and an order requiring the city to approve the site plan was entered. That decision is now being appealed by the City. Pending the outcome of the appeal, the district court order has been stayed. If the site plan is subsequently upheld, the development requested in the site plan must be granted. In this event, the small area plan will have to be reviewed in its entirety.

The site plan requires access directly to the George Washington Memorial Parkway. The Parkway is a major north/south, regional highway serving traffic with a four lane, limited access roadway and a large landscaped median. There are no turning lanes or interchanges now provided to serve the Potomac Greens site. RF&P and the National Park Service have contracted to allow RF&P to construct a diamond interchange with the Parkway at Daingerfield Island. This agreement is being contested by a citizens' suit. The City does not advocate the interchange. This small area plan contemplates that there will be no access to the Potomac Greens from the Parkway.

### **Constraints on Development**

Development of the Potomac Yard and Potomac Greens sites will be affected by several major physical constraints. (Map 5) Although the Potomac Classification Yard is closing, other rail services must be maintained. In addition to the Metrorail tracks, which will stay in their present location, two or possibly three tracks requiring a right-of-way of about 120 feet must be retained on the site to accommodate freight, Amtrak, and future Virginia Commuter service. Continued service to the PEPCO Generating Plant on Slater's Lane must also be accommodated.

Regardless of where these required tracks are located, they will have the effect of separating developable portions of the site from each other or from the community. The impacts of the rail corridors would be reduced if rail trackage were moved to the eastern edge of Potomac Yard adjacent to the Metrorail line.

Environmental constraints also exist on the Potomac Greens site. It is probable that the wetlands areas bordering the Parkway will be designated as a preservation area under the forthcoming Chesapeake Bay regulations; development is likely to be limited to the remainder of the site. Map 6 illustrates the proposed wetlands preservation area.

Because of the proximity of the site to National Airport, the FAA regulations will constrain the heights of buildings throughout the area. In addition, the FAA regulations will specify where the tallest buildings may be located and where only buildings of moderate height would be allowed due to the established flight path.

### **Opportunities for Development**

Although the constraints for redevelopment of the site are considerable, so are the opportunities (see Map 9). The Potomac Yard and Potomac Greens sites are among the largest urban properties available for redevelopment inside the Beltway. These sites are favorably located near the employment hub of the Washington Metropolitan area and near major transportation facilities, including Washington National Airport, I-395, U.S. Route 1, the George Washington Memorial Parkway and Metrorail.

The sites are also located near major open space/recreational facilities and residential uses which creates the opportunity to physically and functionally connect new development to existing neighborhoods and open space systems. For example, the eastern portion of the property bordering the George Washington Memorial

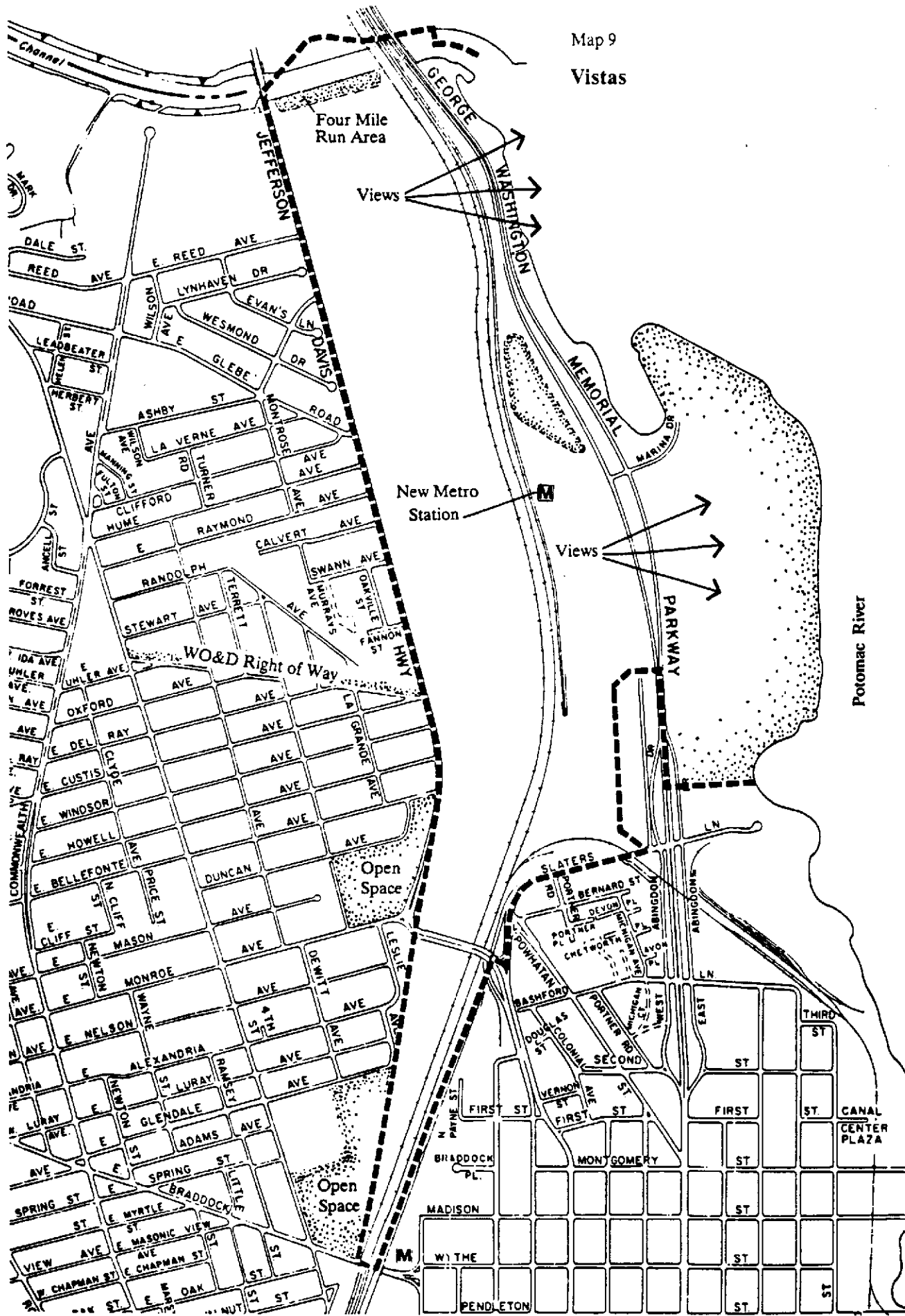
Parkway offers views of the Potomac River and provides opportunities for development in a park-like setting. The proximity of Daingerfield Island provides open space amenities and recreational areas particularly appropriate for higher quality residential development on Potomac Greens.

Four Mile Run provides the site with a valuable recreational and scenic opportunity. With removal of some of the trackage across the Run, more of this water feature could be exposed to view. Landscaping and the development of recreational water oriented uses would provide an attractive setting for development on both sides of the Run.

Near Four Mile Run, a portion of the Yard extends out toward the George Washington Memorial Parkway. This area provides some of the best views of the Potomac River and the national monuments and is a natural area for a large open space area with surrounding residential development.

The site provides the opportunity to create a new Metro station in the center of the area, providing access to an extensive regional transportation system. If built, the new Metro station will also provide transit service within walking distance to new residential development on the Potomac Yard and Potomac Greens sites and proximate to existing residential neighborhoods. Map 10 indicates distances to the new Metro station proposed for the Potomac Yard and Potomac Greens sites. Most of the Potomac Yard site north of the Monroe Street Bridge and a large portion of Potomac West would be within a 10 to 15 minute walk of the Metro station. The portion of the site south of the Monroe Street Bridge is within a 10 to 15 minute walk of the Braddock Road Metro station.

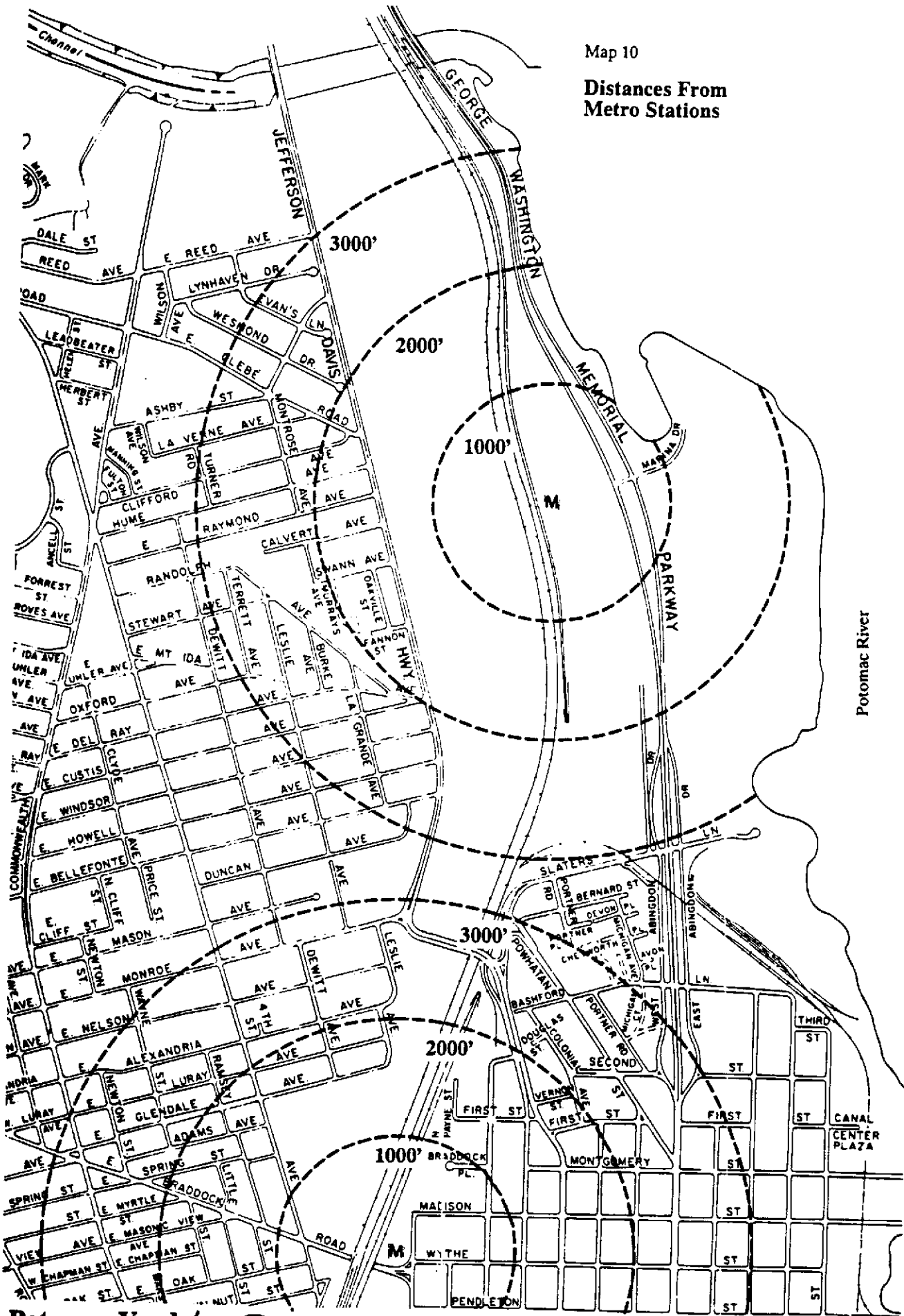
While the piggyback yard north of Slater's lane is not especially attractive today, redevelopment of the Yard and removal of the piggyback facility will provide a site insulated from through traffic movements and with potential for a residential neighborhood.



Potomac Yard /  
Potomac Greens



Distances From Metro Stations



Potomac River

Potomac Yard / Potomac Greens



## LAND USE PLAN CONCEPT

### Relationship to Alexandria 2020 and Potomac Greens Plans

In preparing a land use concept for this area, staff was able to draw upon useful analysis and plans prepared for Potomac Yard. While staff differs with Alexandria 2020 with respect to the overall densities proposed, there are many aspects of the Alexandria 2020 plan which are well thought out and staff has incorporated those elements into this area concept plan.

### Area of Development

According to the analysis by Alexandria 2020, only a portion of the total 264 acres in Potomac Yard would consist of developable area; the remainder would be for other purposes, such as streets and rights of way, open space and railroad use. On Potomac Greens, a much smaller percentage of the area will be required for infrastructure such as roads, but a large portion of the site will be required to be reserved as a wetlands preservation area. Table 9 illustrates the breakdown of total acreage for both sites.

Table 9

#### SITE AREA SUMMARY

<u>Potomac Yard*</u>	<u>Acres</u>
Gross Site Area	264
Railroad Corridor	31
Streets and Rights of Way, including Metro	71
Four Mile Run	4
	---
NET SITE AREA	158
Parks and Open Space	45
	---
AREA AVAILABLE FOR DEVELOPMENT	113
* Based on information provided by Alexandria 2020	
<u>Potomac Greens</u>	
Site Area	39
Wetlands Preservation Area (estimated)	20
Streets and Rights of Way (estimated)	4
	--
NET SITE AREA/AREA AVAILABLE FOR DEVELOPMENT	15

## **General Land Use Concept**

This land use concept plan calls for a new Metro station in the center of the site, with higher density mixed use development, consisting of office, retail, hotel and residential uses, to be concentrated near the station. The plan proposes a mixed use development along the Four Mile Run, consisting of predominantly residential and retail uses, to take advantage of the opportunities of building near the water, and a public facility and commercial center in the vicinity of Monroe Street, serving the project and the nearby residential area. The plan recommends that the remainder of the developable portions of the site be developed with residences or devoted to recreational facilities (see Map 11).

The plan proposes a variety of residential neighborhoods and a number of public open spaces and recreational opportunities serving both the project area and the nearby residential neighborhoods.

## **Transportation System**

A key element of the land use concept plan is a new Metro station on the existing Metro rail line at a straight section of track roughly east of Raymond Avenue. A commuter rail facility should be built near the new Metro station.

The major organizing structure of the plan for the area west of the Metro tracks is a grid system of streets with a spine road through the center of the site connecting U.S. Route 1 south of Monroe Street to Crystal Drive in Arlington. The spine road would provide new access to the major part of the project from the south. The grid pattern of streets would make it likely that the development within Potomac Yard would be urban in character, oriented toward streets, a pattern found in most of the surrounding areas of the City.

The area east of the Metro tracks is too long and narrow to support a grid network of streets. Instead, this plan calls for a single road running north/south through the site connecting with Slaters Lane. If access to the Parkway is gained by the developer of Potomac Greens the road network will need to be designed so as to limit the possibility of significant through movements between the Parkway and Slaters Lane.

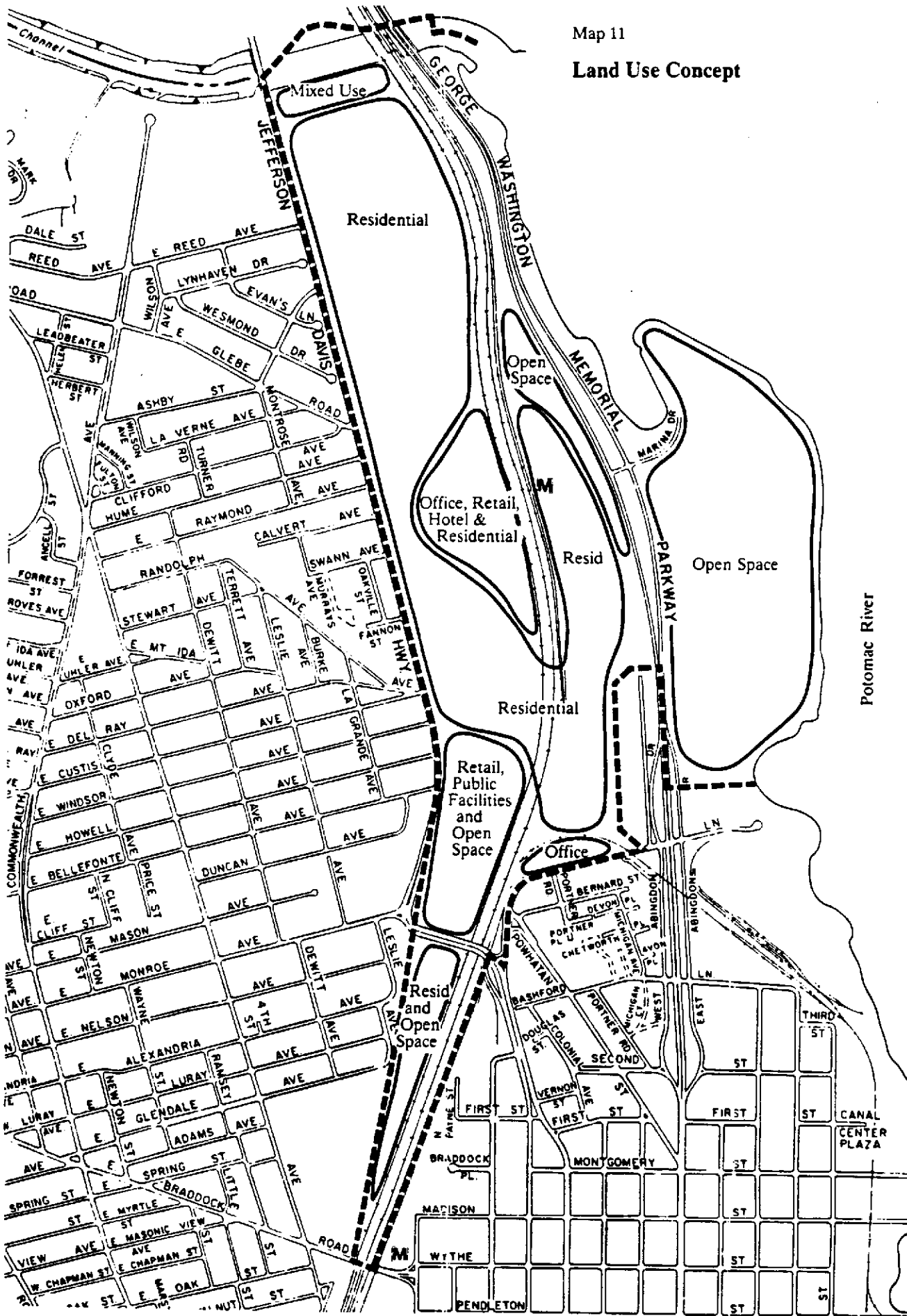
## **Open Space System**

The second major organizing feature of the plan is a system of open spaces, recreational facilities and pedestrian/bicycle trails which extend throughout the site and connect to existing open spaces and trails in the immediate vicinity.

The plan calls for a major open space in the southern part of the yard in the vicinity of Monroe Avenue and connecting to Simpson Stadium; and an open space on both sides of Four Mile Run with connections to Four Mile Run Park, an existing open area at the north of the Potomac Greens site. In total, new open space areas should comprise at least 30%, (approximately 48 acres), of the 158 acres of developable area in Potomac Yard.

The plan proposes a series of bikeways through the site, offering north/south routes connecting Alexandria with Arlington, and several east/west routes connecting Potomac West with the site and the parks along the Potomac River. All waterfront areas, including Four Mile Run, should be connected by bike paths linking up with the existing bike trail system. In this way, the new open space and recreational areas will enhance the accessibility of existing areas, and make those areas more available to the city as a whole (see Map 12).

Land Use Concept



Potomac Yard / Potomac Greens



### Open Space Concept

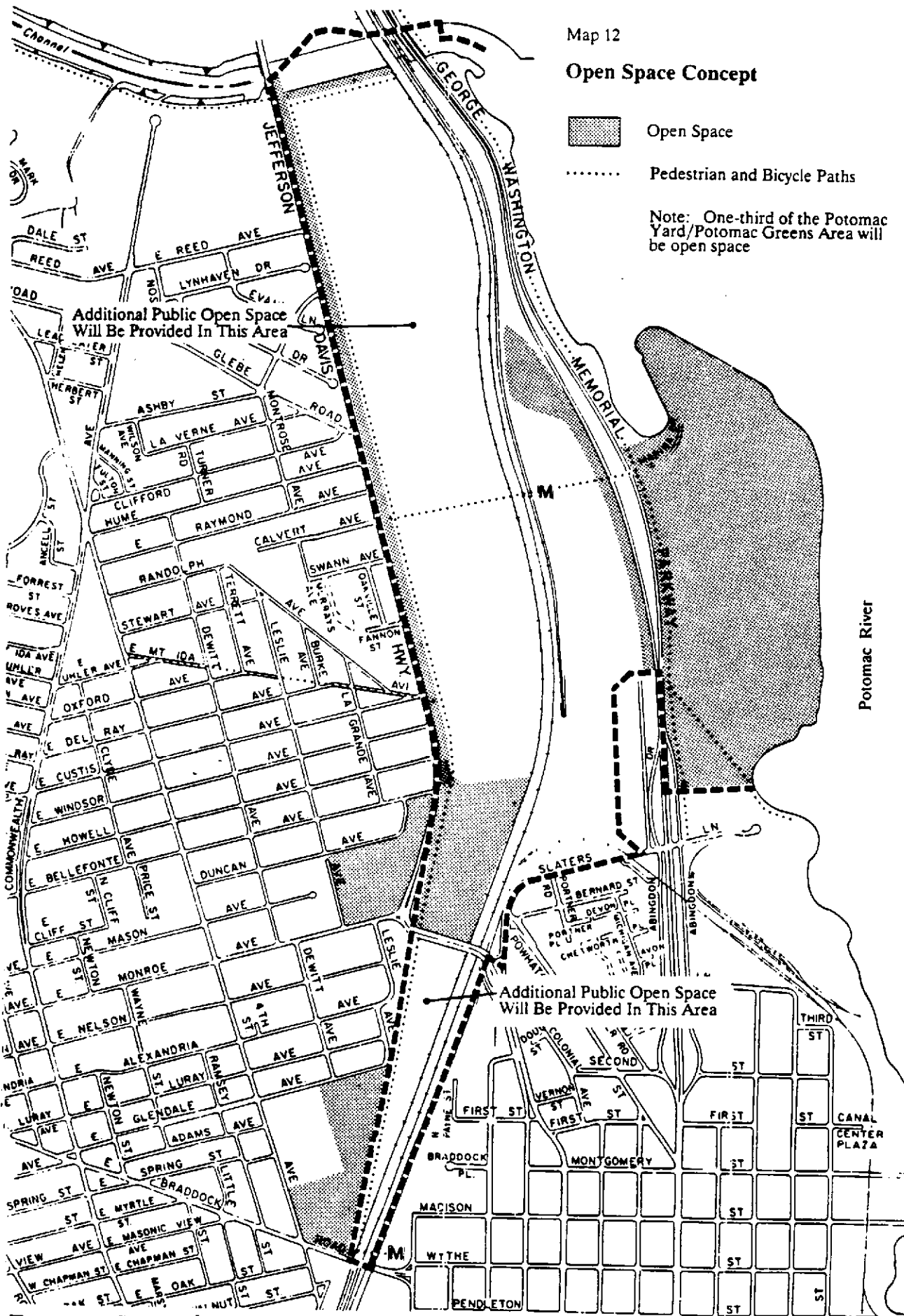


Open Space



Pedestrian and Bicycle Paths

Note: One-third of the Potomac Yard/Potomac Greens Area will be open space



# Potomac Yard / Potomac Greens



## Description of the Neighborhoods

The land use concept plan can be more specifically described and explained by subdividing the Potomac sites into 8 areas as shown on Map 13.

### 1. Metro Station Area

This area is proposed to be the high density central core of the Potomac Yard site and includes the proposed Metro Station. A mix of higher density commercial office, retail, hotel and residential uses is proposed to be concentrated near the transit facility within 1000 feet of the Metro station.

### 2. Four Mile Run Area

The Four Mile Run area, which includes the northern tier of the Potomac Yard in Alexandria, should serve as a gateway to the City and distinguish Alexandria from Crystal City development to the North. If possible, development of this area should be coordinated on both sides of Four Mile Run, regardless of the jurisdictional boundary, to take advantage of scenic and recreational opportunities offered by this waterway. The area near the Run should be planned as a natural extension of Four Mile Run Park in Alexandria and as part of the entire Four Mile Run park system in Arlington County.

This area is an appropriate location for a mix of uses, predominantly residential and retail. Retail stores and restaurants should be encouraged to support pedestrian activity next to what should be developed as a major water attraction and open space area.

### 3. Monroe Avenue Area

The Monroe Avenue area lies between Monroe Avenue, Slater's Lane and Route 1 and is centrally located relative to surrounding residential neighborhoods and recreational facilities. Because of its accessibility, this area is a suitable location for a community retail center, lower density professional offices, major active recreational facilities and other public facilities as may be needed.

### 4. Northern Yard

This area is proposed to be predominantly residential with a mix of housing types.

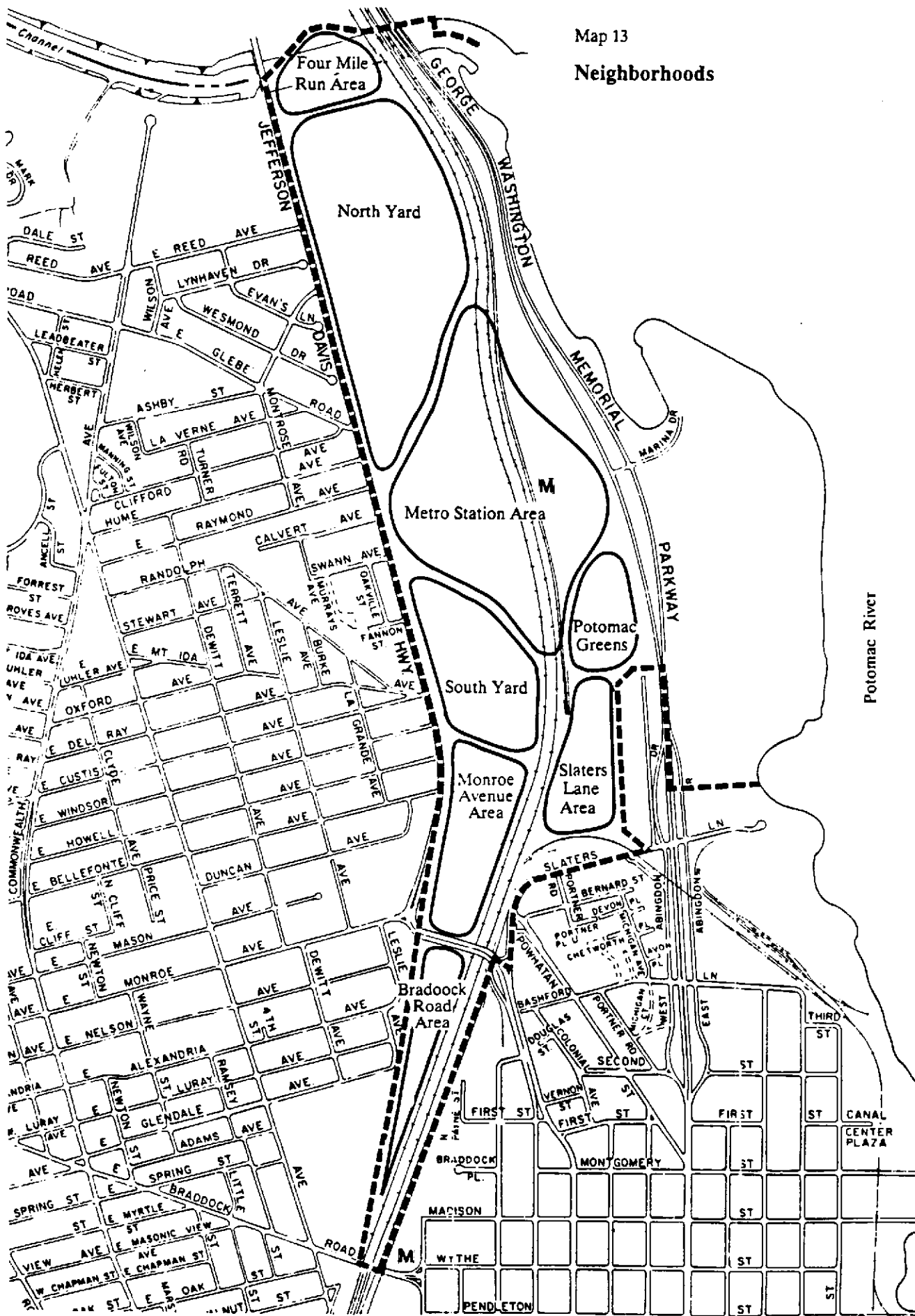
### 5. Southern Yard Area

This area lies between the Metro station area and the open space and community facilities to the south, and is proposed to be residential with a variety of housing types, predominantly townhouse.

### 6. Braddock Road

The Braddock Road area south of the Monroe Avenue Bridge is wedged between the George Washington Junior High and industrial uses to the west and the Metrorail line to the east and is the most isolated area within the Potomac Yard site. With the consolidation of the rail lines along the Metro line, the remaining land could be developed residentially and integrated with the existing Del Ray neighborhood. Over time, it may be desirable to encourage the residential redevelopment of the small amount of industrial and commercial uses located along Leslie Avenue. The City may wish to consider acquiring the southern portion of this area as an addition to the George Washington School recreational facilities.

Neighborhoods



Potomac Yard / Potomac Greens



7. Slater's Lane Area

This subarea includes what is now the piggyback yard and is located between the Metrorail line, the Potowmack Crossing Apartments located on W. Abington Drive, and Potomac Greens. Residential development of the Slater's Lane area would extend and strengthen the residential character of the Northeast neighborhood and provide a focus of residential development oriented along the Parkway. Moderately scaled residential, predominantly townhouse, would be appropriate to relate to existing and proposed adjacent residential development.

8. Potomac Greens Area

Potomac Greens, located adjacent to the Parkway, enjoys excellent views of the river and good access to the recreational facilities on Daingerfield Island. While this site is most appropriate for predominantly residential development and this plan recommends only residential development, the ongoing litigation affecting this site may ultimately determine the character of its development. If the site plan is upheld by the courts, a high density, all commercial development will be able to proceed on the site. If commercial development is approved for this site, this plan will encourage a shift of commercial densities from Potomac Greens to Potomac Yard, with a compensating shift of residential to Potomac Greens. Development of this site will need to be sensitively designed to avoid any negative impacts on the memorial character of the Parkway.

Coordinated Development District

The most comprehensive approach towards developing a large scale, mixed use project is to designate all the property in the Potomac Area excluding federally owned land and the small amount of existing commercially developed land north of Slater's Lane, as one Coordinated Development District (CDD). The CDD would include both Potomac Yard and Potomac Greens. It is logical to place all of this land in one CDD because all of the land is owned by the RF&P railroad and constitutes one contiguous redevelopment area.

The CDD designation will help ensure that redevelopment of this large site will be based on overall design principles that will provide cohesion and continuity to site development and will be compatible with adjacent areas of the City.

DEVELOPMENT PARAMETERS

The Potomac Yard/Potomac Greens CDD and the land use concept plan need to be based on a set of principles to guide development of the site. The most important of these principles, density and height, establish the scale and level of development desired for Potomac Yard and Potomac Greens and are discussed at length below. Other principles which address issues such as design guidelines are found in the Recommendations section.

Density

The level of density in Potomac Yard and Potomac Greens will be a key determinant of the character of the development in the Potomac Yard Potomac Greens sites. In establishing the appropriate level of density, two factors must be considered:

1. **Transportation:** The impact of different levels of development on the City's transportation network and areas of the city near Potomac Yard and Potomac Greens
2. **Character of Development:** A judgment about the type of development appropriate for the new Potomac community

Each of these factors are discussed below.

**Factors affecting Density**

1. **Transportation**

The traffic impact of alternative levels of development has been addressed earlier in this plan and in a study by Frederic R. Harris, transportation consultant. The traffic study suggests that the development proposed by this plan will have limited impact on peak hour traffic, but may result in exacerbating the longer peak period. The road system built in the Potomac area may alleviate some of the congestion from development predicted to occur.

2. **Character of Development**

The character of Potomac Yard and Potomac Greens will be determined in large part by the density and location of commercial and residential development.

This plan is based on the assumption that a Metro station is necessary in order to attain a high quality mixed use development. The location of a proposed Metro station is substantially determined by configuration of the Metro tracks. The station needs to be located on a straight stretch of track; since there is only one such stretch, the station would be located approximately east of Raymond Avenue.

**Office Density**

The potential construction of a Metro Station in the Potomac Area is the key determinant of the location and density of office development for the project. In other Metro station locations, the City has encouraged a concentration of higher density mixed use development, including high density office uses within convenient walking distance to the station (about a 1,000 foot radius). Recent research has shown that the number of people taking Metro rail in the Washington Metropolitan area is a function of the distance from the station to the destination. Ridership begins to fall off markedly after 2000 feet. Therefore, this plan calls for most of the ~~2,100,000~~ <sup>2,750,000</sup> square feet of office development in the area to be located near the new Metro station.

To place this amount of office development into perspective, a comparison to the King Street Metro Station area is instructive. The King Street Metro Station area consists of approximately 28 acres, excluding public rights of way. This area is currently planned for approximately 2.6 million square feet of office space, of which 1.7 million has already been built, and an additional 0.9 million planned, not including the Carlyle project. Much of the office development around the King Street Metro station has been or will be development at densities of between 2.5 and 3.0 F.A.R. (see Figure 6).

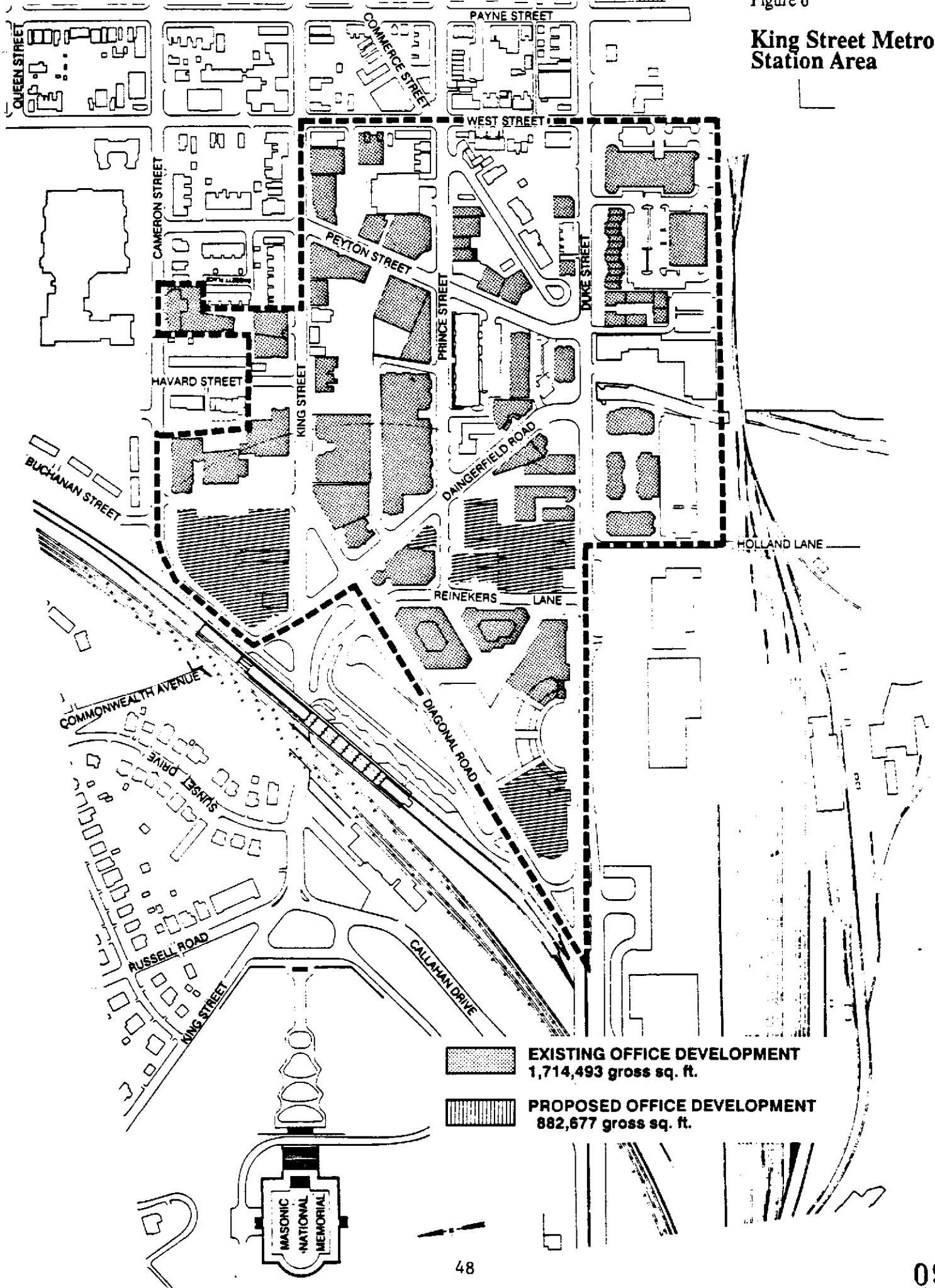
It would be preferable to concentrate the commercial development west of the tracks, on the Potomac Yard site where street access is superior. This would eliminate the need for an intersection or an interchange with the Parkway, since a substantially residential development could be served by Slaters Lane to the south.

**Residential Density**

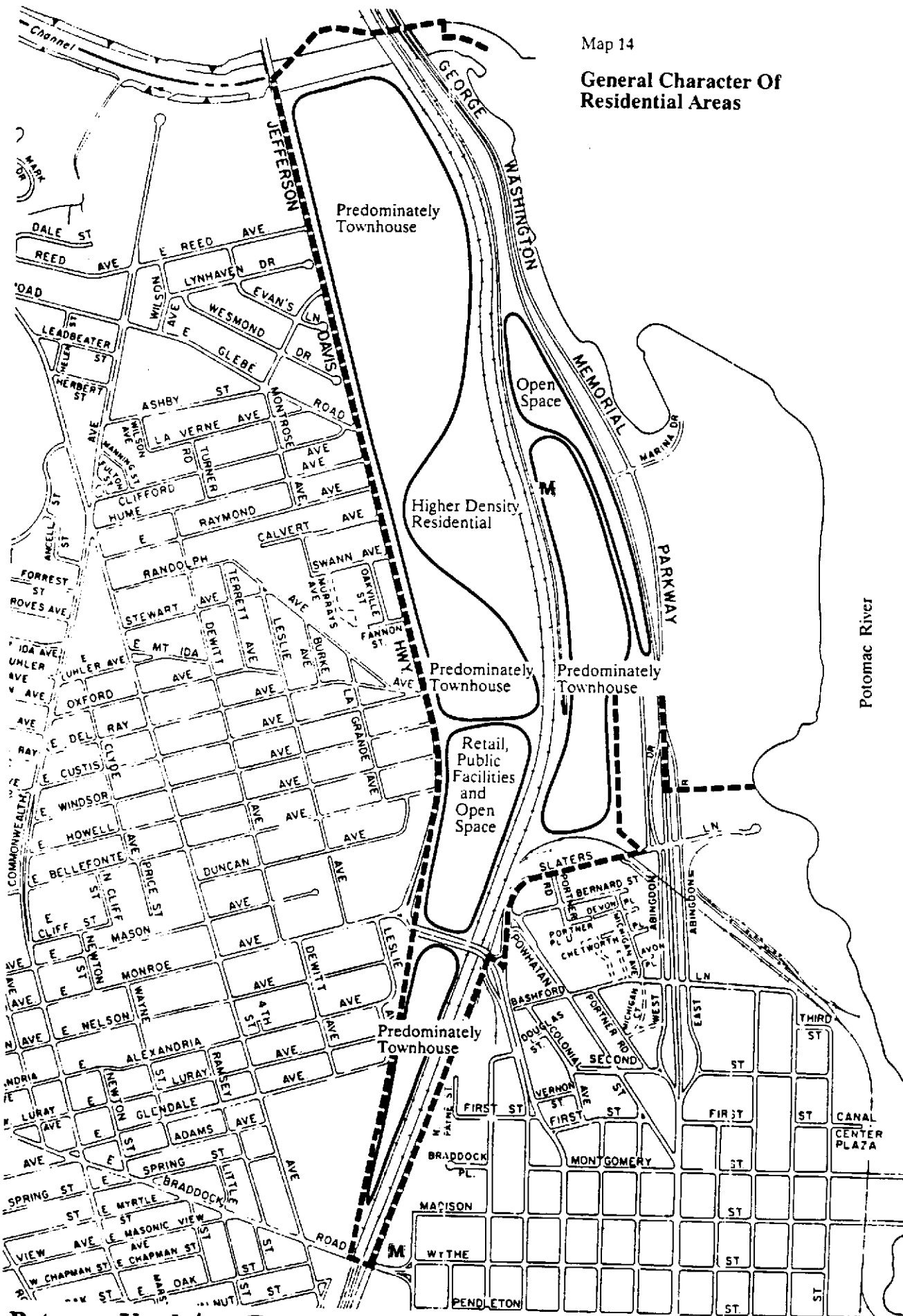
This plan allows for the development of up to ~~4.578 million square feet of residential space~~ <sup>3500 units</sup>, to include a variety of densities. At least two-thirds of the residential development should be townhouses.

In allocating the required amount of residential density in the land use concept plan, staff has considered which areas are appropriate for higher residential densities and which areas require lower densities more compatible with adjacent existing areas. Map 14 shows how these housing types would be arrayed by neighborhood in the Potomac Yard/Potomac Greens Small Area Plan.

# King Street Metro Station Area



### General Character Of Residential Areas



Potomac Yard / Potomac Greens



### General Character of Residential Areas

The vicinity of the Metro station is the area appropriate for higher residential densities on the Potomac Yard. Although this area is likely to be predominantly office and commercial retail, some residential development at higher densities should be encouraged on Yard to provide a true mixed use environment.

The Potomac Greens area would have about all of its estimated 15 acres developed in a mix of residential types. In order to minimize the visual intrusion of development on the Parkway, the type and arrangement of the residential structures on this site is critical. The buildings in this area must be set back from the Parkway and set back from each other to allow generous landscaped open spaces between buildings. The low buildings closest to the Parkway should screen the taller buildings to the west. An important goal of development in this area is to ensure that the natural setting and visual character of the Parkway will be preserved.

A lower scale of residential development is appropriate for the Braddock Road subarea. Low to moderate density and scale townhouses should be oriented toward the existing low scale residential neighborhood along Glendale and Alexandria Avenues. *Mid-rise residential development is appropriate further east and closer to the Braddock Road Metro station.* The remaining large open portions of the Yard and the Slater's area are proposed to be predominantly low scale and moderate density residential development, consisting mostly of townhouses.

### Examples of Residential Densities

In general, the eastern part of the City is predominantly a mix of townhouses and garden apartments, with a few scattered midrise and highrise residential buildings. The densities of these townhouse or garden apartment blocks are typically around 20 du/acre for townhouses, with garden apartments or stacked townhouses (flats) at up to 50 du/acre. Midrise buildings (between 5 and 8 stories) are typically between 50 and 70 du/acre, and highrise buildings (generally above 9 stories) range between 50 du/acre and 100 du/acre.

There are many examples of townhouses and garden apartments in Alexandria within the 20-50 du/acre range of densities. Traditional townhouses, such as Bulfinch Square (North St. Asaph, Pitt and Princess Streets), are at the lower end of this range. This block has surface parking on the interior of the block and a density of approximately 20 du/acre (see Figure 7). Townhouse densities in many blocks in Old Town generally range between 20 and 30 du/acre.

The Watergate project (Figure 8) in Old Town North at 32 du/acre and Brockett's Crossing (Figure 9) on North St. Asaph and Pendleton Streets at 39 du/acre represent townhouse projects at the upper end of the range. The Watergate project has underground parking, although Brockett's Crossing, a much smaller project, does not. However, it is usually difficult to meet the parking requirements of these densities without underground parking.

St. Asaph Square (South St. Asaph, Green, Pitt and Jefferson Streets) at 56 du/acre, provides an example of a denser, garden apartment project slightly above the 20-50 du/acre density range (Figure 10). Barton's Crossing, The Arbors at Landmark and Wyndham garden to mid-rise apartment complexes are also about 60 du/acre, but this plan does not advocate those projects as suitable models of development.

The Colecroft project (see Figure 11), consisting of midrise buildings, townhouses and garden apartments, provides an example of a mix of housing types that average 42 du/acre; the midrise buildings are at 72 du/acre and the townhouses are 28 du/acre. Even though its on-site parking is slightly inadequate, Colecroft is one of the best recent examples within the city of a mix of housing types at moderate densities.



Figure 7

**Bulfinch Square**

Location: North St. Asaph and Princess Streets  
 Density: 20 du/ac (31 units)  
 Height: 35'  
 Parking: offstreet (surface)



Figure 8

**Watergate**

Location: North Royal, Second and North Pitt Streets  
 Density: 32 du/ac (100 units)  
 Height: 43'  
 Parking: underground

**Potomac Yard /  
 Potomac Greens**

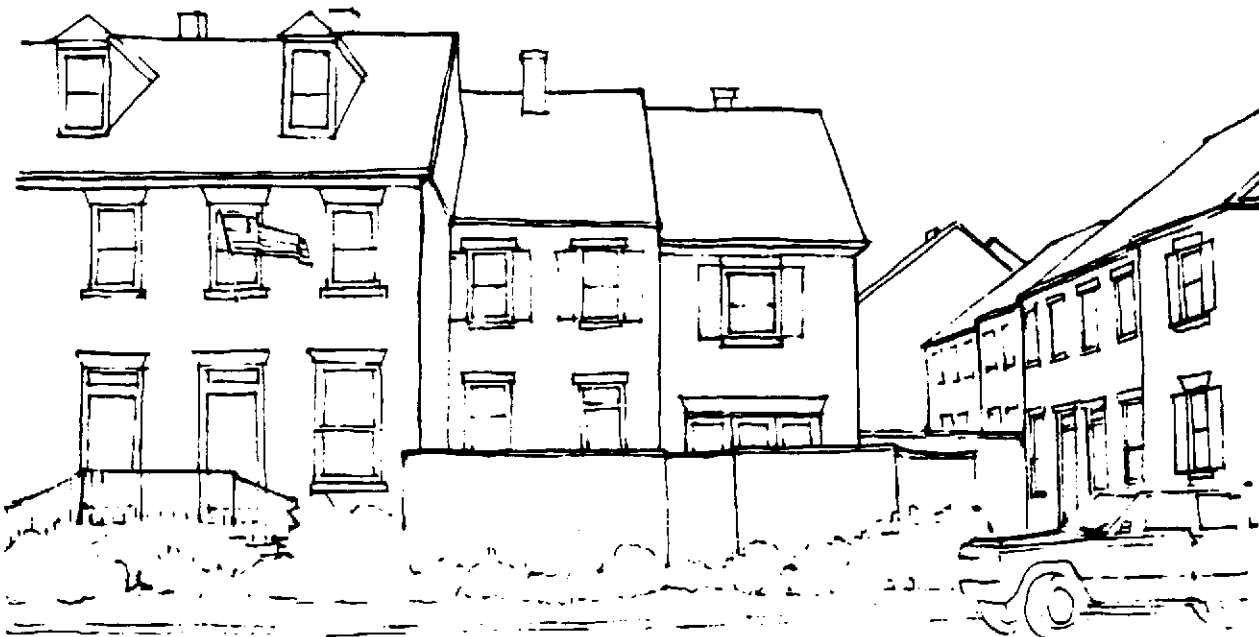


Figure 9

**Brockett's Crossing**

Location: North St. Asaph between Princess  
and Queen Streets  
Density: 39 du/ac  
Height: 22'  
Parking: offstreet (surface)

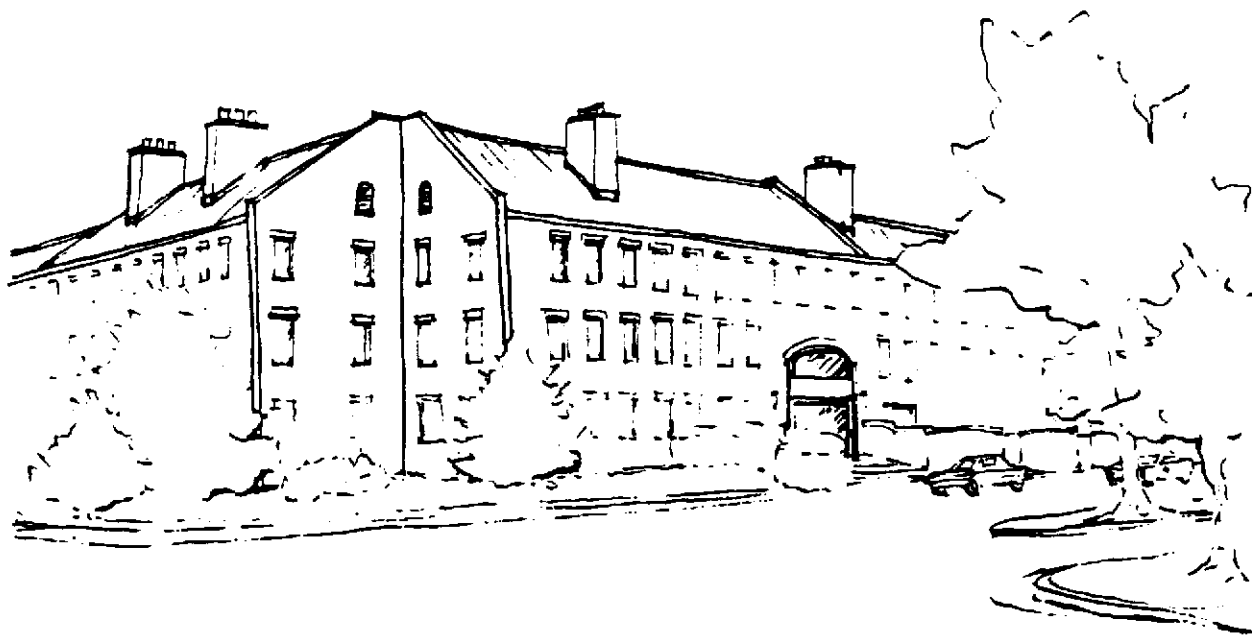


Figure 10

**St. Asaph Square**

Location: South St. Asaph and Green Streets  
Density: 56.5 du/ac (113 units)  
Height: 40'  
Parking: underground



Figure 11

**Colecroft Midrise/Townhouse**

Location: North West Street and Braddock Road  
 Density: 77 du/ac (156 units)  
 41 du/ac (131 units)  
 Height: 77'/40'  
 Parking: underground/offstreet (surface)

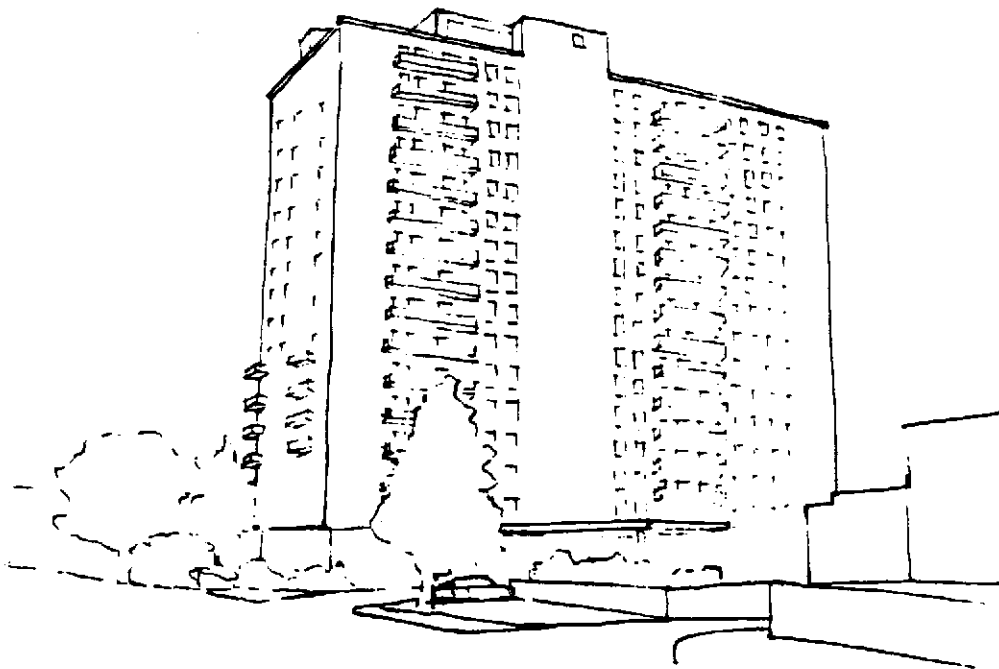


Figure 12

**Port Royal**

Location: North Pitt and Montgomery Streets  
 Density: 100 du/ac (208 units)  
 Height: 145'  
 Parking: offstreet (surface)

**Potomac Yard /  
 Potomac Greens**

The conclusion drawn from the above analysis is that attractive and livable townhouse development with underground parking can occur at densities of up to 35 du/acre and garden apartments or mixed housing areas at densities of up to 40-50 du/acre.

The City has few residential projects which exceed 60 dwelling units per acre. A notable example is the Port Royal condominiums, a high rise building in Old Town North at 100 dwelling units per acre (Figure 12). While the City seldom approves residential developments at above 54 du/acre, the City has, however, followed a policy of increasing residential density allowances near transit stations. For example, the City approved new zoning within 1000 feet of the King Street Metro Station that would allow up to 160 dwelling units per acre. At the Eisenhower Avenue Station, City Council approved the Mill Race project which will have a density of approximately 130 dwelling units per acre. Residential development above 100 units per acre was also approved at selected blocks in the CNS project located between the King Street and Eisenhower Avenue Metro stations.

### Hotel and Retail Uses

625  
650 hotel rooms are supportable.

The appropriate level of hotel development is based on the level of office development. With 2.1 million square feet of office development, approximately ~~290,000 square feet of hotel development is supportable.~~

Land use goals as well as residential and office development levels are considered in determining the appropriate amount of retail development. With ~~2.1 million square feet of office space and 4.579 million square feet of residential development,~~ an estimated ~~250,000~~ square feet of retail development can be supported. This amount will provide adequate retail space to support the new residential and office areas. Included in this amount is up to 160,000 square feet for a larger retail center, approximately the size of Hechinger Commons shopping center, serving both the new areas and the existing surrounding community.

2.75  
3500  
units 300,000

### Height

Building heights within the Potomac Yard and Potomac Greens sites should serve a variety of functions and purposes; to emphasize important locations on the site, to provide a focal point for development, to provide special views of landmarks, to provide transitions compatible with adjacent low scale areas, and to add visual interest to the project (see Map 15).

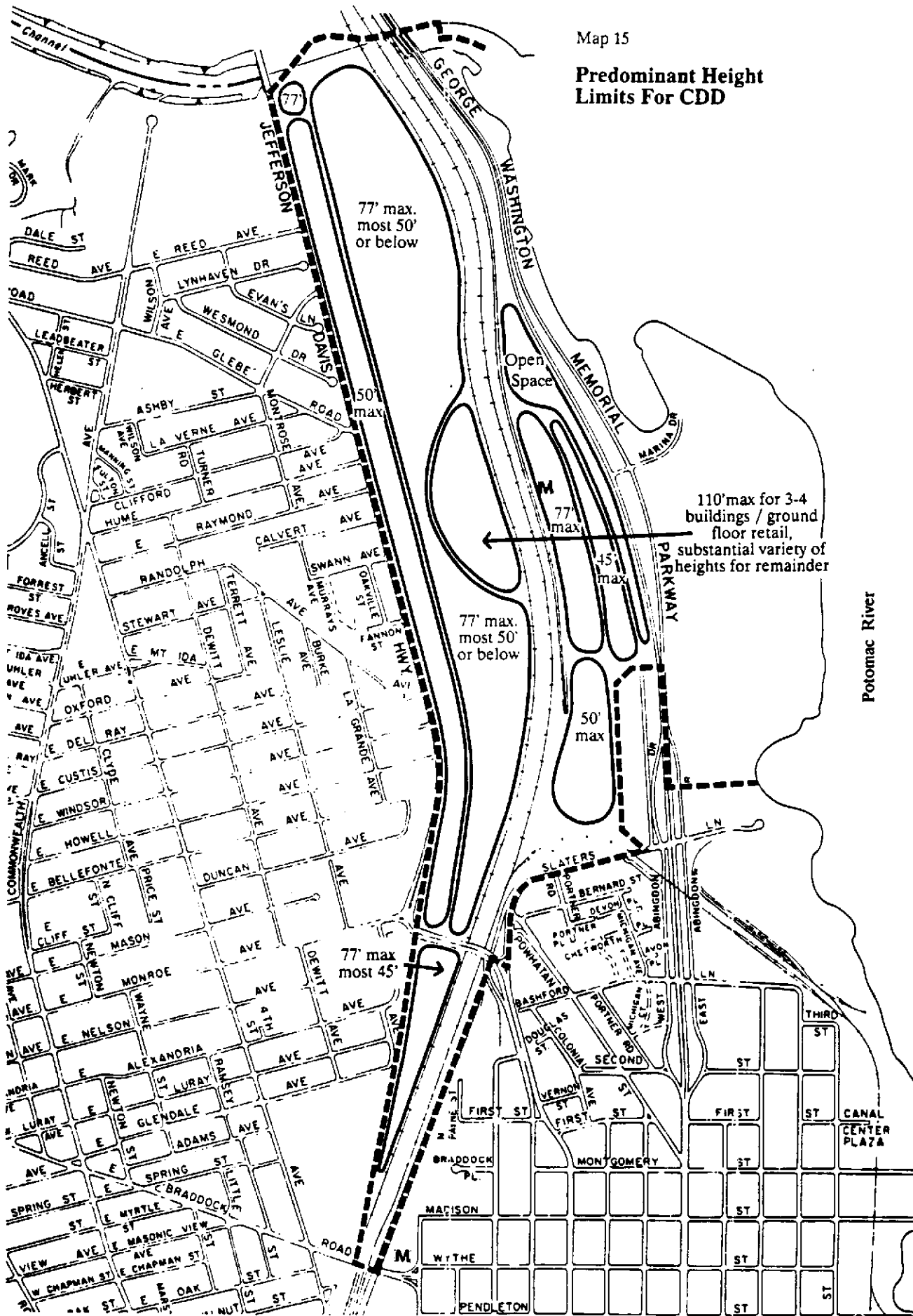
The location of the Metro station in the middle of the site is the appropriate location for greater heights in the Potomac Area. On Potomac Yard tall buildings with heights of up to ~~94~~ <sup>110</sup> feet should be concentrated around this area, with the tallest buildings adjacent to the station to provide a focus for the entire area. Areas adjacent to the commercial core should provide a transition from an intense concentration of tall buildings to buildings of more moderate heights.

On the Potomac Greens site, all buildings within 500 feet of the centerline of the Parkway are within the Old and Historic Alexandria District and must remain below 50 feet above average finished grade. This small area plan limits heights adjacent to the Parkway to 45 feet. Buildings outside the 45 foot area and adjacent to the proposed Metro station could rise to varied heights, up to a maximum of 77 feet.

The heights near existing neighborhoods should be kept predominately low, ~~45 feet~~ <sup>to 50 feet</sup> or under, to protect these areas from taller, larger scaled buildings. These areas include the southern portion of the site, adjacent to the Braddock Road and Del Ray neighborhoods, and the area adjacent to Potowmack Crossing. ~~of the railroad tracks, within the residential areas, a limited number of~~ buildings may be allowed to rise to 77 feet

The height of development along Route 1 should also be ~~45 feet~~ <sup>50</sup> feet or under to mirror development to the west, except that 1-2 buildings may be allowed to rise to 77 feet at Four Mile Run, to mark the entrance to the City.

### Predominant Height Limits For CDD



77' max.  
most 50'  
or below

50' max

77' max.  
most 50'  
or below

77' max

45' max

50' max

110' max for 3-4  
buildings / ground  
floor retail,  
substantial variety of  
heights for remainder

Potomac River

Potomac Yard /  
Potomac Greens



## **GOALS AND OBJECTIVES**

The goals of the Potomac Yard/Potomac Greens Small Area Plan are:

- \* to encourage the redevelopment of Potomac Yard and Potomac Greens as a pedestrian oriented urban environment with a mix of uses
- \* to develop livable neighborhoods and successful commercial areas
- \* to integrate redevelopment of Potomac Yard into the fabric of the City through the design and arrangement of uses, streets, open space and pedestrian systems.
- \* to protect neighboring residential areas from the impacts of traffic and incompatible development.
- \* to minimize traffic, visual and environmental effects of development on the George Washington Memorial Parkway
- \* to increase the accessibility of existing neighborhoods to the Potomac River, Four Mile Run and transit facilities.

## **PROPOSED LAND USE AND ZONING**

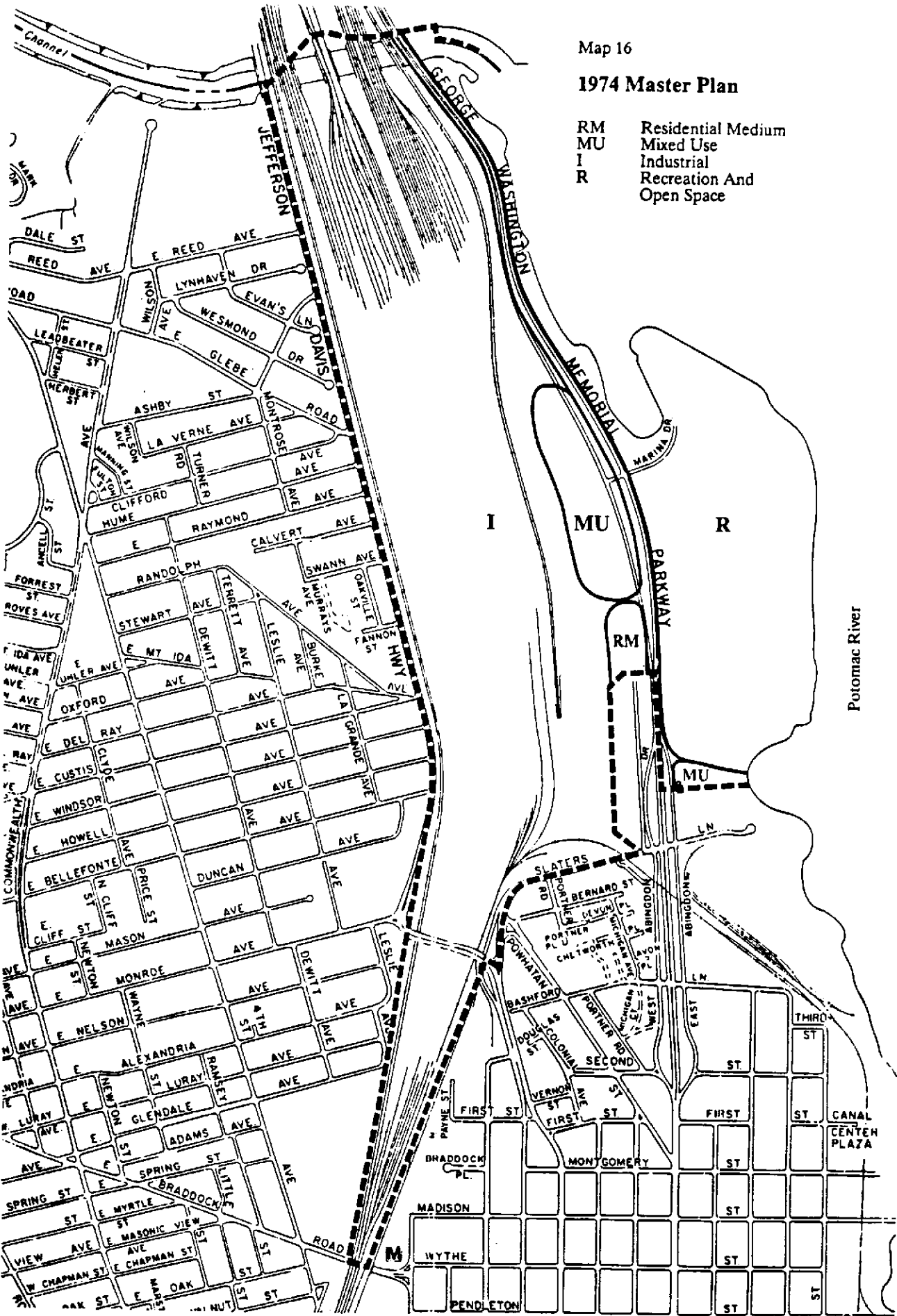
To achieve these goals, this Plan recommends that the entire privately owned area within the Small Area Plan be designated a Coordinated Development District, except for the commercial properties located on the north side of Slater's Lane. These properties are not owned by RF&P and should be designated OC-Office Commercial, compatible with the properties on the south side of Slater's Lane. Daingerfield Island and the George Washington Memorial Parkway should be designated WPR-Waterfront Park.

Development in the Coordinated Development District will be guided by a land use concept plan as discussed in the Land Use and Urban Design Analysis section of this Plan, and by the CDD principles expressed below. This section includes the following maps:

- Map 16 - 1974 Master Plan
- Map 17 - Land Use Changes
- Map 18 - Proposed Land Use
- Map 19 - Existing Zoning
- Map 20 - Zoning Changes
- Map 21 - Proposed Zoning
- Map 22 - Existing Heights
- Map 23 - Land Use Concept
- Map 24 - Height Limits for CDD

Map 16  
**1974 Master Plan**

- RM Residential Medium
- MU Mixed Use
- I Industrial
- R Recreation And Open Space

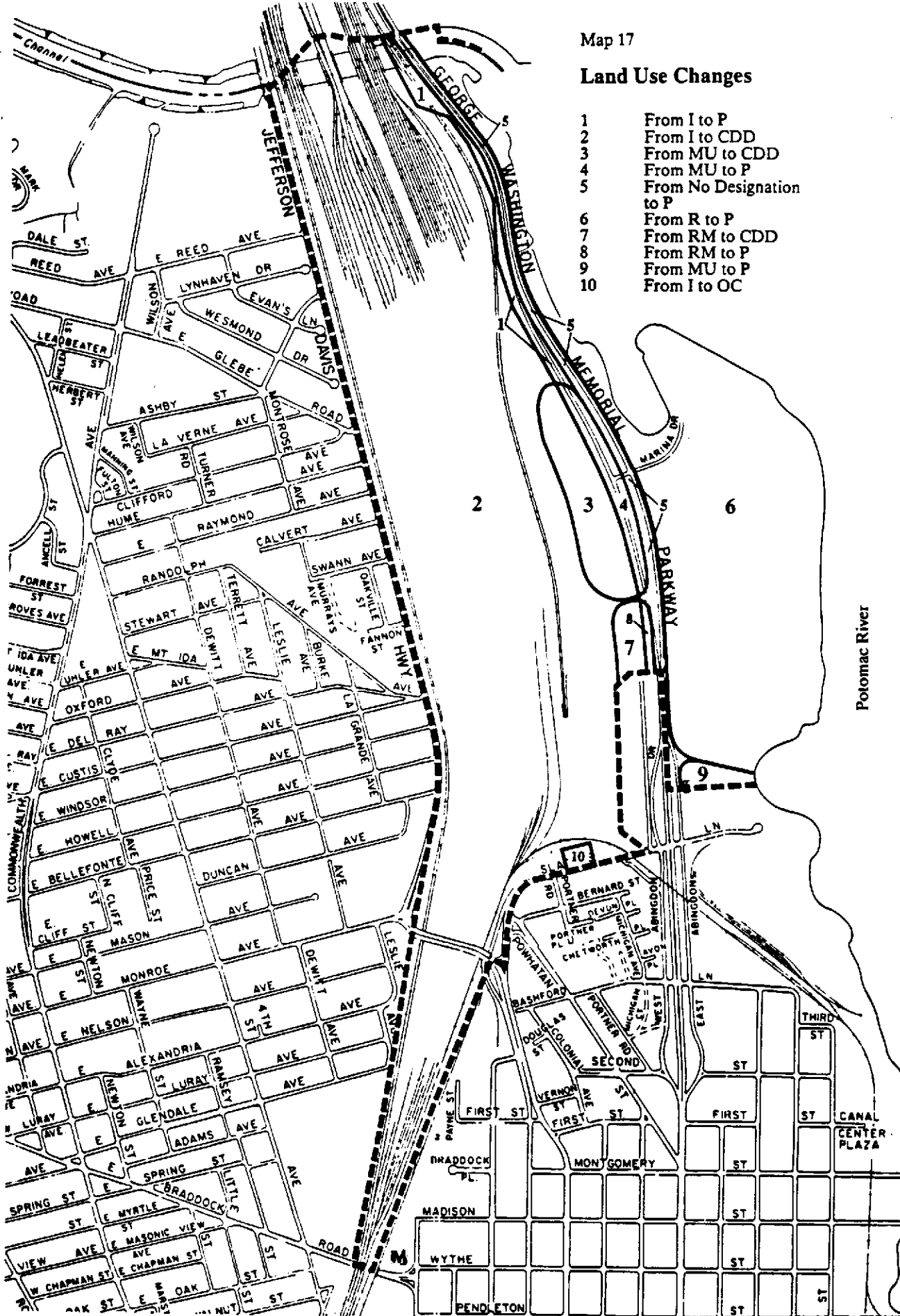


Potomac Yard /  
 Potomac Greens



### Land Use Changes

- 1 From I to P
- 2 From I to CDD
- 3 From MU to CDD
- 4 From MU to P
- 5 From No Designation to P
- 6 From R to P
- 7 From RM to CDD
- 8 From RM to P
- 9 From MU to P
- 10 From I to OC

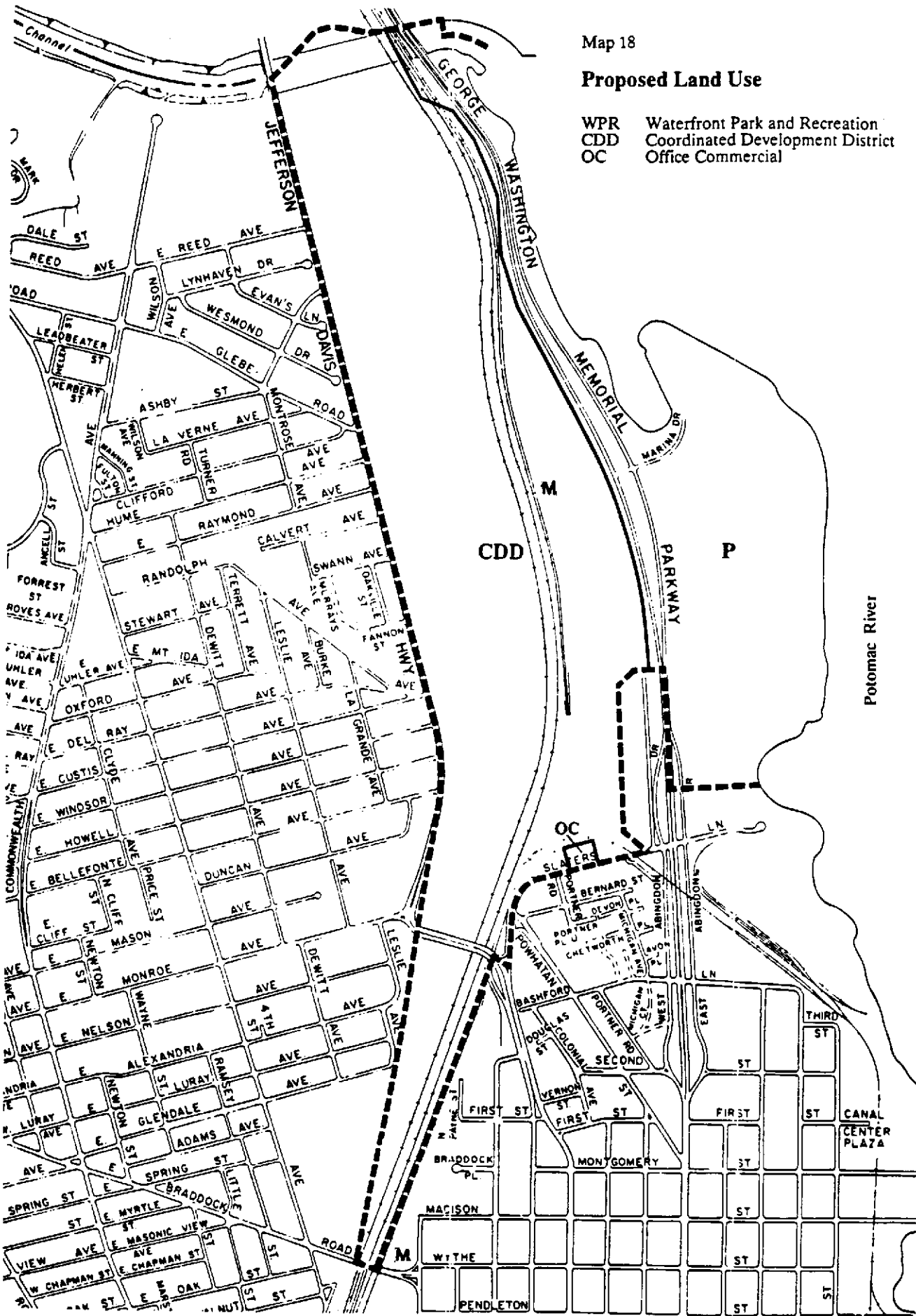


Potomac Yard / Potomac Greens



### Proposed Land Use

- WPR Waterfront Park and Recreation
- CDD Coordinated Development District
- OC Office Commercial

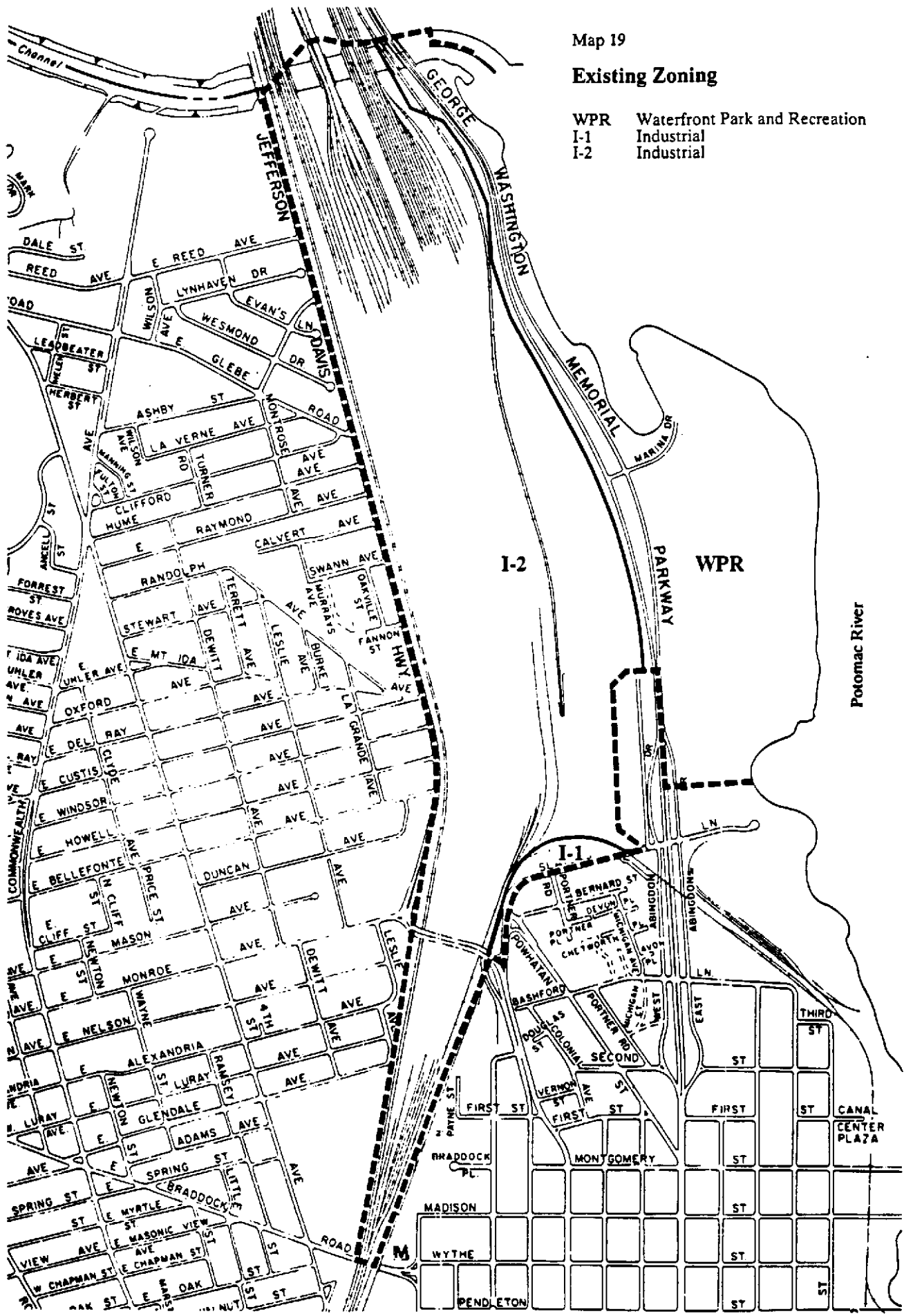


**Potomac Yard /  
Potomac Greens**



Existing Zoning

- WPR Waterfront Park and Recreation
- I-1 Industrial
- I-2 Industrial

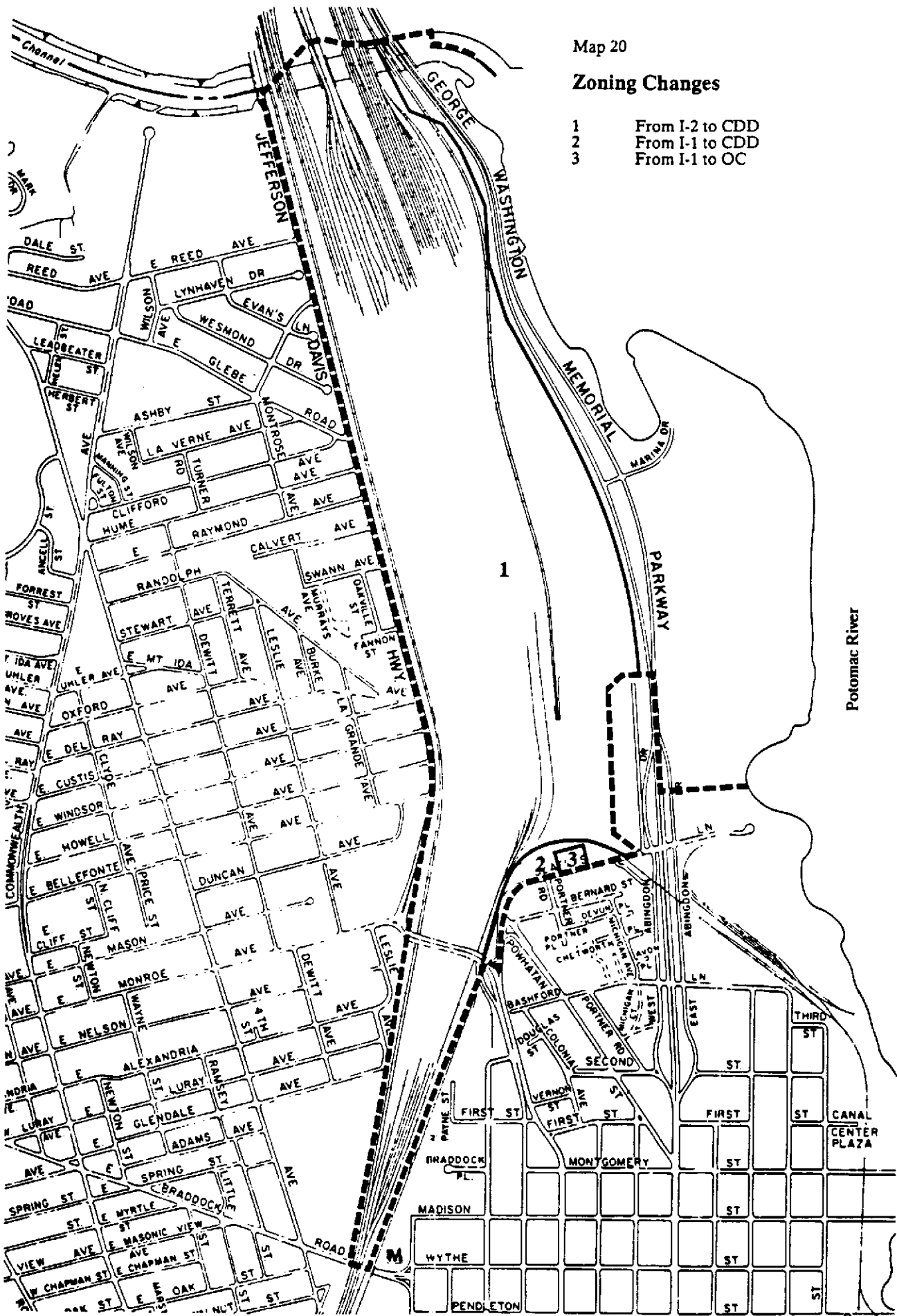


Potomac Yard / Potomac Greens



### Zoning Changes

- 1 From I-2 to CDD
- 2 From I-1 to CDD
- 3 From I-1 to OC



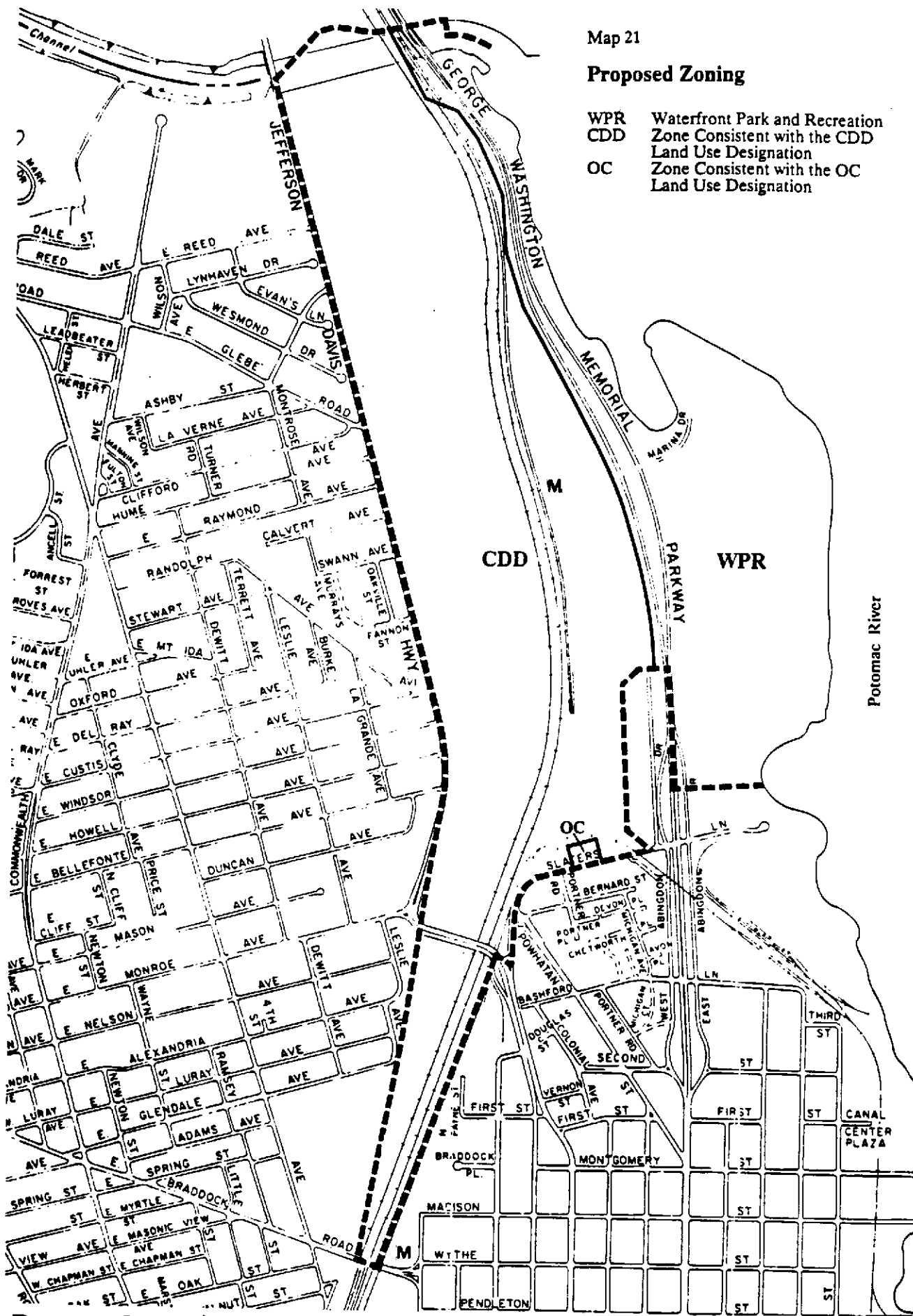
Potomac River

Potomac Yard / Potomac Greens



### Proposed Zoning

- WPR Waterfront Park and Recreation
- CDD Zone Consistent with the CDD Land Use Designation
- OC Zone Consistent with the OC Land Use Designation



Potomac Yard / Potomac Greens

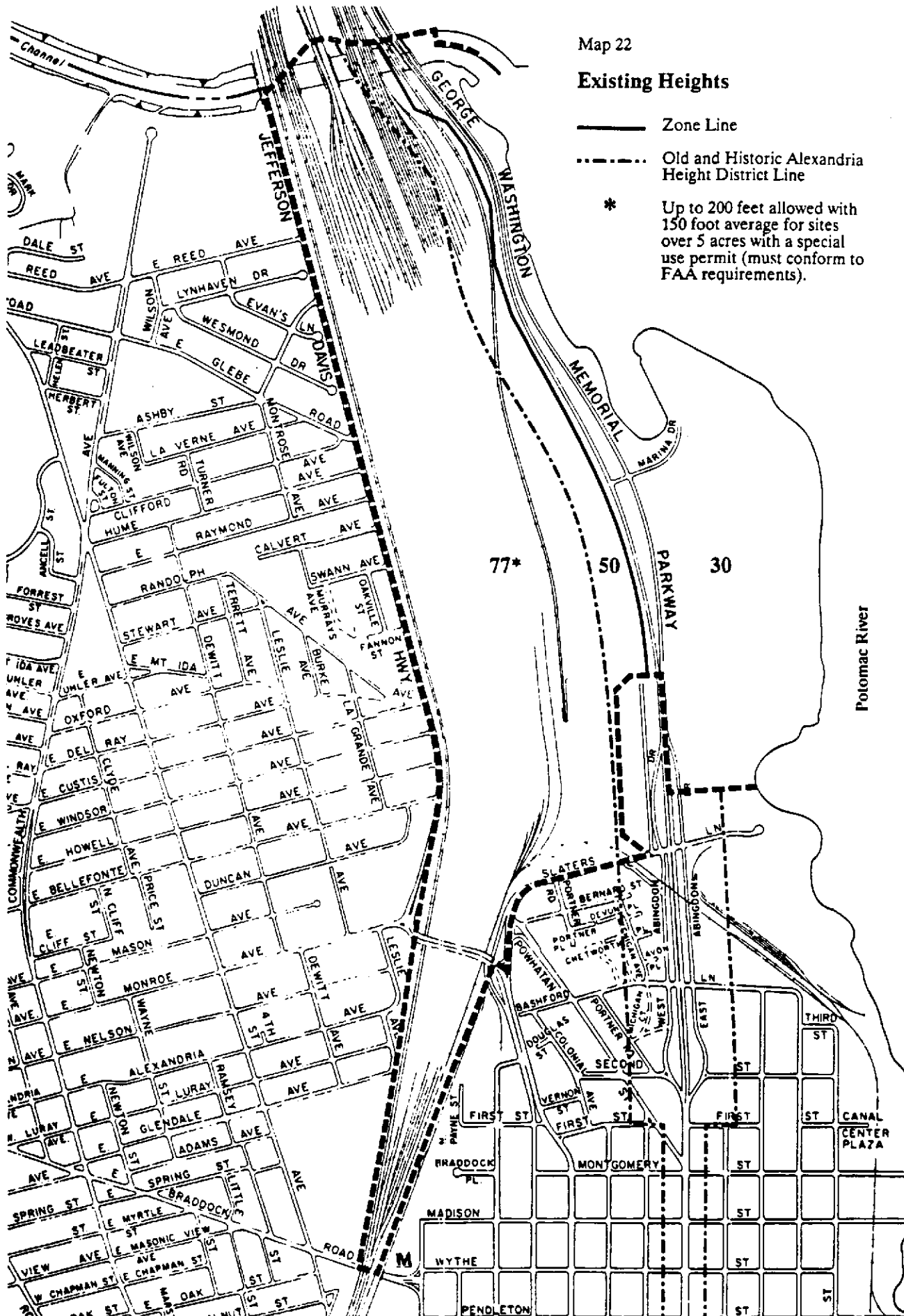


Existing Heights

— Zone Line

- - - Old and Historic Alexandria Height District Line

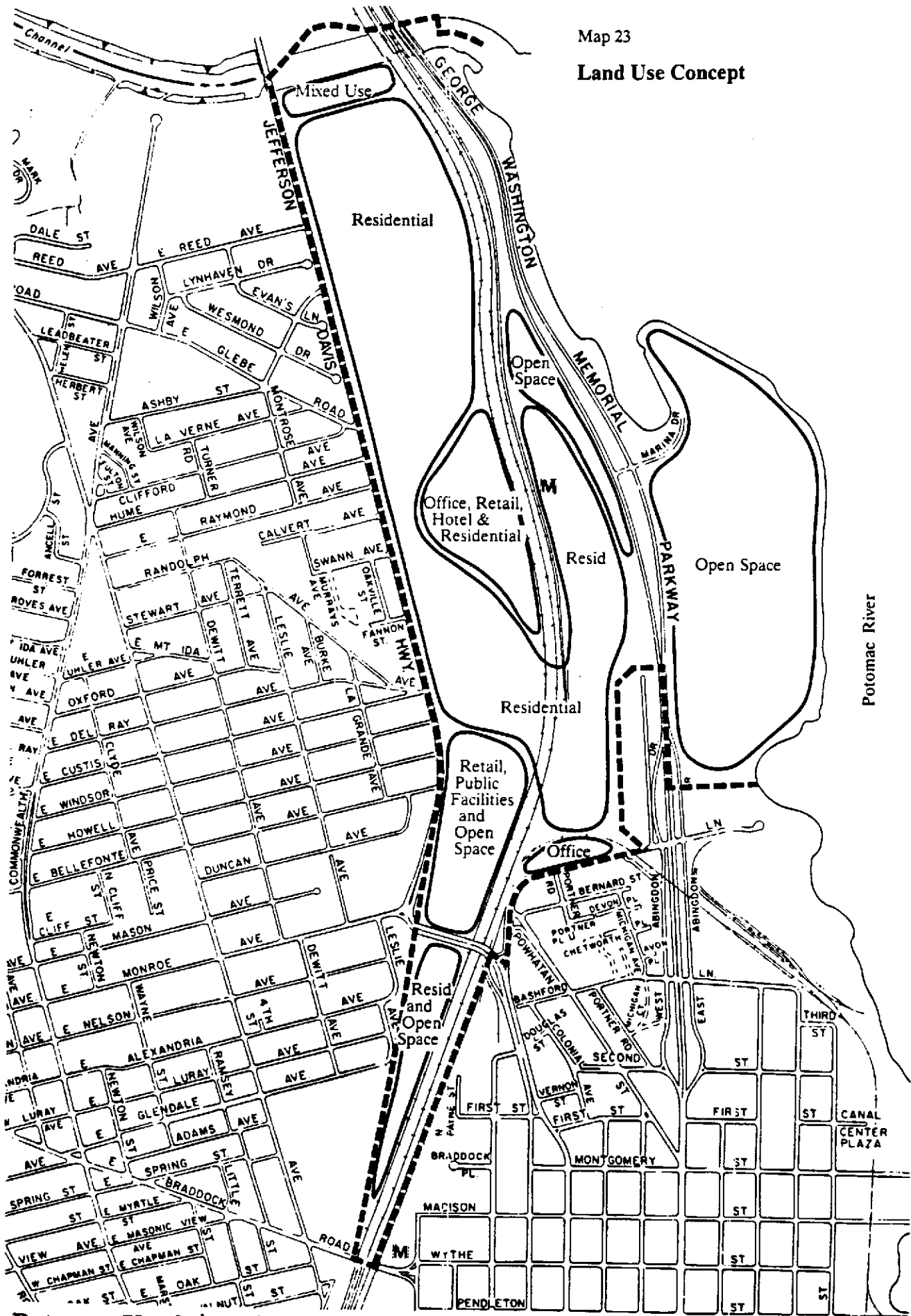
\* Up to 200 feet allowed with 150 foot average for sites over 5 acres with a special use permit (must conform to FAA requirements).



Potomac Yard / Potomac Greens



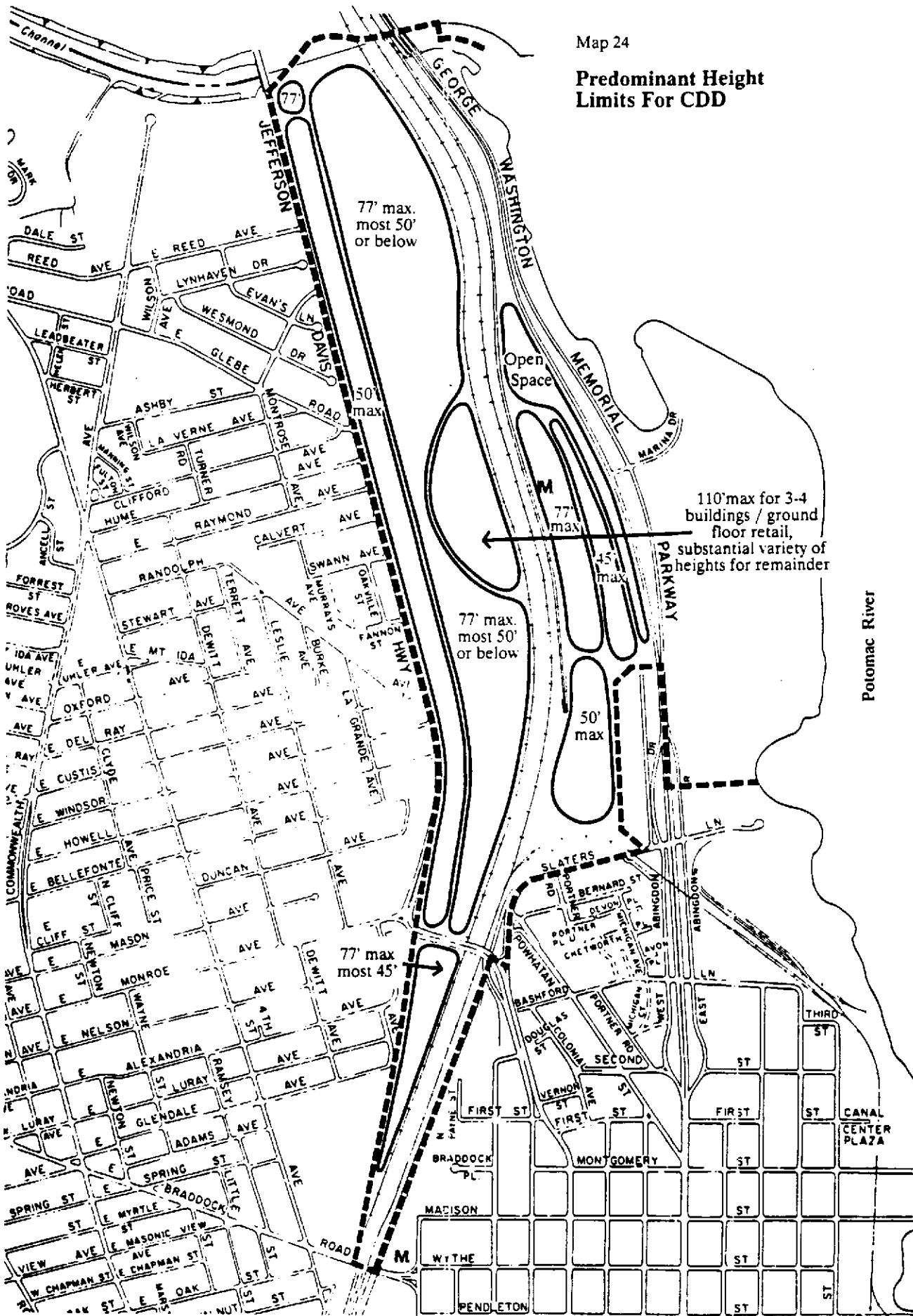
Land Use Concept



Potomac Yard / Potomac Greens



### Predominant Height Limits For CDD



Potomac Yard / Potomac Greens



## CDD Guidelines for Potomac Yard/Potomac Greens

Development under the Special Use Permit procedures within the CDD shall be in accord with the following principles:

### General

1. The entire area encompassed by the CDD designation shall be treated as one integrated mixed use development area under the procedures specified in the CDD zone.
2. Except for interim uses all railroad trackage shall be located or relocated generally adjacent to the existing Metrorail tracks.
3. All on site utilities shall be placed underground.
4. The total amount of development allowed on this site shall be as follows:
  - 1) 2.75 million square feet of office space;
  - 2) 625 hotel rooms;
  - 3) 300,000 square feet of retail space;
  - 4) 3,500 residential units.

The City Council acknowledges the right of the owner of the site, or a successor in interest, to apply for an amendment to this plan and to the City's zoning code which would increase the amount of development permitted on the site pursuant to a CDD plan. Council also acknowledges that a future city council may look favorably on such an amendment if the then existing development on the site and the proposed increase in development has not caused, and is not expected to cause, adverse impacts on the overall character of and quality of life in the City, and in particular the residential neighborhoods that are near the site and are affected by the vehicular traffic traveling to and from the site.

In the event the Potomac Greens site plan, which is currently in litigation, is upheld by the courts and a decision to proceed with the site plan project is made, appropriate revisions to this paragraph and other CDD principles will be made.

### Phasing

5. The proportion of uses in each phase shall be specified in the conceptual design plan submitted to the City for approval. At no time shall the proportion of residential uses in the aggregate amount of development that has been constructed and occupied be less than the proportion of residential uses in the overall development stated in paragraph 4.
6. Each development phase within the CDD shall contain all infrastructure and facilities necessary to accommodate that phase of development.

### Mixed Use Development

7. The area shall be predominantly residential with 1) a mix of land uses with office, supporting retail, restaurants and higher density housing concentrated near the metro station, 2) a mix of housing types, 3) a possible shopping center to serve the district and nearby residential neighborhoods, 4) a variety of retail and service uses scattered throughout the district at appropriate locations, 5) a variety of parks and open spaces and 6) community facilities as needed.

### Open Space

8. Approximately one third of the net site area (total site area less streets and rights of way, Four Mile Run and rail operating land), shall be dedicated to the City for public parks or accepted by the City as usable open space.
9. All major open space in the CDD shall be connected by pedestrian and bicycle trails to existing open space and recreation facilities in surrounding neighborhoods.
10. There shall be a system of bikeways connecting the residential areas to the Metro station and to the primary recreation facilities.
11. A landscaped strip of at least 30 feet shall be provided along Jefferson Davis Highway as a buffer between the new buildings and Route 1.

### Residential Uses

12. At least two-thirds of the residential units shall be townhouses, at a variety of densities. Up to one-third may be multifamily units.
13. Ten percent of the residential units constructed on the site shall be made affordable. An amount equivalent to the provision of an additional five percent of the on site residential units as affordable shall be made available to the City for use in the provision of off-site affordable housing.

### Office Uses

14. The transfer of office space from Potomac Greens to Potomac Yard shall be encouraged, subject to City Council review.

### Public Institutions and Facilities

15. Up to 7 acres of land or comparable space, as determined by the City, shall be provided for public institutions and facilities, including school and school-related facilities. In addition, land shall be made available for sale to Virginia Power for a substation if it is needed. Needs will be determined at the time that a development plan is submitted for review.

### Interim Uses

16. Interim uses on sites planned for later phases of development under a CDD SUP shall be permitted subject to the special use permit process, provided that the City Council determines that such uses are compatible with adjacent uses and with the adopted long range development plan for the CDD and that the uses do not exceed the heights and densities allowed in the underlying zone.

### Transportation

17. A new Metrorail station shall be built and paid for by the developer(s) at an appropriate location within the CDD area; the station shall have convenient pedestrian and bicycle access from the Potomac Greens and Potomac Yard portions of the CDD.
18. The Metrorail station shall be designed to accommodate a commuter rail station on the Potomac Yard site. The commuter rail and Metro station area shall be designed so as to provide joint and convenient access to bus feeder services.

19. Designated pedestrian and bicycle crossings shall be provided across Jefferson Davis Highway, the rail corridor, and the George Washington Memorial Parkway.
20. The CDD street system development shall be designed to minimize use of existing residential streets to the east, west and south of the project by commercial traffic heading to or from the site.
21. The existing Monroe Avenue Bridge shall be maintained as a four lane facility.
22. Through vehicular connections between the Potomac West area and the Potomac Yard section of the CDD north of the Monroe Avenue Bridge shall be limited to E. Glebe Road, S. Glebe Road, and Swann Avenue. Access to and from Jefferson Davis Highway will be determined in consultation with adjacent communities.
23. There shall be no intersection or connection between the George Washington Memorial Parkway and the Potomac Greens site by which motor vehicles can access that site from the Parkway or by which vehicles can access the Parkway from the site.
24. No curb cuts serving individual development projects will be allowed on Jefferson Davis Highway.
25. The use of rail cars shall be maximized for the transportation of construction materials and equipment to and from the development site. All construction related traffic shall use I-395 to access the site when rail transport is not feasible.
26. A comprehensive transportation management plan shall be required to encourage employees to travel by modes other than single-occupant vehicles. As a minimum standard the development must meet a 30% transit usage and 1.4 auto occupancy rate within one year after the Metro station is opened unless otherwise provided by the TMP.
27. In the event that projected development results in a traffic spillover onto residential streets, the City shall implement traffic control mechanisms to mitigate such spillover and protect local neighborhoods. These measures shall include the neighborhood protection measures discussed on pages 31-33 of the City's Master Transportation Plan.

#### Urban Design

28. Buildings shall be designed and sited to be in consonance with the historic character of the adjoining historic districts. The heights of buildings in the Potomac Yard and Potomac Greens areas shall follow the height limits shown on Map 25.
29. Buildings along Route 1 shall be limited to 50 feet except for 1-2 buildings at Four Mile Run, which may rise 77 feet.
30. Buildings in the interior of the Potomac Yard site designated for residential use shall have a maximum height of 77 feet provided that a predominant number of the buildings will rise no higher than 50 feet.
31. In the commercial core west of the proposed Metro station, no more than three or four buildings may rise to a height of 110 feet, provided that they have retail uses on the ground floor; the remaining buildings in that area shall display a substantial variety of heights below 110 feet.
32. South of the Monroe Street Bridge, the heights shall be predominantly 45 feet, with a few buildings allowed up to 77 feet.

33. Buildings on the Potomac Greens site shall be designed and sited so as to minimize the visual impact of development along the Parkway.
34. East of the Metro tracks, buildings within 500 feet of the George Washington Memorial Parkway shall be limited to 45 feet; outside of the 500 foot line and within 1500 feet of the Metro station buildings shall be of varied heights up to maximum of 77 feet; all others shall be limited to 50 feet.
35. Parking in the area shall be underground to the maximum degree feasible and shall be well screened where above ground.
36. Vistas and views of the National Capital monuments shall be maintained from open space wherever possible.
37. In general, a grid system with moderate block sizes shall be favored on the Potomac Yard.
38. An Urban Design Advisory Committee appointed by City Council shall review proposed urban design guidelines and individual buildings proposed to be built under the guidelines, with the technical assistance of the Department of Planning and Community Development, and its comments shall be presented to the Planning Commission and City Council for consideration in connection with any development plan submitted for approval.

#### Environmental Issues

39. Prior to and as a condition to the commencement of any development activities on the Potomac Yard site, one or more studies shall be conducted to determine the nature and extent of environmental pollutants which are present on the site. Based on these studies, a plan for the remediation of such pollutants, by removal or otherwise, shall be prepared and submitted to the city, to the Virginia Department of Health and any other appropriate state agencies, and to any federal agencies having and asserting authority with respect to the site's remediation. Such plan shall include an identification of the types and location of the environmental pollutants located on the site, a description of the methods to be undertaken to remediate such pollutants, and a schedule containing the estimated periods over which such remediation methods will be undertaken. During the city's review of the plan, the city council may conduct a duly advertised public hearing on the plan. No remediation activities may be undertaken pursuant to the plan unless and until the plan, whether in its original or an amended form, has been approved by the city, the Virginia Department of Health, and any other state and any federal agencies having review and approval authority. Following such approvals, the plan shall be implemented in accordance with its provisions. No construction or other development activity may commence on any portion of the site unless that portion has been remediated in accordance with the terms of the approved remediation plan, and the city has determined that portion of the site, following its remediation, will not be adversely affected by any pollutants existing on the portions of the site which will remain unremediated.

The prior provisions of this condition shall apply to the Potomac Greens equally.

#### Historic Resources

40. Prior to any development, cultural resource studies shall be conducted and a management plan shall be prepared to: determine the location and significance of prehistoric and historic resources; to identify the historic context and character of Potomac Yard and Potomac Greens and surrounding historic neighborhoods; and to set forth appropriate preservation strategies. The preservation measures shall be taken in a timely manner in accordance with federal, state and local standards.

41. Historically significant resources and themes including, but not limited to, Preston Plantation (the only known Alexander family site within Alexandria), the Alexandria Canal, and the railroad industry shall be commemorated through appropriate landscapes, exhibitions, buildings and signage.
42. To the extent possible, the developer should work with the City to develop and implement a job training and placement program to provide training and employment opportunities for City residents.

DEVELOPMENT WITHOUT A CDD SPECIAL USE PERMIT

Within the CDD zone the uses permitted without a CDD special use permit shall be as follows: The area south of the Monroe Street Bridge and the area east of the Metro tracks shall be RB (townhouse); the first 250 feet east of Route 1 shall be CSL; the remainder of the site shall be I (Industrial).

**PLEASE RETAIN**  
**GOALS AND OBJECTIVES**

ADOPTED MAY 20, 1989; ORDINANCE 3379

AS AMENDED BY THE PLANNING COMMISSION  
MAY 27, 1992

**MASTER PLAN**  
**ALEXANDRIA, VIRGINIA**

## A. LAND USE GOALS, OBJECTIVES, POLICIES

### GOALS

1. To have a harmonious set of land uses <sup>that</sup> ~~which~~ preserves the predominant character of Alexandria as a city of residential neighborhoods with a lively and attractive mix of commercial, institutional or community facilities, and recreational activity, and maintains an appropriate economic base.
2. To preserve and enhance residential neighborhoods.
3. To preserve and enhance the historic aspect of the city.
4. To preserve the residential and commercial diversity <sup>that</sup> ~~which~~ has historically characterized Alexandria.
5. To preserve and increase parkland (for both active and passive uses) and open space throughout the city.

### OBJECTIVES

1. To promote mixed use development in most major development or redevelopment areas.
2. To maintain existing residential areas.
3. To ensure that new development is compatible with adjacent or nearby residential neighborhoods.
4. To maintain a mix of uses compatible with existing uses and pedestrian oriented scale.
5. To maintain existing mixed use areas and ensure that nearby development is complementary.
6. To require open space or parkland, particularly in nearby developing areas targeted for dense residential and commercial use.

### POLICIES

1. All new large scale development or redevelopment on parcels of 10 acres or more shall be residential or mixed use, and at densities that may be lower but in no case higher than allowed today except where a small area plan determines that residential use is inappropriate.
2. In areas designated for mixed use development, development of parcels of 2 acres or more shall be residential or mixed use or shall contribute to achieving the mix desired in the area.
3. <sup>The</sup> ~~Promote~~ dual use of public spaces <sup>shall be promoted,</sup> where appropriate, to encourage activity for longer periods each day.
4. Areas of the city currently zoned residential should remain zoned for residential use at no higher than their current density.
5. New development in or near the older areas of the city must be compatible with and provide for a transition in height, density, scale, and design from the old to the new.

6. The mixture of uses in new development must be compatible with nearby existing mixed use areas.
7. ~~Encourage~~ Development plans <sup>should</sup> to make effective use of existing parkland and/or open space by site plan orientation, enhancement of existing stream beds and coordinated plazas.
8. ~~Periodically reassess the function of existing publicly owned space for conversion to parkland and/or open space use.~~ <sup>The use of publicly - owned space should be periodically reassessed to determine if such space can be converted to parkland or open space use.</sup>
9. Purchased ~~land~~ for public use where no other reasonable alternatives exist to provide desirable parkland and/or open space. <sup>Land should be</sup>
10. ~~At~~ Coordinated Development District development must include dedicated and protected parkland and/or open space.
11. Non-residential development adjacent to 1 or 2 family housing areas should be limited to low density, low scale (say 3 1/2 story) uses which are compatible with residential areas. Appropriate uses might include small-scale retail, townhouse office, service establishments.
12. Non-residential development adjacent to medium density residential areas (townhouses and garden apartments) should be limited to moderately low density, moderate scale (say 50 feet) uses which are compatible with residential areas. Appropriate uses might include moderate scale retail and service establishments, small office buildings, and other uses with high performance standards.
13. Residential areas should be buffered, where possible, from high impact or potentially incompatible uses such as industry, high-impact retail or eating establishments.
14. Shopping centers and high-intensity commercial activity should be concentrated in a small number of relatively compact commercial areas.
15. Large scale and high density office concentrations should be limited to designated development potential areas where high density concentrations are appropriate and where the traffic impacts on residential neighborhoods <sup>are</sup> relatively limited. These concentrations should be limited to areas served by expressways or arterials, and preferably by Metro <sup>rail</sup>. In all such areas, mixed use development should be promoted to limit the adverse impact of office-only development. In medium and high density areas where there is a tenuous balance between residential and office development, a concerted effort should be made to maintain that balance and mixed use development will generally be preferred.
16. Industrial, wholesale, distribution and heavy service uses should be concentrated in industrial areas well located with respect to transportation facilities, and well buffered from residential areas.

## **B. HOUSING**

### **GOALS**

1. Maintain the appropriate residential and neighborhood character of the City by preserving existing residential areas and promoting residential components of proposed development projects.
2. Encourage a mix of private homeownership and rental options for families and individuals so that those who choose to live in the City have the opportunity to purchase or rent safe, decent affordable housing within their means.
3. Provide quality standards to guide major developments and coordinated development district projects that provide a needed mix of housing types at affordable ranges.
4. With respect to publicly assisted housing, the City will attempt to maintain its current commitment; in the future, the City will seek additional regional approaches to subsidized housing with neighboring Northern Virginia jurisdictions.
5. Encourage housing options for special population groups (e.g. handicapped, elderly, low/moderate income etc.) residing in the City.
6. Promote housing for ownership and rental that is affordable to the children of Alexandrians and City employees.

### **OBJECTIVES**

1. Enforce the City's building and health codes to ensure safe and healthful housing for the City's residents.
2. Increase opportunities for homeownership in the City while protecting the range and number of affordable rental housing units.
3. The Capital Improvement Program and Housing funds should be coordinated to improve neighborhoods.
4. Encourage programs that provide elderly homeowners with the opportunity to maintain residence in their own home.

### **POLICIES**

1. For new development, the City shall require suitable landscaping and well-defined open spaces to serve as a buffer between planned residential and commercial areas.
2. For proposed new large-scale developments, the City shall conduct itself or require developers to submit cost-revenue analyses of City services required to support these developments.
3. The City will continue to enforce and expand where necessary City policies governing residential parking permit programs, alternative traffic patterns, etc. to ensure that the livability of residential areas is maintained.
4. To encourage the provision of affordable housing units in all new major developments, the City will continue to use existing and develop new incentives that can effectively enhance the economic competitiveness of housing compared to other uses.

5. The City shall encourage mixed commercial and residential uses of both existing and new buildings by incentives such as reduced parking requirements, increased density and code concessions.
6. The City shall uphold the commitment contained in Resolution 830 to maintain 1150 publicly-assisted housing units.
7. The City shall promote innovative use of existing and new housing stock that will enable elderly homeowners to continue living in their homes and provide additional affordable housing for Alexandrians provided the uses do not change neighborhood population densities.
8. The City shall explore the establishment of an affordable housing fund to be supported by appropriate fees on commercial development.
9. The City shall continue to work in partnership with the private sector on a balanced response to the need of Alexandria homeless.

## **C. TRANSPORTATION**

### **GOAL I**

The City of Alexandria shall develop and manage a safe, comprehensive transportation system consistent with the City's land use policies which is designed to move people and goods at a satisfactory level of service with minimal community disruption and environmental impact.

### **OBJECTIVES**

1. Strengthen the hierarchy of functional classification of streets and highways.

#### **Policies/Actions:**

- a. Adopt improved design and access standards for all roadway classes and strictly enforce them on all parties.
- b. Establish an access control program for arterials to reduce direct access especially along strip development.
- c. Establish principal commuter corridors along I-395, I-95, Route 7 (west of Commonwealth Avenue), Route 236 (west of Route 1), Route 1, Telegraph Road, Eisenhower Avenue, and Washington Street/the George Washington Memorial Parkway. Focus access control efforts, land use decisions, and traffic operational improvements to expedite peak period traffic along these routes, while recognizing the difference in the off-peak demands on several of these facilities.

2. Minimize the impacts of traffic, especially the impacts on residential neighborhoods.

#### **Policies/Actions:**

- a. Upgrade and improve the efficiency of major streets and highways to achieve Level of Service D during peak hours.
- b. Where Level of Service D is not achievable without creating undue impacts of expanded streets and highways on residential areas, then Level of Service E will be tolerated for the peak hours.
- c. During off-peak hours, Level of Service C shall be achieved; in such cases where this would create undue impacts on residential neighborhoods, Level of Service D will be tolerated.
- d. Where "b" cannot be achieved, and the result is commuter traffic impacts on neighborhood residential streets, then a program of sound traffic engineering changes to deter neighborhood cut-through traffic will be established in cooperation with the citizens of the affected area.
- e. Work to reduce commuter use of residential streets to protect their primarily residential nature, such as Beauregard Street, Braddock Road, Commonwealth Avenue, Janney's Lane, segments of Mount Vernon Avenue, Quaker Lane, Russell Road, Seminary Road, Van Dorn Street (north of Duke Street), and north-south streets in the residential portions of the Old and Historic District.

Alexandria

- f. Work to discourage commuter use of residential streets.
3. Increase the safety and efficiency of the existing street system.

Policies/actions:

- a. Initiate a Topics study. Topics was an early 1970's Federal program for Traffic Operational Improvements for Capacity and Safety. The acronym is still in general use by transportation engineers. A particular emphasis of this effort will be adequate sign distance issues, especially on stop-controlled approaches in the Old Town area.
  - b. Prepare an action plan for implementing the study's recommendations.
  - c. Enhance, upgrade, and expand the computerized traffic signal system software, hardware, and budget for operations and maintenance.
  - d. Continuously update the signal system timing plans.
  - e. Consider the advisability of reallocating functions between the Traffic and Parking Board and the Director of Transportation and Environmental Services.
4. Increase the availability and use of a variety of public transportation options.

Policies/Actions:

- a. Expand the DASH bus service between major employment centers, residential areas, and Metrorail stations as warranted by demand.
  - b. Expand the Office of Transit Services and Programs employer and employee outreach programs. This office is the focus of all efforts of transportation demand management in the City, and should have a strong resource base to maximize its effectiveness.
  - c. Conduct a study of the feasibility of alternative modes (e.g., people movers, shuttle buses, etc.), both new and conventional technology, for circulation in major new developments such as the Eisenhower Valley and the Potomac Yard.
  - d. The developers shall construct a new Potomac Yard Metrorail Station before or concurrent with any significant development in the Yard or Potomac Green.
5. Reduce the rate of increase of vehicle trips.

Policies/Actions:

- a. In cooperation with other jurisdictions, advocate substantial improvements to major radial commuting facilities, both highway and transit:

the Woodrow Wilson Bridge: increased capacity and an HOV facility on I-95 from I-495 to I-295.

I-395: increased capacity of the regular lanes and an additional HOV lane.

I-295: increased capacity and an HOV facility.

the Metrorail Yellow Line: accelerated completion of the line to Franconia/Springfield station.

the NOVA Commuter Rail proposal: implementation of the full service.

- b. Complete and expand the bikeway system.
  - c. Upgrade pedestrian facilities, especially in lower density areas of the City and eliminate street furniture which restricts pedestrian movement.
  - d. Increase the amount of pedestrian-oriented mixed-use development to reduce peak and off-peak auto usage. Consider the degree to which a proposal is at a scale and of a design which maximizes pedestrian access and circulation as an integral part of the CCD preparation, negotiation, and approval process.
6. Expand the usage of multi-occupant vehicles.

Policies/Actions:

- a. Work with VDOT and adjacent counties in the development of a comprehensive regional plan including regional HOV facilities on the Capital Beltway (I-95 portion), the George Washington Memorial Parkway in Fairfax County and, Route 1 in Fairfax County, Route 236, and Route 7.
- b. Cooperate with the VDOT to establish a connection which permits access from the northbound Shirley Highway HOV lanes through the regular lanes to exits in the City of Alexandria.

GOAL II

The City of Alexandria shall achieve a balance between the development which is allowed and the transportation system necessary to meet the needs imposed by that development.

OBJECTIVES

- 1. Increase the revenues used for transportation improvements, both capital and operating, from the tax base added by the development.
- 2. The timing of development should relate to the timing of transportation improvements needed to serve that development. In this way the infrastructure needed to serve the City should preferably be in place either before or concurrent with development.

Policies/Action:

- a. Maximize the use of direct developer contributions for implementation of necessary transportation improvements simultaneous to the construction of the new development.
- b. Establish Transportation Management Areas in the Eisenhower Valley (between Hooff's Run and Van Dorn Street), in the Potomac Yard/Potomac Greens area, and in the area between Beauregard Street and Shirley Highway. These areas should have a comprehensive multi-modal access and circulation system planned by the City prior to approval of any further development. Funding for implementation of the systems shall

come from direct developer contributions and a Transportation Benefit Assessment District (to be established through City cooperation with landowners), with minimal direct support from tax-based sources.

3. The intensity and mix of development in any given area should relate to the ability of the transportation system to satisfy transportation demand.

Policies/Action:

- a. Limit intensive development in areas of the City which are already underserved by the existing transportation system and where the prospects for improvements in the future are dim.
- b. Where intensive development already approved or constructed has outstripped the capabilities of the transportation system to adequately meet the demands as defined above, then the system should be improved within the guidelines for protection of existing residential neighborhoods defined above.
- c. Within the limitations expressed in 3(a) and 3(b), establish intensive development within a 1,000-foot radius of the Metrorail stations where the opportunity of efficiently transporting people is the highest. Certain exceptions to this rule are necessary to preserve existing residential areas, e.g., the neighborhoods west of the King Street Station and near the Braddock Road Station. In the Potomac Yard area, which overall will be low to medium density, a portion of the development should be constructed at high densities immediately adjacent to the proposed Metrorail station. This will enable lower densities throughout the remainder of that large parcel.

4. Refine, improve and strengthen the Traffic Management Plan (TMP) and Traffic Impact Study (TIS) process as a means of managing the transportation needs of new development and redevelopment.

Policies/Actions:

- a. Establish as a legislative priority securing the charter amendment authority enabling the City to reject or amend development proposals on the basis of their transportation impacts on the health, safety, and welfare of the citizens of this City.
- b. Adopt standards for and establish as part of the TIS process for major developments the analysis of air quality, noise, and water quality impacts related to the traffic to be generated by the development. This information shall be explicitly considered in judging the potential adverse effects on the health, safety, and welfare of the citizens of this City.
- c. Establish a continuing monitoring program of all developments which submitted TMP's to determine the real effectiveness of the various measures proposed to ease peak hour vehicular trips. Utilize this factual basis in the review of future TMP's.
- d. Require developers to reasonably justify the effectiveness of their proposed TMP actions. Insufficient justification should constitute grounds for rejection of the TMP. One way to accomplish this without total rejection of the development proposal is to permit a phased development, with subsequent phases dependent on the demonstrated success of the TMP actions.

GOAL III

The City of Alexandria shall provide or require to be provided enough parking to adequately meet the needs of each land use type, but not to the extent that parking availability encourages the use of the *single* occupant private auto.

OBJECTIVES

1. Complete actions on the recommendations of the CBD parking study.
2. Conduct a technical parking standards study for the rest of the City in order to derive the sound base of information needed to formulate a parallel set of policies for other land uses in other locations.

## **D. COMMUNITY FACILITIES**

### **GOALS**

1. To have array of convenient public and quasi-public services and facilities which provide for the health, well-being, and personal development of residents at all ages.
2. The character of specific facilities and services projects and improvements should be harmonious with and sensitive to the ambient environment, natural and manmade, in which they are located.
3. The level of quality and the quantity of facilities and services projects should reflect sound principles, and should meet or exceed performance standards generally accepted on the national level.
4. Alexandria is known for the quality of its educational, historic resource and cultural opportunities; City activities and emphasis should be placed on maintaining and enhancing those features.
5. This segment of the Master Plan should be used as an operating document, providing City staff with overall policy guidance, goals and objectives.
6. Public and private policy must lead the way to guarantee a healthy and satisfying environment for this generation and for all generations to come.
7. To preserve and enhance the historic character of the City through the identification, planning, conservation, interpretation, and public enjoyment of our historic resources.
8. To enhance the City's tax base substantially by marketing Alexandria as a viable destination for conventions and group tours.

### **OBJECTIVES**

1. City operated business and service facilities should be located for the convenience of the citizens; consideration should be given to providing selected services on a full or part time basis, and during other than normal business hours, at locations other than the central City Hall.
2. Public facilities should be designed to enhance the private facilities/development in their area, and vice versa.
3. That existing cemeteries be preserved.
4. The level of facilities and services development should be set to have infrastructure in place when/where needed.
5. The City should strictly enforce utility franchise agreements, and review those agreements to increase benefits to the residential and business users; e.g. facilities should be modernized on a City-determined schedule, services should be expanded to keep Alexandria in the forefront of technological advances in telecommunications, fuel conservation, cable TV, etc.
6. All facilities and services should be critically reviewed on a periodic basis to determine whether or not they provide an enhancement to the quality of life in the City, and whether or not they attain their goals and objectives.

7. Pursue historic preservation efforts in Alexandria through legislation, easements, public education, and citizen involvement.
8. Administer City museums, historic sites and programs in order to preserve, protect, interpret, and collect artifacts (buildings and objects) relating to all facets of Alexandria's history.
9. Continue the City's archaeological program in order to study, preserve, protect and interpret Alexandria's archaeological resources.
10. Establish and/or support programs to encourage tourism and convention activities and to promote the well being of businesses, the arts, and museums and historic sites.
11. Administer a City-wide program to protect and preserve the City's archival resources and to make those records available to the public for research and study.
12. Inventory the City's historic resources and create plans for their preservation and interpretation, and the public's education.
13. Promote the use of easements in order to preserve historic buildings (exteriors and interiors), gardens, sites, and artifacts throughout Alexandria. ~~(Moved from Parks and Recreation, Objective 14, with modification.)~~
14. Promote festivals and celebrations of our City's historic past and maintain the traditions of all our citizens.

#### STRATEGIES

1. All open land should be catalogued/inventoried and considered for public use, now or in the future. Properties should be classified for community use by priority, and efforts made to obtain the highest priority properties for the City as funds will permit. Trade-offs should be encouraged.
2. Shorelines should be protected, and modified only in conformance with guidelines established by the City, State or Federal Governments to prohibit erosion, sedimentation, and adverse visual impacts. Docks and piers should be limited and their use controlled.
3. Woodlands throughout the City should be mapped and preserved to the extent possible commensurate with their natural and visual quality; the City should plan and encourage the planting of varieties of trees most suitable to the climate and soil of the area, and designed to provide a variety of shapes and colors throughout the year.
4. A City-wide forestation program, including street trees, should be maintained.
5. Property owners and developers should be encouraged or, under prescribed circumstances, required to preserve existing trees and vegetation; selected varieties of trees might be contracted for at volume prices and made available to residents under the contract.
6. City policies should be coordinated with adjoining Counties, the Corps of Engineers, State Governmental Agencies, U.S. Environmental Protection Agency, and other Federal Agencies, Chesapeake Bay Coalition, etc.
7. Air quality should meet or exceed all air quality standards set by the Commonwealth of Virginia and the U.S. Environmental Protection Agency; the City should maintain an active monitoring program and take aggressive action against polluters.

8. The City should maintain a working relationship with the Northern Virginia Airport Authority to mitigate noise generated by National Airport air traffic.
9. The City should maintain an active noise reduction/control program; citizens should be informed of the standards, and the police should enforce noise controls on such vehicles as motorcycles and trucks.
10. To work with the neighborhood civic and community groups and small businesses in the community to ensure that the affects of a rapidly expanding business sector are realized and that the needs of all citizens are served.

#### CITY UTILITIES/FACILITIES - GOALS

1. A safe, efficient and dependable system of public and private utilities serving the basic health, sanitation and communications needs of property owners and tenants.
2. To provide a high level of quality and service to the residential and business communities.
3. To support regional cooperation in the provision of community facilities in cooperation with Fairfax and Arlington Counties, when desirable, since the impact and importance of most public works are not neatly locked within the boundaries of any given jurisdiction -- one community's failure to provide adequate sewage treatment may hinder all others in the vicinity.

#### CITY UTILITIES - OBJECTIVES

1. To conduct periodic professional studies of each infrastructure facility to get maximum value out of each/every dollar spent; to increase efficiency through improved operations, more aggressive maintenance procedures, recycling, etc.
2. To maintain current assets to the optimum standards, which may be the single most important element of the City's stewardship obligation, and the greatest cost reduction factor.
3. To periodically review the present use of all facilities for possible alternative uses or higher priority uses; e.g. the recently built rowing facility.

#### SOLID WASTE DISPOSAL - OBJECTIVES

1. To provide a cost-effective solid waste collection and disposal system, either through City services or licensed contractors.
2. To develop and implement longer-term solutions to solid waste disposal to avoid future problems of service, capacity, increased environmental impact or cost, including recycling and increased separation of types of waste.
3. To increase penalties for violation of City waste disposal laws and rigorously prosecute violators.
4. To require high rise buildings constructed in the future to have facilities for the ready separation of various types of solid waste, i.e. paper, garbage, bottles, cans.

5. To closely monitor the waste-to-energy plant and ensure that its contractual standards are met. No less than every five years, the standards should be critically reviewed and appropriately revised, considering new technology, new health information, and costs.

#### PRIVATE UTILITIES - OBJECTIVES

1. The City should continue to rely on private, franchised suppliers for its supply of electricity, natural gas, water, telecommunications and cable TV; however, the City should take an active role in rate negotiations to ensure users receive competitive rates for services provided.
2. The City should continue to monitor the cable TV franchisee to ensure that the community is properly served.

#### WATER - OBJECTIVES

1. Emphasis and continued study should be given to water conservation and recycling techniques.
2. Sources of supply should be identified to fill the needs of the future.
3. Emergency plans should be developed to protect against source contamination, both in identification and replacement.

#### WASTE WATER - OBJECTIVES

1. ~~By the end of fiscal year 1990~~ The City should complete an extensive engineering study of the present sewer and waste water systems using current development and usage projections for the year 2010 including separation of storm and sanitary sewers.
2. The City should actively monitor waste water flow to identify and eliminate sources of water pollution.

#### STORM WATER - OBJECTIVES

1. All land development projects should provide for on-site stormwater control so that run off after development is at no greater rate than run off prior to development.
2. Construction within the 100 year flood plain should either be prohibited or should be constructed in such a manner so as not to interfere with the flood plain capacity.

#### ELECTRIC UTILITIES/CABLE TV - OBJECTIVES

1. All future utilities should be placed underground and present utilities should be moved underground under a planned schedule over a twenty year period.
2. Utility standards should be clearly defined and monitored.

## HEALTH FACILITIES AND SERVICES

### GOALS

1. To provide health programs and services, as set forth by law, to prevent and control disease, to protect the environment, to eliminate unsanitary and unsafe conditions, and to promote the physical and emotional well being of our citizens.
2. To encourage a full range of private sector health facilities within the community.
3. To encourage the provision of mental health, mental retardation and substance abuse services by both for- profit and non-profit providers.
4. To maintain and enhance the quality of life by providing services that are responsive to individual, family and community needs, and to improve citizen access to opportunities, services and resources to facilitate the ability of citizens to function successfully in our society.

### OBJECTIVES

1. As necessary, establish, maintain and/or expand health facilities and create new facilities to meet the needs of the citizens of the City.
2. Encourage the development of adequate facilities for the care of the elderly, handicapped, mentally retarded and mentally ill, including institutional and home care.
3. Encourage development of adequate public and private outpatient and inpatient rehabilitation service facilities to help recovering substance abusers.
4. Maintain adequate trained personnel to inspect food facilities and to provide home health care monitoring.
5. Promote quality child day care services.
6. Conduct active monitoring of air and water to minimize hazards caused by pollutants that enter the City.
7. To provide pre- and post-partum infant health care.

## THE LIBRARY SYSTEM

### GOALS

1. To provide the citizens and businesses of Alexandria with a broad range of library services, including special services for the homebound, handicapped and youth.
2. To meet or exceed the recommended national levels of service, volumes per resident, and facilities.
3. To make all facilities and services available for the convenience of the users.

## OBJECTIVES

1. To study the integration of the school system libraries more fully into the overall City library system.
2. To broaden the types of documents available, increasing the supply of books, films, records, cassettes, discs and computer terminals.
3. To build a new, state of the art, library and media center in the West End of the City, providing space to accommodate the Technical Services, Special Services and Automated Services Divisions, storage space to alleviate the present storage problem, community meeting rooms and a chamber committee room for the storage and preservation of rare and archival materials.
4. To upgrade facilities, where necessary, to provide each neighborhood with ready access to a library; including renovation/replacement of the Queen Street Library.
5. To maintain special equipment at each facility for use by the visually and physically handicapped and for the hearing impaired.
6. To participate in regional library programs to make available networking services for on-line cataloging, business information, data processing, etc.
7. To increase children's programs.
8. To develop and/or expand extension services, such as homebound and nursing home services.
9. To work with the Chamber of Commerce and major employers to ensure that the needs of a rapidly expanding business sector are recognized and served.

## THE ALEXANDRIA SCHOOLS

### GOALS

1. To provide a school environment and level of quality of instruction and facilities that encourages enrollment in the public schools.
2. To provide comprehensive educational facilities and services to serve the need of all citizens, including the handicapped, the elderly, and the pre-school populations.
3. To provide sound vocational and college bound training to prepare all students for a successful post-school life experience.
4. To ensure that all students are able to function within the social and working environment.
5. To broaden the role of the school system to include sound pre-school programs and to provide structured day care facilities throughout the week.

### OBJECTIVES

1. To place emphasis on basic learning skills.

2. To encourage City residents to use the City schools.
3. To increase the use of school facilities for associated community activities, i.e. adult evening education, day care, and recreation.
4. To protect the schools, to the extent possible, from the impact of nearby development and from traffic.
5. To provide an adequate number of well-trained teachers, with needed equipment, working in conjunction with well qualified supervisors and specialists, in facilities that promote learning.
6. To encourage greater involvement of city businesses in curriculum development, funding and sponsoring scholarships, and in the "adopt a school" program.
7. To reduce the dropout rate in the schools by installation of whatever programs necessary.

#### HUMAN SERVICES

##### GOALS

1. To promote the economic and social independence and self-sufficiency of all Alexandrians.
2. To work with other regional governments in providing human services, without becoming a magnet for non- Alexandrians.
3. To ensure that the level of human services is maintained and/or enhanced through advance planning of action programs during a period of rapid development.
4. That, as a principle of land use, housing and treatment facilities should be permitted to meet the needs of citizens with mental and/or physical disabilities.

##### OBJECTIVES

1. To respond to the basic needs of Alexandrians by providing food, shelter, clothing, medical care, transportation, fuel, personal care, and financial assistance, both emergency and longer-term, in accordance with Federal and State mandates and City policy.
2. To provide protective services to Alexandrians to prevent child, spousal and elder abuse and neglect and violence against women.
3. To provide needed residential services for the homeless, elderly, battered women and children and young adults in foster care and for those individuals disabled by mental retardation, or substance abuse.
4. To plan and provide day care for children and adults, including information and registration services and subsidies for low income households.

5. To provide employment assistance for Alexandrians, including workshops, summer employment for youth, skills training, placement services and targeted assistance for refugees and ex-offenders.
6. To provide counseling services, including individual and family counseling, support groups and workshops, particularly for special populations.
7. To protect human rights through investigation, resolution and prevention of discrimination and advocacy and provision of services for disabled persons.

#### POLICIES

1. To provide necessary transportation resources for the elderly.
2. To provide needed safe emergency shelter for homeless persons, with counseling, job training, referral and transitional financial assistance to address long term needs.
3. To provide needed transitional housing and residential facilities for individuals disabled by mental retardation, mental illness, or substance abuse, youth and young adults leaving foster care, women leaving the battered women's shelter and the elderly and persons leaving hospital and nursing care facilities.
4. To encourage added Medicaid nursing home availability.
5. To provide pre-employment and remedial training, and encourage private employers to participate in these programs.
6. To expand home day care opportunities in the community.
7. To expand after-school day care programs for children.
8. To develop and encourage day care resources for children with special needs, such as physical or mental handicaps.
9. To institute a Social Impact Analysis (SIA) of proposed developments in the City. The SIA would assess the degree to which a proposed development impacts, positively or negatively, on the higher priority social concerns of the City, such as housing, job creation, job training, day care provision, senior citizen housing, handicapped access, etc. By prioritizing its goals, the City should be able to direct and control development into the areas and types of development considered most desirable.
10. To encourage proffers from developers that incorporate priority social services and facilities.

#### ENVIRONMENTAL HEALTH

##### GOALS

1. To protect the quality of the environment.
2. To protect public health.

## OBJECTIVES

1. To ensure that the public is adequately protected against improper food handling and service.
2. To protect the public against unsanitary conditions in public and private facilities catering to the personal needs of the public at large.

## POLICE DEPARTMENT

### GOALS

1. To maintain an effective crime suppression program.
2. To maintain law and order within the City.
3. To assist persons in distress, in need of protection (physical or property), to respond in a professional manner to civic emergencies.

## OBJECTIVES

1. To maintain an emergency response time of under five minutes.
2. To search out higher crime areas and take measures to reduce the opportunity for crime.
3. To maintain a well-trained police force.
4. To encourage citizen participation and interest, and foster good working relations between the citizenry and the police.
5. To cooperate effectively with surrounding jurisdictions.
6. That all development take into account crime prevention design considerations, and that community facilities are planned from a broad community problem-solving approach that includes the police perspective.

## FIRE DEPARTMENT

### GOALS

1. To maintain an effective fire prevention program.
2. Enforcement of all laws and ordinances relative to fire and fire prevention.
3. Professional operation of the City's emergency ambulance and rescue service.
4. To foster modern code and building techniques in construction projects in the City.
5. To maintain a fire insurance rating for the City which will allow for low fire insurance premiums for all property owners.

## OBJECTIVES

1. To maintain an emergency response time of 3-4 minutes anywhere in the City.
2. To maintain a well trained, well equipped force, prepared to handle all types of fires, hazardous materials and emergencies.
3. To provide medic life support service.
4. To cooperate with surrounding jurisdictions in the use of equipment and in response to emergency calls.
5. To protect life and property of Alexandria residents and to maintain a low insurance rate for property in the City.
6. To work with surrounding jurisdictions and the railroads to minimize the impact of potential chemical and/or hazardous material seepage, leakage, or spills in the railroad yards or on the highways.
7. To improve/modernize the water systems to better fight fires in the Old Town area and the Potomac Yard.
8. To provide prompt, professional building inspection services and ensure that developers build to the building code, plans and specifications.
9. To enforce the codes for properties throughout the City.

## PARKS AND RECREATION

### GOALS

1. To provide a well planned and well maintained park and recreation system that will serve all segments of the population with a variety of facilities and programs to meet the expressed needs.
2. To preserve and enhance the public open spaces and recreational areas by protecting the natural and developed amenities they possess and by encouraging development which respects and is consistent with those amenities. Add publicly accessible open space by creative and innovative ways.
3. To integrate public and private open space into the fabric of the City at all scales, in order to provide for leisure and recreation, preserve natural resources, and provide a healthy and attractive environment. Promote the provision of publicly accessible parks and recreation facilities in development projects through appropriate incentives.
4. Protect remaining open spaces in the City and acquire appropriate portions of such land for park and recreation uses wherever practical in order to increase the ratio of open space per capita for future populations.
5. To increase the availability of park lands to a minimum of 6.5 acres of active/passive open space per 1000 population.

6. Encourage developers to incorporate both active and passive open spaces and recreational facilities in the development plans to serve the added residential and employee population in their development with the standard for developers to meet is 6.5 acres per 1,000 residents, and 1/2 acre per 500 non-resident employees. This standard can be attained by applying the total open space (exclusive of parking, roads, loading and yard setbacks) but including the amenities of the project.

#### OBJECTIVES

1. To provide a park within walking distance of every Alexandria resident and a safe pleasant way to get there.
2. To develop a park system plan, defining the types of open spaces and facilities to be provided throughout the City. Develop a park stream valley system to provide continuous linkage and access to recreational facilities.
3. To protect lands used for park and recreational purposes by the creation of a Public Open Space and Community Recreation Zone.
4. To encourage public and private, citizen, business and Government, to identify ways in which they can each aid in the beautification of the city and the retention of trees and other flora.
5. To protect, preserve and enhance the City's waterfront and waterways.
6. To require major development projects to include active and passive recreation space to satisfy their new population needs.
7. To encourage developers to incorporate both active and passive open spaces in their development plans and to ensure that such spaces are coordinated to fit into a parks master plan. Develop active and passive parkland in this city with its limited vacant land as over parking garages, on roof tops and within structures of development projects, <sup>and</sup> ~~over freeways, and air rights above the A&P Railroad Yards.~~
8. To promote continued development of recreational facilities in conjunction with neighboring, regional, state and federal agencies.
9. To catalog all significant historic sites in the city, sign them for public information purposes, and acquire the sites when they may otherwise be destroyed by development.
10. To consider allocating part of the cost of the park system to non-residents, by such means as user fees.
11. To promote the use of scenic easements.
12. To provide a reasonable distribution of recreation centers throughout the City, and to provide structured programs at each center to meet the expressed needs of the surrounding area.
13. To aggressively seek federal and state assistance in acquiring additional parkland, such as the river front and land adjacent to the George Washington Parkway, the Cameron Station wildlife preserve, etc.

14. To catalog all vacant land owned by the City, identify that which should be used as parkland and ask for park designation; identify other areas of the City that need parkland and trade or sell City properties to permit purchase of the needed land.
15. To expand landscaping, upgrading and enhancing of street medians and rights of way and approaches to the City.
16. To redefine facilities and services for senior citizens and working families to reflect sociological changes.
17. To continue joint use of school and recreation lands and buildings, but to maintain separate ownership and control.
18. To continue development of the bike trail system.
19. To better define City policies and guidelines for accepting gifts of parkland and recreational facilities.
20. To preserve and expand the number and variety of trees in the City, and to encourage sound forestry practices.

POLICIES: PLANNING DISTRICT I

1. Provide a nature center.
2. Establish the Frederick Tilp memorial arboretum on the river front.
3. Develop a public marina at the Old Town Marina site.
4. Revitalize and renovate the Durant Senior Citizen Center.
5. Expand and improve the Lee Center.
6. To explore using state or Federal funds for the purchase of portions of the waterfront east of the Strand between King and Duke Street for public open space and waterfront activities use.

POLICIES: PLANNING DISTRICT II

1. Build an new recreation Center and gymnasium at Cora Kelly.
2. Upgrade Four Mile Run Park, including a deck walk in the marsh area.
3. Expand the Chinquapin Center to include added racquet ball courts and multi-purpose rooms, i.e. general purpose, arts and crafts rooms.
4. Build a nature center.
5. Acquire the W & OD Greenway from Landover to Grace Episcopal Church; promote a pedestrian walk from Russell Road to Commonwealth Avenue.
6. Complete a pedestrian walkway along Hooff's Run.

### POLICIES: PLANNING DISTRICT III

1. Improve the Holmes Run Greenway Park and other District III Parks, including tree maintenance, benches, gates, wildflowers and increased maintenance.
2. Restudy and improve facilities in Cameron Run Stream Valley.
3. Add a running track at Patrick Henry School.
4. Complete the bike trails.
5. Work with the Northern Virginia Park Authority to further develop the Cameron Run Regional Park, including water themes and mixed use recreational facilities.
6. Explore the possible division of Planning District III.

### CULTURAL ARTS

#### GOAL

1. To provide a well balanced cultural arts program for City residents and visitors.

#### OBJECTIVES

1. To provide programs and facilities to encourage public and private arts activities, including design arts and performing arts.
2. To continue support of the Torpedo Factory Art Center, the Lyceum and similar programs.
3. To develop a cultural arts/performing arts center.

## E. ECONOMICS AND FINANCE

### GOAL I

To maintain an adequate tax base to provide adequate public services and facilities.

#### OBJECTIVE

Maintain the level of public services (police, schools, sanitation, recreation, public health) at least as high as surrounding jurisdictions in individual sectors, but higher on the average for all services combined, as required for a superior urban area.

#### POLICY

Continue to provide high quality services by regular and timely maintenance of the city infrastructure, and by maintaining competitive pay scales for an adequate city staff.

### GOAL II

Alexandria should aim to remain competitive with other Washington metropolitan jurisdictions in tax burden on residential and commercial real estate and overall tax burden.

#### OBJECTIVE

Reduce the current disparity between the real estate tax burden in Alexandria and adjoining jurisdictions by a balance of new commercial and residential development.

#### POLICIES

1. Permit conversion of lower value uses to higher value and higher tax revenue producing uses, where appropriate, in selected areas of the city.
2. Accommodate new housing needs by encouraging mixed use development favoring inclusion of housing units in most areas of the city, and in most commercial use zones.
3. Encourage the continued development of Alexandria's tourist potential, by emphasizing to the extent possible, tourist clientele interested in historic preservation.
4. Encourage the development of mixed use buildings to reduce infrastructure costs, ameliorate traffic and parking problems, and foster and preserve the [urban] character of the urban portions of the city.

### GOAL III

Alexandria should provide for its fair share of aggregate regional social obligations.

## **F. URBAN DESIGN**

### **GOALS**

1. To integrate new development into existing development so that the whole is enhanced without aggravating existing problems or creating new ones.
2. To create habitable space with the highest possible quality of life.
3. To maintain and preserve the City's sense of identity.

### **OBJECTIVES**

1. Conserve and strengthen natural features.
2. Strengthen community identity - neighborhoods.
3. Blend old and new development.
4. Encourage development at pedestrian scale.
5. Eliminate above ground utility lines.
6. Enhance city landmarks.
7. Retain vistas and sight lines throughout the city.
8. Improve appearance of city approaches and street landscaping.
9. Encourage better building and site appearance.
10. Attract excellence by encouraging quality development and design.
11. Preserve and protect unique architectural and historic character of the Old and Historic District and other sites throughout the city which have been designated architecturally or historically significant.
12. Park stream valley systems should be developed and connected to provide a continuous linkage and access to recreational facilities.
13. Continue development of a continuous waterfront park system including development of water oriented activities and facilities.
14. Street ends should remain open to the river wherever possible

### **POLICIES**

1. Incorporate design review into the overall site plan approval process and discretionary zoning review process (SUP, PUD).

General Criteria - Design Guidelines (To include, but not necessarily be limited to:)

- A. Consider each development in relation to its general area and to the city as a whole.
  - B. Protect and enhance historic areas, sight lines, vistas, landmarks, natural elements, (waterfront, streams, indigenous vegetation, topography), residential areas, open space, streetscapes and landscape design.
  - C. Limit "dead" areas - mix of use, activities
  - D. Ensure compatible interface with neighboring areas visual harmony with surroundings sensitivity to environment in areas such as water, sewerage, air and noise.
  - E. Promote quality of design and materials.
  - F. Promote good pedestrian circulation and compatible street design.
  - G. Ensure humane scale in accordance with generally accepted urban design standards.
  - H. Consider orientation for sun and air. Balance relation among people, buildings and streets. Balance "green and brick".
  - I. Keep new development from adversely impacting the infrastructure.
2. It is the intent of the Master Plan ~~Task Force~~ that these criteria be used to develop design guidelines.
- A. Develop general design studies for each potential development area.
  - B. Develop general performance criteria for each potential development area.
3. Establish urban design expertise within the Planning Department.
- A. Have staff capability for doing specific design studies for development areas.
  - B. Formulate general performance criteria to be done either by staff or an outside consultant.
4. Provide ongoing regularly scheduled meetings between the Planning Department and all interested parties (e.g.: involved citizens' groups, landowners, etc.).
- A. To review changing conditions and projections/possibilities for development areas.
5. Require developers to provide models of projects to scale determined by City, elevations and mapping by street, open space and use patterns.
6. Promulgate the availability of informational materials regarding the development process and stress the importance of early citizen and City staff involvement.
- A. Make Guide to Development Process more available as well as process summaries and flow charts.
7. Provide design assistance.
- A. Update aerial photography of city
  - B. Consider isometric mapping

8. Continue on a phased program of undergrounding utilities.
  - A. Formulate plan and proceed on a regular schedule, recognizing the finance necessity of doing small areas at a time.
  - B. Allocate city funds for existing streets and neighborhoods.
  - C. Require developer participation in new areas.
9. Strengthen protection of <sup>the</sup> Old and <sup>Alexandria</sup> Historic District and other designated architecturally or historically significant sites.
  - A. Provide inspector to ensure compliance with <sup>Board of Architectural Review</sup> BAR decisions.
  - B. Seek authority ~~(may require Charter change)~~ to impose stronger penalties for infractions of preservation regulations.
10. City should lead in design excellence.
  - A. Public spaces.
  - B. Public rights of way (street design, furniture, signage).
11. Request that the Parks and Recreation Commission and the Beautification Commission review and recommend improvements to portal and street landscaping.
12. In addition to incorporating design review into the site plan and discretionary zoning processes, the City may wish to adopt urban design overlay districts.
13. The City should consider the collaborative problem solving technique as a process to short circuit confrontation concerning site development before strong polarization occurs.
14. Review development process annually to streamline it, keeping it lean and meaningful so that it does not waste the resources of the City staff or development community.

# PLEASE RETAIN LAND USE

APPROVED NOVEMBER 1990

AS AMENDED BY THE PLANNING COMMISSION  
MAY 27, 1992

MASTER PLAN  
ALEXANDRIA, VIRGINIA

## **LAND USE GOALS, OBJECTIVES, AND POLICIES**

One of the purposes of the Master Plan is to implement the following land use goals, objectives and policies:

### **GOALS**

1. To have a harmonious set of land uses that preserves the predominant character of Alexandria as a city of residential neighborhoods with a lively and attractive mix of commercial, institutional and community facilities, and recreational activity, and maintains an appropriate economic base
2. To preserve and enhance residential neighborhoods.
3. To preserve and enhance the historic aspect of the city.
4. To preserve the residential and commercial diversity which has historically characterized Alexandria.
5. To preserve and increase parkland (for both active and passive uses) and open space throughout the city.

### **OBJECTIVES**

1. To promote mixed use development in most major development or redevelopment areas.
2. To maintain existing residential areas.
3. To ensure that new development is compatible with adjacent or nearby residential neighborhoods.
4. To maintain a mix of uses compatible with existing uses and pedestrian oriented scale.
5. To maintain existing mixed use areas and ensure that nearby development is complementary.
6. To require open space or parkland, particularly in nearby developing areas targeted for dense residential and commercial use.

### **POLICIES**

1. All new large scale development or redevelopment on parcels of 10 acres or more shall be residential or mixed use, and at densities that may be lower, but in no case higher, than allowed prior to the adoption of this plan, except where a small area plan determines that residential use is inappropriate.
2. In areas designated for mixed use development, development of parcels of 2 acres or more shall be residential or mixed use or shall contribute to achieving the mix desired in the area.
3. The dual use of public space shall be promoted, where appropriate, to encourage activity for longer periods each day.
4. Areas of the city currently zoned residential should remain zoned for residential use at no higher than their current density.

5. New development in or near the older areas of the city must be compatible with and provide for a transition in height, density, scale, and design from the old to the new.
6. The mixture of uses in new development must be compatible with nearby existing mixed use areas.
7. Development plans should make effective use of existing parkland and open space by site plan orientation, enhancement of existing stream beds and coordinated plazas.
8. The use of publicly-owned space should be periodically reassessed to determine if such space can be converted to parkland or open space use.
9. Land should be purchased for public use where no other reasonable alternatives exist to provide desirable parkland and open space.
10. Coordinated Development District development must include dedicated and protected parkland and/or open space.
11. Non-residential development adjacent to 1 or 2 family housing areas should be limited to low density, low scale (say 3 1/2 story) uses which are compatible with residential areas. Appropriate uses might include small-scale retail, townhouse office, or service establishments.
12. Non-residential development adjacent to medium density residential areas (townhouses and garden apartments) should be limited to moderately low density, moderate scale (say 50 feet) uses which are compatible with residential areas. Appropriate uses might include moderate scale retail and service establishments, small office buildings, and other with high performance standards.
13. Residential areas should be buffered, where possible, from high impact or potentially incompatible uses such as industry, high-impact retail or eating establishments.
14. Shopping centers and high-intensity commercial activity should be concentrated in a small number of relatively compact commercial areas.
15. Large scale and high density office concentrations should be limited to designated development potential areas where high density concentrations are appropriate and where the traffic impacts on residential neighborhoods are relatively limited. These concentrations should be limited to areas served by expressways or arterials and, preferably, by Metrorail. In all such areas, mixed use development should be promoted to limit the adverse impact of office-only development. In medium and high density areas where there is a tenuous balance between residential and office development a concerted effort should be made to maintain that balance and mixed use development will generally be preferred.
16. Industrial, wholesale, distribution and heavy service uses should be concentrated in industrial areas well located with respect to transportation facilities and well buffered from residential areas.

## OVERVIEW

The way in which land is developed and used is critical to the quality of life in an urban area and to the local government's fiscal capacity to provide and maintain the infrastructure and services that are needed to support the uses of the land.

The last major revision of the city's Master Plan was adopted in 1974. That plan recognized the potential impact of the Metrorail system, the growing problems of traffic congestion, the need for affordable housing, adequate recreational facilities and open space, the growing public concern with good urban design and the need to protect residential neighborhoods, historic areas and the natural environment. The Plan also recognized the need for Alexandria to remain economically competitive within the region and to develop employment opportunities for its residents.

In consideration of these diverse needs, the Plan attempted to strike a balance between encouraging growth and development and protecting, stabilizing and improving residential areas. This balance was to be achieved by encouraging development in designated growth areas and by discouraging development in residential areas. To create more vibrant development areas and to lessen traffic impacts associated with new development, the Plan emphasized providing a mix of uses in the designated growth areas.

These issues, raised and discussed in the 1974 Master Plan, continue to be of major issues of concern to Alexandrians. The Plan's approach toward addressing these concerns is still valid and provides a solid foundation upon which to base the 1990 Master Plan. However, the 1974 Plan needs to be updated and refined to reflect and respond to ever changing conditions and needs in a dynamic urban environment.

This chapter documents some of the key land use and development changes which have affected the City over the past 15 years and discusses how the City might continue to change in the future based on economic and demographic projections. The chapter then discusses the strategies used in the Small Area Plans to implement the Goals, Objectives, and Policies adopted by City Council to guide the City's future development.

**CURRENT LAND USE**

The current uses of land in Alexandria are summarized in Table 1 on the basis of the geographical units used in the development of Small Area Plans.

**Table 1**  
**1990 LAND USE BY SUBAREAS OF THE CITY**  
**(in acres)**

	<u>Res.</u>	<u>Comm.</u>	<u>Ind.</u>	<u>Inst.</u>	<u>Parks</u>	<u>Vacant</u>
Alexandria West	487.0	67.7	7.7	109.6	67.6	170.2
Braddock Road Metro	63.6	16.6	41.0	12.7	8.5	12.6
Fairlington/Bradlee	5.6	28.9	--	7.9	--	3.1
King Street/Eisenhower	2.4	98.3	148.4	14.2	7.5	87.1
Landmark/Van Dorn	273.3	189.1	304.6	178.1	4.3	74.1
Northeast	43.0	3.2	5.3	1.4	1.6	5.1
North Ridge/Rosemont	720.4	6.1	6.8	83.4	16.8	14.0
Old Town	144.2	63.8	12.5	12.5	63.5	10.0
Old Town North	39.1	61.0	27.9	--	7.2	3.4
Potomac West	808.9	75.5	68.0	1.2	100.4	30.0
Potomac Yard	--	--	304.4	--	107.0	--
Seminary/Strawberry	754.9	76.6	91.0	349.5	108.5	32.4
S.W. Quadrant	62.3	19.6	55.5	26.2	9.2	7.3
Taylor Run/Duke St.	<u>347.7</u>	<u>20.6</u>	<u>70.7</u>	<u>71.1</u>	<u>35.4</u>	<u>17.6</u>
<b>Total</b>	<b>3,752.4</b>	<b>727.0</b>	<b>1,143.8</b>	<b>867.8</b>	<b>537.5</b>	<b>466.9</b>
<b>Percent</b>	<b>50%</b>	<b>10%</b>	<b>15%</b>	<b>11%</b>	<b>7%</b>	<b>6%</b>

Source: Alexandria Department of Planning and Community Development

This table indicates that although the predominant land use in the City is residential the City and its neighborhoods are quite diverse. The table also shows that the City is mostly built with only 6% of the land vacant and undeveloped.

**DEVELOPMENT TRENDS SINCE 1974**

**Office Space**

In 1974, 390 acres of land were in commercial use. This had nearly doubled by 1990. Most of this growth has been in office buildings. More than 10 million square feet of office space has been built in the city since the early 1970s; over 5 million of this in the past 5 years.

During the early part of this period--between 1970 and the mid-1980s--most of the large office buildings were built in or adjacent to the Central Business District or along Eisenhower Avenue. More recently large office buildings and multi-building office parks have been developed near the Metrorail stations, in close proximity to an I-395 highway interchange, or on the north waterfront, which provides easy access to National Airport and the District of Columbia. Multi-building projects typically are developed in stages: The Carr-Norfolk Southern project, for example, is expected to take 20 years to reach completion.

Table 2

LOCATION OF OFFICE DEVELOPMENT  
1974-1990

	<u>Gross Sq.Ft.</u>
Alexandria West	2,206,247
Braddock Road Metro	474,054
Fairlington/Bradlee	0
King Street/Eisenhower Avenue	2,390,838
Landmark/Van Dorn	654,145
Northeast	35,162
North Ridge/Rosemont	198,280
Old Town	1,533,707
Old Town North	2,230,915
Potomac West	77,488
Seminary/Strawberry	115,835
S.W. Quadrant	29,833
Taylor Run/Duke Street	<u>186,511</u>
 Total	 10,133,015

Note: Includes all office buildings over 5,000 square feet.

Source: Alexandria Department of Planning and Community Development

Table 3

MULTI-BUILDING OFFICE PROJECTS

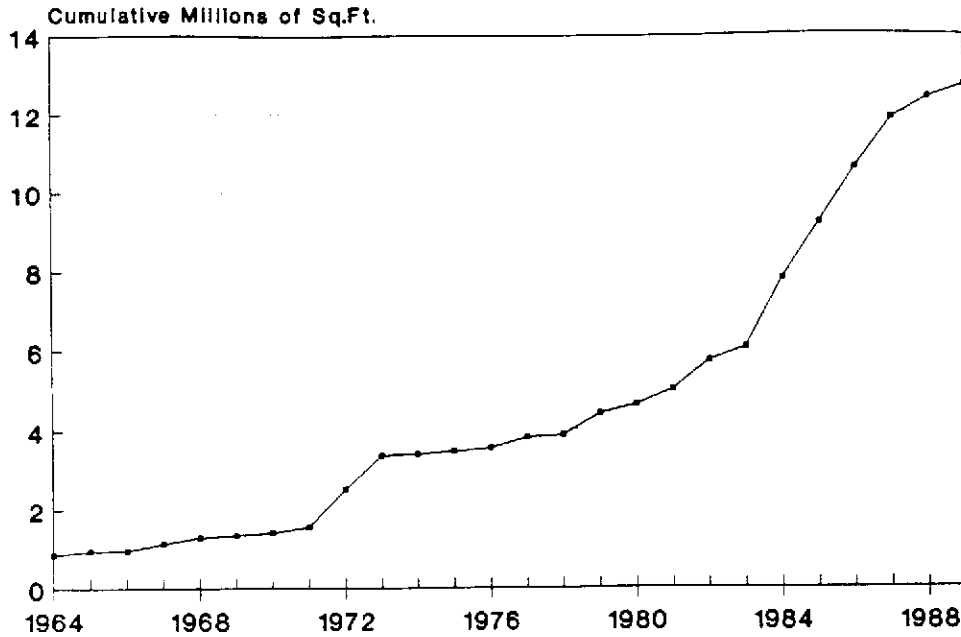
<u>Office</u>	<u>Year Project Completed</u>	<u>Sq. Ft.</u>
Braddock Center (1)(2)	1986	322,950
Transpotomac Canal Center	1987	546,883
King Street Station (2)	ongoing	546,900
Roundhouse Square	1979	104,083
Duke Street Station	1986	182,345
Alexandria Tech Center (1)	ongoing	346,000
Transpotomac Plaza	1985	354,871
Mark Center Office Park	1979	317,544
Mark Center (1)	ongoing	715,000
Park Center (1)(2)	ongoing	3,321,325
King Street Metroplace(1)	ongoing	389,157
<del>Carlyle</del> <del>Carroll</del> <del>Norfolk Southern</del> (2)	ongoing	2,800,000

(1) Includes some planned space not built or under construction

(2) Total includes other uses; residential, retail and/or hotel

Source: Alexandria Department of Planning and Community Development

# OFFICE DEVELOPMENT 1964-1989



Note: Includes only those buildings over 5,000 sq ft  
 Source: Department of Planning and Community Development

## Hotel Rooms

The development of office space and the continuing decentralization of activities away from the core city of Washington have created new demands for hotel accommodations in Alexandria. Twelve hotels, with more than 2,200 guest rooms, have been built in the city since 1970.

Table 4

### NEW HOTELS 1970-1990

	<u>Rooms</u>
Old Town Holiday Inn, 480 King Street	220
Ramada Inn, 4641 Kenmore Avenue	201
Executive Club, 500 Bashford Lane	81
Madison Place, North St. Asaph Street	248
Compri, 2700 Eisenhower Avenue	176
Old Colony Inn, North Washington Street	105
Morrison House, 116 South Alfred Street	47
Ramada Inn, 901 North Fairfax Street	254
Raddison Mark Plaza, 500 Seminary Road	500
Rodeway Inn, 6254 Duke Street	150
Days Inn, 110 South Bragg Street	200
Bragg Towers, 99 South Bragg Street	<u>100</u>
<b>Total</b>	<b>2,282</b>

Source: Alexandria Department of Planning and Community Development

**Hotel Rooms**

The development of office space and the continuing decentralization of activities away from the core city of Washington have created new demands for hotel accommodations in Alexandria. Twelve hotels, with more than 2,200 guest rooms, have been built in the City since 1970.

**Retail Space**

New offices in Alexandria and the population growth in residential areas adjacent to the city have created a demand for retail space. Over 1 million square feet of new retail space has been built since 1974, including a 694,000 square foot expansion of the city's only regional shopping mall--Landmark Center--and the 147,500 square foot Hechinger Commons on Duke Street.

Retail space has also been provided on the ground floor of many of the city's new office buildings, and over 365,000 square feet of retail space is expected to be built as a part of the Carr-Norfolk Southern development.

**Industrial Uses**

The use of land for industrial purposes declined by 20% between 1974 and 1990. There were 1,180 acres of industrially-used land in 1974; only 947 in 1990.

The industrial uses that dominated the north waterfront have been replaced by office and residential uses. Industrial uses are also disappearing from Cameron Valley as land costs in that area increase and from the areas adjacent to the south end of Potomac Yard that were built up by businesses that required rail-road access.

Little new industrial development has occurred in the city since 1974, although some 130 acres have been developed for warehouse uses, principally on Wheeler and Eisenhower Avenues and on the former Fruit Growers Express Company property south of Duke Street.

**Residential**

Between the early 1970s and 1990, the number of housing units in the City increased by over 30 percent; 11,400 units have been built since 1974 resulting in an estimated 58,000 units in the housing stock in 1990.

**Table 5**

**HOUSING UNITS**

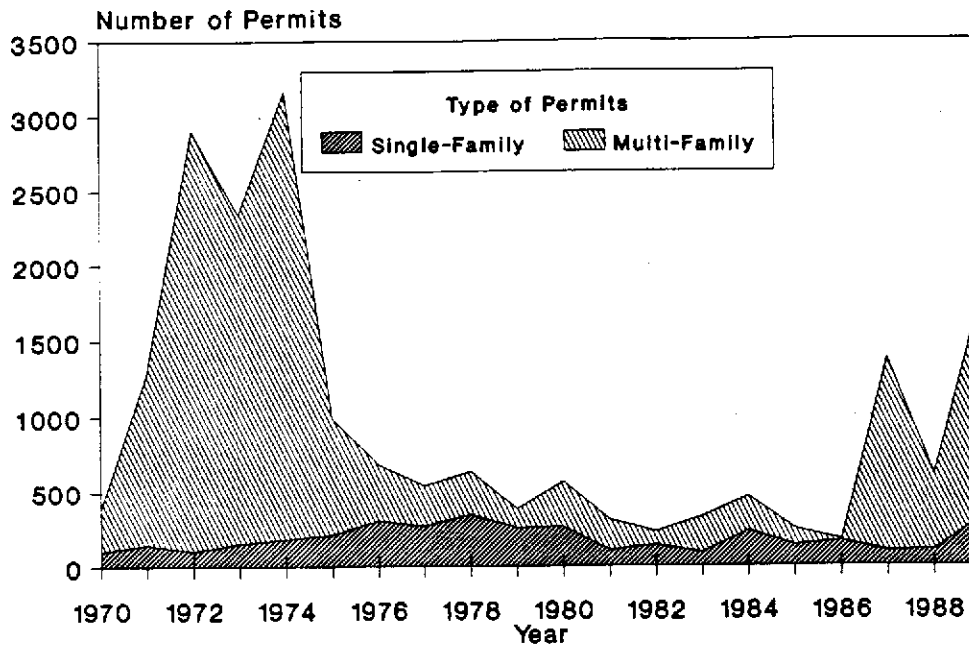
<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
44,424	51,161	52,041	55,989	57,996

Source: U.S. Bureau of the Census and Alexandria Dept. of Planning and Community Development

Although, on average 712 new units have been added to the stock annually since 1974 housing construction in Alexandria has been highly cyclical. As Chart 2 illustrates, housing booms occurred in the early 1970's, reaching over 3,000 units in one year, in the late 1970's, reaching almost 3,000 units in one year, and again in the late 1980's, reaching over 1,700 units in one year.

Over three-fourths of the housing built in the city since 1974 has been located west of Quaker Lane. Most of the 8,700 new units in that area were mid and highrise apartments/condominiums, with some town-houses.

Chart 2  
RESIDENTIAL PERMITS AUTHORIZED 1970-1989



Source: Dept. of Transportation & Environmental Services

Although the number of single family homes built each year has remained relatively constant, single family homes have consistently fallen as a percentage of the city's housing stock. While in 1970, 39 percent of the housing stock was single family homes, by 1985, less than a third of the housing in the city was single family units. In the future, given increased land costs, it is likely that an even greater share of the new housing will be multi-family.

The character of multi-family residential construction has and will also change. Prior to 1970, two-thirds of all apartments in Alexandria were garden apartments. Increasingly, multi-family residential development has been in midrise or highrise buildings at much higher densities.

#### LAND USE DEVELOPMENT BEYOND 1990

As part of the region's Cooperative Forecasts, each jurisdictional member of the Washington Area Council of Governments (COG) submits to COG growth forecasts for employment, households and population. For Alexandria, these forecasts were based on the amount and zoning of vacant and redevelopable land, announced development plans, and an office market study provided by Hammer, Siler George & Associates.

**Zoning of Vacant and Redevelopable Land**

About 97 percent of the 1,100 acres of vacant and redevelopable land in the City is zoned for commercial development. Given the existing zoning of these sites, 128 million square feet of commercial development could be built in the City. Most of this land is located in the Alexandria West, Landmark/Van Dorn, King Street/Eisenhower Avenue and Potomac Yard.

**Table 6**

**ZONING OF MAJOR COMMERCIAL/INDUSTRIAL VACANT/REDEVELOPABLE SITES**

Zone Class	Land Area		Total Vacant and Redevelopable (Acres)	Off.Potential Current Zoning (Millions Sq.Ft.)
	Vacant (Acres)	Redevelopable (Acres)		
C-2	120.3	21.0	141.3	18.4
C-2-B	12.5	2.5	15.0	1.9
C-3	--	0.5	0.5	0.1
C-O	67.0	--	67.0	5.8
I-1	9.9	247.3	257.2	28.0
I-2	56.7	448.5	505.2	65.9
M-1	--	4.4	4.4	0.6
M-3	3.9	36.8	40.7	6.2
W-1	--	<u>7.5</u>	<u>7.5</u>	<u>0.8</u>
<b>Total</b>	<b>270.3</b>	<b>768.5</b>	<b>1,038.8</b>	<b>127.7</b>

Source: Alexandria Department of Planning and Community Development

The vacant and redevelopable land that is zoned for residential development is less than 40 acres, which at a maximum, could be developed for about 1,700 units. Although residential development could theoretically occur on most of the commercially-zoned parcels, the densities allowed for commercial uses in a commercial zone is far greater than that allowed for residential uses.

In effect, Alexandria's zoning and its relationship to vacant and underutilized land subject to redevelopment reveals the enormous bias of the zoning code toward high density office development and the potential to develop office levels which exceed by a factor of two all the office development experienced by the city so far in its history.

As will be discussed below, the market demand for even a tenth of this potential office space on developable commercially-zoned land will probably not occur in 20 years or, for that matter, in a century.

**Employment Forecasts**

The employment forecasts are largely based on the growth of office employment in the City projected in the Hammer, Siler, George & Associates market analysis. The consultant concluded that the marketplace would absorb from 931,000 to 1,019,000 square feet of office space between 1988 and 1994 and from 611,000 to 749,000 square feet between 1994 and 2005. This is less than the annual rate of 1 million square feet needed in the mid-1980s, and reflects a projected reduction in the total regional demand for this type of space. Alexandria's share of the regional demand is, however, expected to increase from 5% in 1988 to 8% between 1995 and 2005.

The projected demand for office space in Alexandria in the period from 1988 to 2005 is 13.6 million square feet. This is, of course, much less than the 128 million square feet possible under the present zoning ordinance. Based on the data developed during the Hammer study, it is concluded that the more restrictive zoning provisions now under consideration will not adversely affect the city's economic base.

The bulk of the new office space will be located in identifiable major growth areas. These are:

- o King Street/Eisenhower Avenue. This area has excellent access to 2 Metrorail stations and the Capital Beltway. Over 2.8 million square feet of office space is planned for the ~~Carrollton~~ <sup>Carlyle</sup> ~~Southern~~ mixed use development. Other large development sites include the Hoffman property and Cameron Center.
- o Potomac Yard. Plans are being developed by the owner of Potomac Yard to curtail railroad operations and build a mixed use project that would contain a substantial proportion of office space. It is, however, unlikely that the city can permit development on the massive scale envisioned by the developers because of the potential traffic impact.
- o West End of Cameron Valley. Development will occur around the new Van Dorn Metro station, which is scheduled to open in 1991.
- o Alexandria West. Large potential development sites, with access to I-395, are located in the West End north of I-395. These include the Winkler properties, with 100 acres still undeveloped, and the Stone tract.

Based on an average office density of 3.5 employees per 1000 square feet of space, the 14 million square feet of projected office development would result in an additional 49,000 office employees in the City by 2010. On the other hand, as commercial development displaces industrial uses, industrial employment will decrease. The table reflects employment projections in five year increments for each major section of the City.

**Table 7**

**EMPLOYMENT, 1990-2005**

<u>Area</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>
East & South of the RR	47,300	56,600	64,600	73,100
Between the RR & Quaker Lane	10,400	10,200	10,900	11,500
West & North of the RR	<u>39,600</u>	<u>40,500</u>	<u>46,800</u>	<u>50,700</u>
Total	97,300	107,300	122,300	135,300

Source: Alexandria Department of Planning and Community Development

**Housing**

The number of housing units in Alexandria is forecasted to increase by 28% between 1990 and 2010. By the later year there could be 74,400 housing units in the City.

Table 8

PROJECTED GROWTH IN HOUSING UNITS

Area	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>	%Change 1990- 2010
East of RR	10,100	12,900	15,600	17,400	19,200	90%
Between RR/Quaker	16,900	17,400	18,100	18,200	18,300	8%
West of Quaker	<u>31,000</u>	<u>33,100</u>	<u>34,000</u>	<u>36,300</u>	<u>36,900</u>	<u>19%</u>
Total	58,000	63,400	67,700	71,900	74,400	28%

Source: Alexandria Department of Planning and Community Development

The area east of the tracks is predicted to have the greatest growth in housing units. The 90% growth in housing units forecasted for this area can be attributed to two mixed use developments, the ~~Carr-Norfolk Southern~~ <sup>Carlyle</sup> development that is approved for the King Street/Eisenhower Avenue area and the proposed Alexandria ~~20/20~~ <sup>2020</sup> project in the Potomac Yard ~~area~~.

Townhouses and apartments will be typical of new residential development throughout Alexandria. In this mix, apartments will predominate, although a small number of detached houses will be built in areas such as North Ridge/Rosemont and Taylor Run/Duke Street where detached houses are characteristic.

Of the approximately 2,300 housing units under construction in 1990, 78% were apartments and nearly all of the rest were townhouses. These medium and high density forms of housing will continue to be the norm in Alexandria as long as land remains expensive and scarce.

Population

Residential development will increase the City's population. Housing is forecasted to grow by 16,400 units, reaching 74,400 units in 2010. These units could house 72,000 households with an average household size of 1.86 people and a vacancy factor of 3.5%. Based on the forecasts the City's population would grow to 135,000 by 2010 or by 22%.

The population east of the railroad tracks is projected to grow by 7% between 1990 and 2010. This population increase is based on an estimated 6,200 people residing in the Potomac Yard's ~~20/20~~ <sup>2020</sup> project by 2010 and 5,300 people residing in Cameron Valley's new housing at Mill Race, ~~Carr-Norfolk Southern~~ <sup>Carlyle</sup> and other sites. Neither the Potomac Yard nor Cameron Valley had any residents in 1990. The Braddock Road area is also an area with new housing and a growing population which is forecasted to increase by 1,900 people.

In absolute numbers, the area west of Quaker Lane will grow almost as much as the area east of the railroad tracks. Mixed use projects on large sites such as the Stone Tract in Alexandria West and Cameron Station in the Landmark/Van Dorn area will add thousands of housing units and people. Smaller projects such as Breckenridge Place and Skypointe in Alexandria West would also contribute to the West End's growth over the next 20 years.

**Table 9**

**PROJECTED POPULATION GROWTH**

Area	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>	%Change 1990- 2010
E. of RR	18,300	23,600	27,100	29,800	32,200	76%
Between RR/Quaker	35,100	35,700	36,700	36,400	36,200	3%
W. of Quaker	<u>56,100</u>	<u>59,300</u>	<u>60,400</u>	<u>64,000</u>	<u>64,900</u>	<u>16%</u>
<b>Sub-Total</b>	<b>109,500</b>	<b>118,600</b>	<b>124,200</b>	<b>130,200</b>	<b>133,300</b>	<b>22%</b>
Institutional	<u>1,700</u>	<u>1,700</u>	<u>1,700</u>	<u>1,700</u>	<u>1,700</u>	<u>0%</u>
<b>Total</b>	<b>112,200</b>	<b>120,300</b>	<b>125,900</b>	<b>131,900</b>	<b>135,000</b>	<b>21%</b>

Source: Alexandria Department of Planning and Community Development

**SMALL AREA PLANS**

The analysis of development trends and the forecasts indicate that the City has grown and changed enormously over the past 15 years and that these trends will continue for the foreseeable future. Some 49,000 additional jobs and some 23,000 additional people are forecasted to live or work in the City by 2010.

The analysis also reveals that current zoning of vacant and redevelopable land in the City allows far more commercial development than could ever be absorbed by market demand, ever be accommodated by City facilities and services and ever be tolerated by Alexandria citizens. Clearly, an updated and revised land use plan and new zoning are needed to meet the challenge of economic growth, to guide future development and to implement the City's land use policies, goals and objectives.

The City has chosen to use small area planning as an integral part of the Master Plan process to guide the City's future development. The intent of the 14 small area plans is to provide the analytical base for detailed land use recommendations affecting each of the City's neighborhoods and development areas. The small area plans also form the basis for changes in the zoning code needed to insure that zoning is consistent with the small area plans and the City's land use policies.

To implement the goals, objectives and policies adopted by the City and listed at the beginning of this chapter the small area plans employ the following strategies;

1. Existing residential land uses, in all its forms, and with few exceptions, are to be preserved.
2. Residential neighborhoods are to be protected from major new development by providing transitional uses, heights and densities between low scale residential uses and higher scaled and more intense commercial uses.
3. Regional, community and neighborhood shopping and retail uses vital to serving residential areas are to be preserved, revitalized and protected from higher density office development.
4. Areas designated for parks and recreation are to be preserved and protected from development encroachment.

5. Areas providing public facilities and public utilities are to be preserved and protected from development encroachment.
6. Private institutional uses in residential areas such as places of religion and schools, should be preserved or if not longer viable, should revert to residential uses compatible with adjacent areas.
7. Viable industrial areas that contribute to the City's economic diversity and varied employment base and provide needed services are to be maintained and protected from significant office development and redevelopment.
8. Major development is to be directed away from existing low scaled residential areas and encouraged on areas designated for development.
9. High density office development is to be limited to sites that are located within convenient walking distance to a transit station and to a high capacity roadway system.
10. High density but lower scaled mixed use development is to be permitted within the Old and Historic Alexandria District and central business district consistent with the character of this built-up urban area and subject to review by the city.
11. Mixed use development is to be encouraged in all areas where coordinated development on relatively large tracts of vacant or redevelopable land is desired and on smaller sites where mixed use development can be used to mitigate development impacts on adjacent residential areas.
12. Large tracts of land whose development could have a major impact on adjacent areas are to be designated as Coordinated Development Districts (CDDs). CDD areas are to be developed for a mix of uses in accord with an overall concept plan and subject to urban design guidelines, a comprehensive amenity plan, an affordable housing plan and a transportation management plan.

## **ZONING**

To implement the Small Area Plans new zoning tools are needed.

The present zoning ordinance, adopted in 1951 and since amended many times, contains 11 residential zones, 3 broad-based commercial zones, 2 industrial zones, and 5 specialized zones related to the Metrorail stations, the waterfront, and recreational uses. It served the city adequately until the demand for large quantities of office space and their supporting facilities, such as hotels, arose in the late 1970s and 1980s.

Concurrently with the revision of the policy sections of its Master Plan, the city has been preparing, in close consultation with property owners and civic groups, a series of Small Area Plans that look at specific areas of Alexandria in terms of how those areas should hereafter develop in order to carry out the land use goals, objectives, and policies.

As the Small Area Plans have gone through the processes of drafting, meetings with citizens, public hearings before the planning commission and city council, and adoption, it has been clearly evident that the zoning classifications and regulations of the past, however much they have been amended, are no longer adequate to meet the needs of the 1990s and beyond. In brief, what is needed is not another series of amendments, but a complete revision of the zoning ordinance.

To meet this situation, City Council appointed a citizen task force to prepare a new zoning ordinance designed to implement the City's land use goals, objectives, and policies.

# PLEASE RETAIN TRANSPORTATION

APPROVED DECEMBER 1990

AS AMENDED BY THE PLANNING COMMISSION  
MAY 27, 1992

MASTER PLAN  
ALEXANDRIA, VIRGINIA

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## I. INTRODUCTION

The integration of transportation and land use planning is essential if the City of Alexandria is to continue to develop in a progressive, orderly manner during the decade of the 1990's and into the 21st Century. This plan looks ahead 10 to 20 years, and addresses the changes that will be required to accommodate the travel of people and the movement of goods into, within and through, the City. It is based on the best available information, and it relies upon current development and travel demand forecasts.

The purpose of this transportation plan is to provide a basis for assessment of future needs. Changing land uses inside and outside the City necessitate a plan that provides flexibility. No transportation plan is intended to dictate the future, nor should it foreclose the possibility of new facilities or improvements to existing facilities, regardless of how unpopular they may be today.

Transportation facilities and services should optimize safety and efficiency while minimizing travel time, inconvenience, and environmental disruption. It should be understood that the transportation facilities and services called for in this transportation plan are constrained by fiscal realities, and that, over time, the priorities of the City government might change.

### A. GOALS AND OBJECTIVES

During 1989, the Alexandria City Council acted on a number of major policy questions aimed at enhancing the quality of life for all citizens of Alexandria. The goals that were established are as follows:

1. The City of Alexandria shall develop and manage a safe, comprehensive transportation system, consistent with the City's land use policies, which is designed to move people and goods at a satisfactory level of service with minimal community disruption and environmental impact.
2. The City of Alexandria shall achieve a balance between the development which is allowed and the transportation system necessary to meet the needs created by that development.
3. The City of Alexandria shall provide or require to be provided with enough parking to adequately meet the needs of each land use type, but not to the extent that parking availability encourages the use of the single-occupant private auto.

The specific objectives to achieve these goals are as follows:

- o Foster compatibility between transportation facilities and the adjacent land uses.
- o Minimize the impacts of traffic, especially the impacts on residential neighborhoods.
- o Improve the safety and efficiency of the existing street system and the continuous flow of traffic.
- o Increase the availability and use of a variety of public transportation options.
- o Reduce the rate of increase of vehicle trips.
- o Encourage the use of multi-occupant vehicles.
- o Reduce air pollution, noise, and other nuisances from transportation activities.

- o Increase the revenues used for transportation improvements, both capital and operating, from the tax base added by the development.
- o Coordinate the timing of development with the timing of transportation improvements needed to serve that development. In this way, the infrastructure needed to serve the City should be in place, either before or concurrent with a development to minimize traffic impacts.
- o Relate the intensity and mix of development in any given area to the ability of the transportation system to satisfy transportation demand.
- o Continue the Traffic Management Plan (TMP) and Traffic Impact Study (TIS) process as a means of managing the transportation needs and reducing traffic impacts of new development.

**B. FUNCTIONAL CLASSIFICATION OF FACILITIES**

There are five categories of functional classification that are generally recognized by the Federal Highway Administration and the Virginia Department of Transportation. The City of Alexandria adopted a classification system that is slightly different, but its characteristics are generally the same. Map I-1 gives the classification of streets in the City and Appendix A lists the recommended changes. The following list compares two classification systems:

<u>General Classification</u>	<u>City of Alexandria</u>
1. Controlled Access Facility	Expressway
2. Primary Arterial	Arterial
3. Secondary Arterial	Primary Collector
4. Collector Street	Residential Collector
5. Local or Residential Street	Local Street

The section below describes each of these categories:

**Controlled Access Facilities - Expressways**

Controlled access facilities and expressways are intended to complement the arterial street system by providing for the movement of very high volumes of people and goods, usually greater than 50,000 Average Daily Traffic (ADT). Expressways do not provide direct access to adjacent properties. They form a closed, continuous transportation system between principle traffic generators and attractors. Expressways connect with crossings of major geographical barriers. They frequently act as geographical or psychological barrier between abutting neighborhoods.

Although controlled access highways usually account for about 10% of the total street and highway mileage in an urban area, they carry 40% or more of the daily traffic. Table B-1 gives the comparison of highway facilities in the City of Alexandria, the Northern Virginia subregion, and the Washington, D.C. Metropolitan Area. From a design standpoint, controlled access facilities require wide rights-of-way (120 feet minimum) with four or more travel lanes. Generally, they include medians, shoulders, and grade separated interchanges. Parking or pedestrian access is not allowed adjacent to the travelway. Posted speeds on these facilities in urban areas range from 35 to 55 miles per hour. The interstate system, freeways, expressways, and parkways are classified as controlled access facilities or, in Alexandria's classification as "expressways." Examples of this type of facility include I-395 (Shirley Highway), I-95 (Capital Beltway), and the George Washington Memorial Parkway (north of Slater's Lane).

### **Primary Arterials - Arterials**

Primary arterials serve the main travel corridors by connecting secondary traffic generators such as regional shopping centers, large residential areas, and office complexes with other primary arterials and the interchanges of expressways. These roadways carry relatively high volumes of traffic, between 10,000 to 50,000 ADT. Some access is provided to abutting lands but most traffic is limited to through movements, particularly during the peak hours. Arterials are designed with four or more travel lanes. Medians are optional but are very desirable from a safety standpoint. The right-of-way requirements may vary from 70 to 120 feet. Preferential signalization, signal progression, and linear continuity are essential for arterials. Sidewalks should be provided on both sides of the roadway to serve pedestrian movements. Posted speeds on these streets usually range from 30 to 45 miles per hour. Examples of primary arterials include Duke Street (Virginia Route 236 from western City limits to Henry Street), King Street (Virginia Route 7 from the western City limits to Commonwealth Avenue), Quaker Lane, Seminary Road, Janney's Lane, U.S. Route 1 through the City (Jefferson Davis Highway, Patrick Street, and Henry Street), and Washington Street (Slater's Lane to I-95).

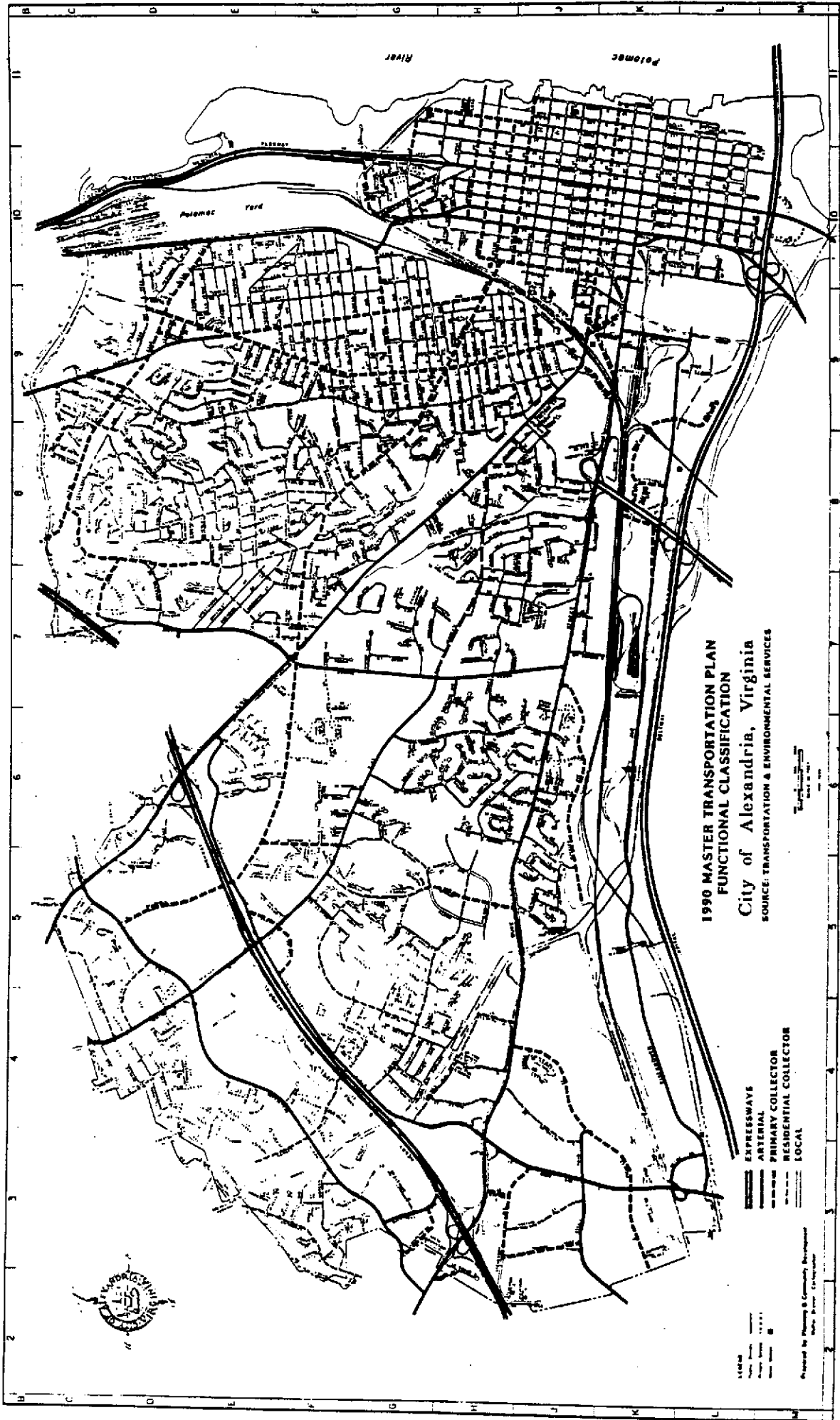
### **Secondary Arterials - Primary Collectors**

Primary collectors serve less concentrated traffic generating areas such as neighborhood shopping centers, high schools, and businesses. They typically carry medium traffic volumes of 5,000 to 20,000 ADT. Primary collectors usually carry an even mix of local and through traffic and link arterials with other facilities. Primary collectors may serve as neighborhood boundaries while providing some local traffic with property access. This class of facility is similar to arterials in design; however, primary collectors generally limited to two travel lanes and provide a lower service-level highway. Also, primary collectors provide access to adjacent properties and have limited preference at signals. Posted speeds range from 25 to 35 miles per hour. Sidewalks should parallel both sides of these facilities. Examples of primary collectors include Braddock Road (from Seminary Road to Commonwealth Avenue), Commonwealth Avenue (from King Street to Reed Avenue), Mt. Vernon Avenue (Commonwealth Avenue to E. Braddock Road), East and West Glebe Road, and Mill Road.

### **Collector Streets - Residential Collectors**

Residential collector streets provide direct service to residential areas, local parks, businesses, and schools by distributing traffic to and from local streets and routing it to higher classified facilities. Trips are relatively short in nature with a lower percentage of through trips. Traffic volumes on residential collector streets are low to moderate, 10,000 ADT or less, but can vary greatly depending on the intensity of the adjacent development. This class of facility is designated to serve areas encompassed by the expressways, arterials, and/or primary collector facilities.

In general, when access to an arterial roadway or primary collector street is greater than one-half mile, residential collector streets are used to provide neighborhood auto access to residential and business developments. They are designed with a minimum of two travel lanes without medians, access control, or preference at signals. Provision of parking is optional, but convenient to the adjacent uses. It is desirable to have sidewalks on both sides of the street. The speed limit is usually 30 miles per hour or less. The importance of this class of the street should not be underestimated. Without these collectors, the local transportation system could not function effectively. Examples of residential collector streets include Cameron Street (from St. Asaph Street to King Street), Prince Street (from Reinekers Lane to St. Asaph Street), Russell Road (from West Glebe Road to King Street), Chambliss Street, Sanger Avenue, Taney Avenue (from Van Dorn Street to N. Jordan Street), and Old Dominion Boulevard.



**1990 MASTER TRANSPORTATION PLAN  
FUNCTIONAL CLASSIFICATION**  
City of Alexandria, Virginia  
SOURCE: TRANSPORTATION & ENVIRONMENTAL SERVICES

- EXPRESSWAYS
- ARTERIAL
- PRIMARY COLLECTOR
- RESIDENTIAL COLLECTOR
- LOCAL

Scale:  
1 inch = 1 mile  
1 centimeter = 0.39 miles  
1 centimeter = 0.63 kilometers  
Prepared by Planning & Community Development  
Map Series: Transportation

### **Local or Residential Street**

The primary purpose of local or residential streets is to provide direct access to individual homes, shops, businesses, and similar traffic destinations. It is essential that direct access be provided to abutting land, for all traffic originates from (or is destined to) these land uses. Local traffic should be encouraged while through traffic should be limited and discouraged. These streets connect local properties to collector streets and, in turn, to higher classified facilities. The design of local and residential streets varies. Generally, there are two lanes for two-way travel, no medians or shoulders, no access control, and no preference at signals. Sidewalks and parking are desirable.

### **C. ASSUMPTIONS OF THE PLAN**

The assumptions used in this analysis are based on past City Council actions and policies; plans and programs by the Virginia Department of Highways and Transportation, the Metropolitan Washington Transportation Planning Board, and the Washington Metropolitan Area Transit Authority. The 1989 study by the Virginia Department of Transportation, Northern Virginia 2010 Transportation Plan, provides the primary basis for the assumptions, as follows:

1. Population, employment and land development will continue to grow in the City and the region, but at a lower rate than the last 10 years.
2. The highest growth rate of population in Northern Virginia will occur in Fairfax, Prince William, and Loudoun Counties. Lower growth rates are expected in Arlington County and in Alexandria.
3. Widening of the Capital Beltway (I-495/I-95), and the Woodrow Wilson Bridge will be made to increase capacity. While the VDOT has recently proposed 14 lanes for the Beltway and the Woodrow Wilson Bridge, all traffic analysis has assumed the C.O.G. projections of 10 lanes.
4. The following highway improvements will be made in Fairfax County to increase capacities:
  - o Completion of the Springfield Bypass (Fairfax County Parkway),
  - o Extension of South Van Dorn Street from Franconia Road to Richmond Highway.
  - o Widening of Little River Turnpike (Route 236) between Fairfax City and I-395 with improvements at the Beauregard Street intersection.
  - o Completion of the widening of Telegraph Road to six lanes from I-95 to Franconia Road.
  - o Completion of the widening of Van Dorn Street to six lanes from I-95 to Franconia Road.
5. The high occupancy vehicle (HOV) network will be expanded to form an interlocking grid system throughout the region. Those that would most directly affect the Alexandria area are:
  - o Provision of HOV lanes on the Capital Beltway from U.S. Route 1 to the Dulles Toll Road.
  - o Extension of HOV lanes on I-66 from I-495 to Centreville and Gainesville.
  - o Extension of HOV lanes on I-95/I-395 to the Prince William/Stafford County line.
  - o Extension of HOV lanes on U.S. Route 1 from Alexandria to Fort Belvoir.
  - o Provision of ramp connections from the I-395 HOV lanes to Duke Street.

- o Provision of HOV lanes on Braddock Road from Route 123 to I-495.
6. Metrorail extensions will be implemented during the next 20 years as follows:
- o The Blue Line will be completed from Van Dorn to Franconia/Springfield.
  - o The Green Line will be completed as planned to serve suburban Maryland.
7. Commuter rail service will be implemented from Fredericksburg and Manassas to Washington, D.C., via Alexandria.
8. Metrobus and DASH bus service will continue to be expanded in the City to meet growing demand, as employment and residential centers develop, and with the opening of the Van Dorn Metrorail Station.

## II. EXISTING CONDITIONS AND TRENDS

### A. TRENDS AND FORECASTS

Metropolitan Washington including suburban Northern Virginia has one of the fastest growing areas in the nation over the last decade, and the growth is expected to continue well into the 21st century. The Metropolitan Washington Council of Governments (COG) has summarized the trend graphically, with estimated growth factors of key economic variables in Northern Virginia, between 1985 and 2010. Between 1985 and 2010 (Figure II-1), population is estimated to increase by about 50%, and households by about 70% (due to smaller household size). During the same period, employment and the number of automobiles are expected to almost double, resulting in more than doubling of the Vehicle-Miles-Traveled (VMT) throughout Northern Virginia (vehicle-miles-traveled is a measure of vehicular activity, i.e., 10 vehicles traveling 20 miles equals 200 VMT).

The largest growth is expected in the outer suburbs of Fairfax, Prince William, and Loudoun Counties (Figure II-2). Fairfax County will absorb the bulk of this growth. The number of households could increase from about 250,000 to more than 400,000; employment could double from about 300,000 to 600,000; and the number of automobiles could increase from about 500,000 to more than 900,000. In contrast, in Alexandria, the number of households, and the automobile ownership is expected to show only a slight increase. However, employment is expected to increase from about 75,000 to 125,000. Thus, Fairfax County which surrounds Alexandria on almost three sides, is expected to continue to have a dramatic effect in the City.

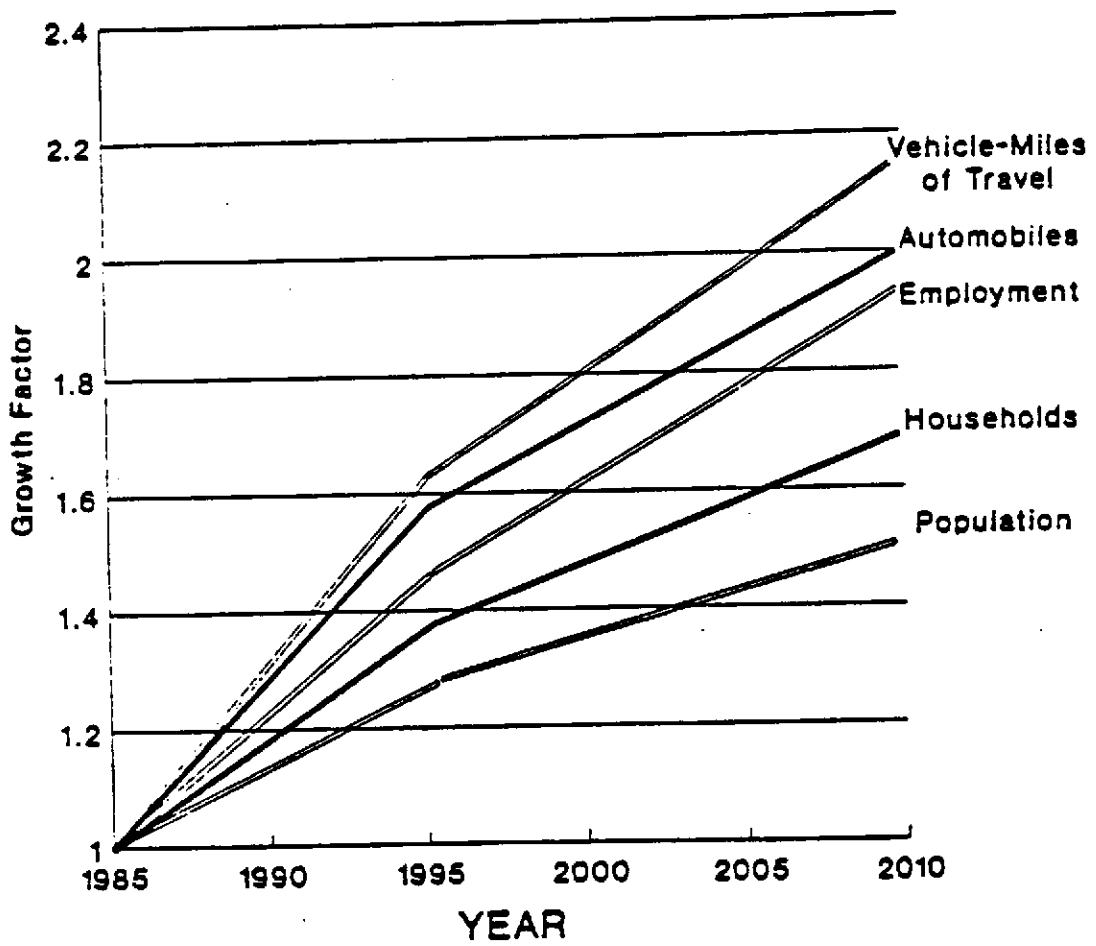
The work-trips from home to work and back, during the AM and the PM peaks are the essence of the transportation problem and traffic congestion. Between 1985 and 2010 the number of work-trips in Northern Virginia (Figures II-3 and II-4), is estimated to almost double; from 520,000 daily trips in 1985 to 947,000 in 2010. The location of the City on the cross road between suburban Virginia and the District, and being surrounded by Fairfax County, results in high proportion of through-traffic in the City, in particular, during the peak periods traveling north-south. The 1988 City's AM peak hour traffic counts at the northern City limits on U.S. Route 1 and on the George Washington Parkway (GWP), showed that approximately 80% of the vehicles were from outside of Alexandria. Approximately 45% of the vehicles on the GWP, and 33% on U.S. Route 1 were from Fairfax County. Also, the vehicular counts at these locations during the AM peak commuting hours indicate that the majority of the increase in the number of vehicles crossing the City limits during the peak (7-8 a.m.) are due to development changes within the City during a period from 1980 to 1988. Traffic increased by 9% in the peak chart hour at the northern City limits; however, during the same period at the southern City limits, the volumes increased by 33%, suggesting that some 24% of the increase was due to development in the City (Table II-1).

The 1988 City traffic volume counts showed that 14 thoroughfares in Alexandria consistently carry 20,000 or more vehicles per day, 9 facilities accommodate 30,000 vehicles or more, and 4 carry more than 50,000. The Shirley Highway (I-395) and I-95 carry approximately 125,000 vehicles every day. According to the 1988 traffic counts taken at the City limits, the volume has increased by 23% since 1978, an average increase of 2.3% per year. Total 24-hour volumes entering and leaving the City have grown from 451,457 vehicles in 1978 to 555,210 vehicles in 1988 (Shirley Highway (I-395) is not included in this total).

#### The Work Trip

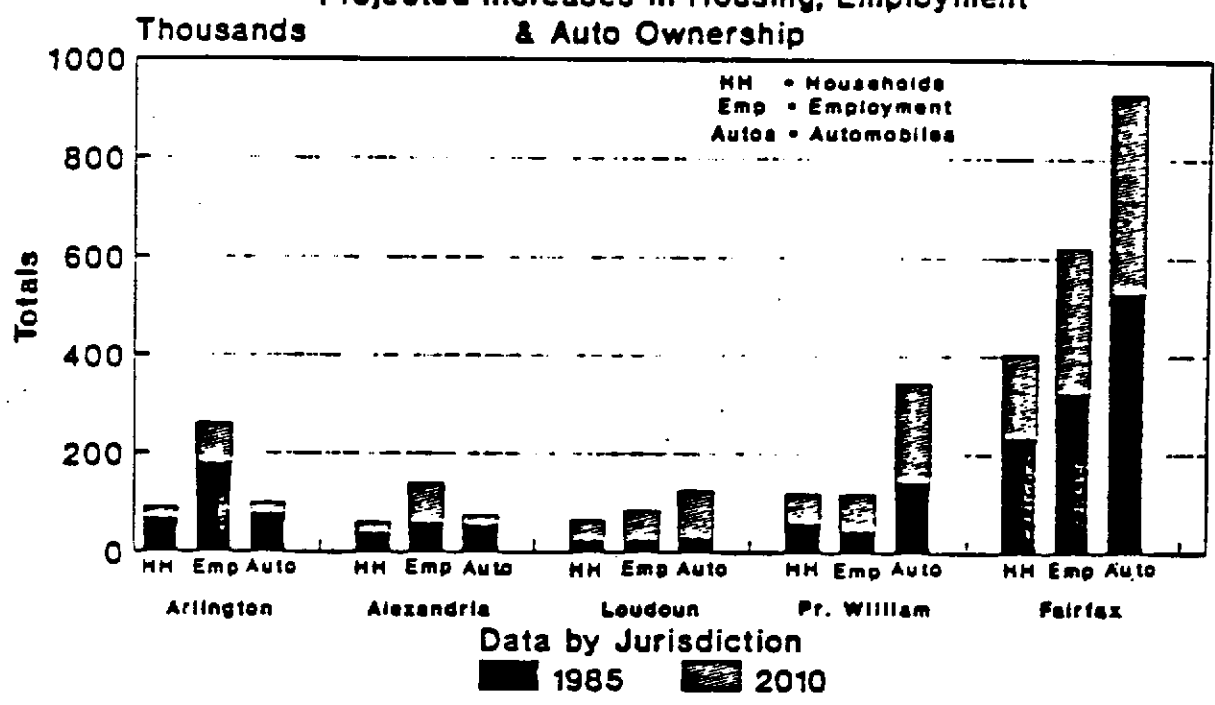
The work-trip during the peak periods is the essence of the transportation problem in Northern Virginia, as well as in other parts of the region and the country. The work-trip is dominated by automobile travel, much of which in a single occupant vehicle (SOV). The problem is compounded by cross-jurisdictional travel and trips to, from, and through the City.

Figure II-1  
Growth Factors - No. Virginia  
Projected for 1995 and 2010



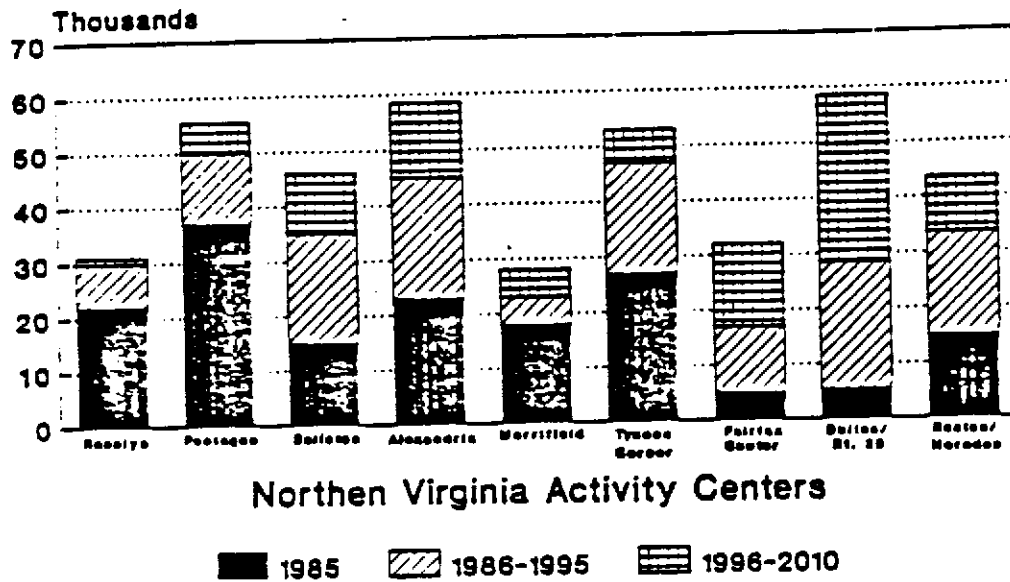
Source: C.O.G. - 1989

**Figure II-2**  
**Growth by Jurisdiction In**  
**Northern Virginia - 1985 to 2010**  
**Projected Increases In Housing, Employment**  
**& Auto Ownership**



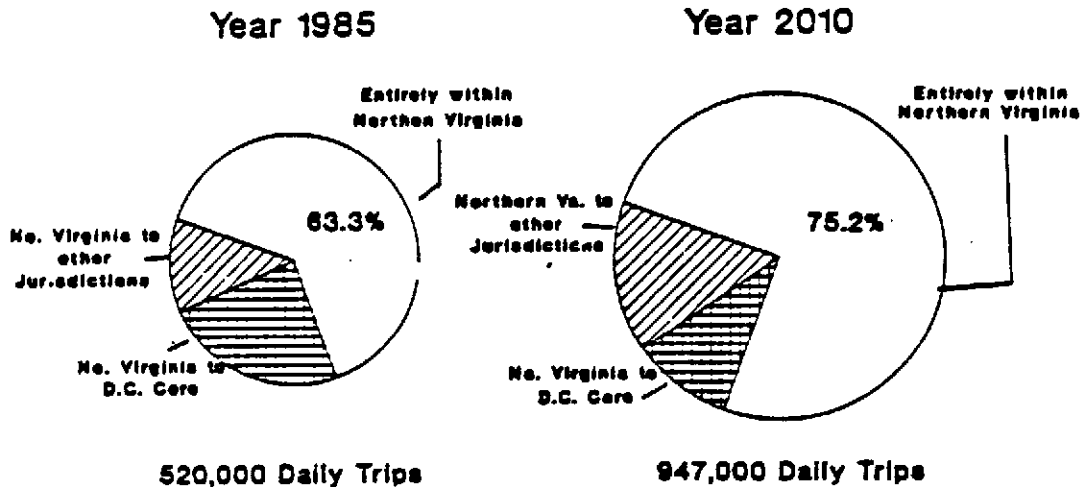
Source: VDOT - 1989

Figure II-4  
**Weekday Home-to-Work Trips**  
 to Northern Virginia Activity Centers



Source: VDOT - 1988

Figure II-3  
**Growth & Distribution of**  
**Home-to-Work Trips**  
 Daily Trips Beginning in Northern Virginia Suburbs



Source: VDOT-1988

Travel estimates from the Washington COG (shown in Appendix Tables B-2 through B-5), of daily work-trips in the Washington region in the years 1985 and 1995 provide insights to the characteristics of the work-trip (from home to work and back). The tables show the number of trips, and percent use of transit, between any pair of jurisdictions in the region. The tables show trip-origin listed as "FROM," on the left side of each table, to trip-destination, listed as "TO." Thus, for example, Table B-2 indicates that in 1985, there were 31,567 daily person work-trips from Alexandria (ALEX) to the DC Core, and 15,113 internal trips within Alexandria (ALEX) to Alexandria (ALEX).

**TABLE 11-1**  
**Summary of Traffic volumes**  
**Northbound U.S. Route 1 and George Washington Memorial Parkway**  
**1980 to 1988**

<u>Facility</u>	<u>Location</u>	<u>Time Period</u>		
		<u>6-7 AM</u>	<u>7-8 AM (peak)</u>	<u>8-9AM</u>
George Washington Memorial Parkway	No. City Limits	+25%	+9%	+5%
	So. City Limits	+28%	+33%	+19%
U.S. Route 1	No. City Limits	+30%	+13%	+11%
	So. City Limits	+34%	+16%	+50%

Source: City of Alexandria.

### Daily Person Trips to Work

The tables show daily person work-trips, the average number of person-trips (by any mode of transportation) from home-to-work and from work-to-home during a single work day. Thus, the number of person-trips during the AM (or the PM) is about one half of the daily trips.

In 1985 (Table B-2) Alexandria generated 96,670 bidirectional daily person work-trips (or almost 50,000 during the AM peak). About one third of the trips (31,567) had D.C. destinations, about 15% (15,113) were internal within Alexandria, and another 15% had a Fairfax County/ destinations.

COG estimated that in 1995 (Table B-3) Alexandria will generate 105,340 daily person work-trips, an increase of about 9.4% over 1985. However, the directional distribution would change quite substantially. Almost a third of the trips (29,082) would be internal trips within Alexandria, and only a quarter (26,541) will be to D.C. The number of trips to Fairfax County will remain virtually unchanged (14,974 in 1995 vs. 15,113 in 1985).

Perhaps, the more important statistics concerning the City, are the number of trips attracted to Alexandria, from all other jurisdictions, and the number of trip from Fairfax County/City to the D.C. (Core and Non-Core) and to Arlington County. Many of the latter, attribute to the through-traffic in Alexandria. COG estimated that the number of daily person work-trip from Fairfax to D.C. (Core and Non-Core combined) will increase by about 13%, from 170,879 in 1985 to 192,544 in 1995. Cross-jurisdictional travel will increase substantially, placing increased demands on the circumferential routes.

### Transit Use and Car Occupancy

Tables B-4 and B-5 show the estimated percent of transit use in cross-jurisdictional travel to work in the years 1985 and 1995. As expected, the highest proportion of transit use, is to the D.C. Core. It is estimated to be 40% in 1985, and 37% in 1995. The second highest is D.C. Non-Core, 20% in 1985, and 18% in 1995. The third highest is the Arlington Core, 20% in 1985, and 21% in 1995. Alexandria had an overall transit use (to-work) of 7% in 1985, and is estimated by COG to increase slightly to 8% by 1995. The COG estimates do not take into account Transportation Management Plan (TMP) measures, adopted by the City, which are expected to increase transit use beyond the 8% projected for 1995.

The COG also estimated vehicular occupancy on a cross-jurisdictional travel to work. The overall regional average is estimated to remain virtually unchanged, 1.23 persons/car in 1985 versus 1.24 in 1995. Alexandria's average is close to the regional average. It is estimated to be 1.21 in 1985, and 1.22 in 1995. Again, the 1995 COG estimates do not take into account the TMP measures. It is expected that the TMP measures coupled with a number of HOV facilities will increase both transit-use and car-occupancy for the work-trip to Alexandria, above the figures currently estimated by the COG.

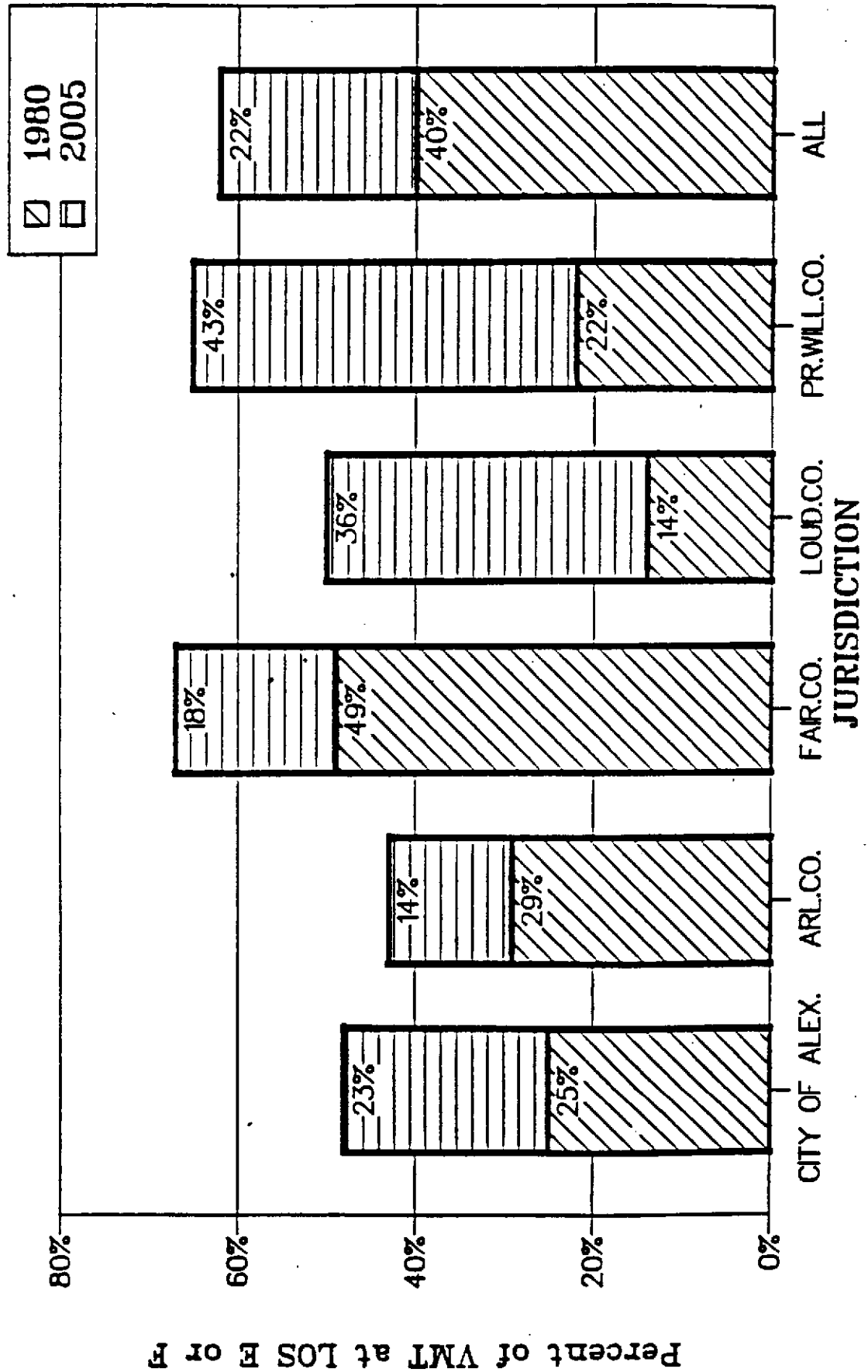
### Congestion and Level of Service

Level-of-Service is the measure of operational conditions of traffic of roads and intersections. The level of service of major commuting corridors in the City is largely dependent on how effective the controlled access facilities adjacent to and serving Alexandria are performing. When I-95 and the Woodrow Wilson Bridge break down, particularly during the afternoon peak period, major routes in the downtown area such as Duke Street, Henry Street (southbound U.S. Route 1), and Washington Street also fail to accommodate traffic adequately. When I-395 is heavily congested, particularly in the morning peak period, traffic is diverted to North Beauregard Street and Van Dorn Street. COG estimates that by the year 2005, 61.9% of peak period vehicles on freeways and arterials in Northern Virginia will be heavily congested at Level-of-Service "E" or "F" (heavily congested), up from 39.3% in 1980. Peak period vehicle miles of travel under heavily congested conditions will range from 43.2% in Arlington to 48% in Alexandria, and 67.4% in Fairfax County (Figure II-5). Peak hour Levels-of-Service for most of the Capital Beltway are expected to deteriorate to "E" and "F". COG estimates that the reduction from Level-of-Service "E" to level of service "F" results in an added one minute of delay time per mile on freeways, and an extra two minutes of delay time per mile on arterials. Thus, a typical 12.4 mile trip will take an extra 12 minutes.

Some City arterials and intersections consistently operate at congested levels regardless of the level-of-service problems on the Beltway or I-395. They include:

- o Northbound Washington Street at E. Abingdon Drive in the A.M. peak period -- due to the heavy traffic movements on the G. W. Parkway transitioning with East Abingdon Drive.
- o Northbound Washington Street at the southern City limits in the A.M. peak period -- due to heavy traffic flow from a limited access facility, the G.W. Parkway, to an urban arterial with signalized intersections.
- o Northbound U.S. Route 1 (South Patrick Street) south of Duke Street in the A.M. peak period -- because of the heavy traffic demand transitioning from three northbound lanes to two unrestricted northbound lanes and because with multiple turning movements through the I-95 interchange.
- o Northbound Telegraph Road at Pershing Avenue in the A.M. peak period -- due to heavy traffic flow from Fairfax and I-95 into the Eisenhower Valley.

**FIGURE II-5**  
**Percentage of Total Vehicle Miles Traveled (VMT)**  
**Operating at Level of Service E or F : 1980 - 2005**



SOURCE : COG - 1988