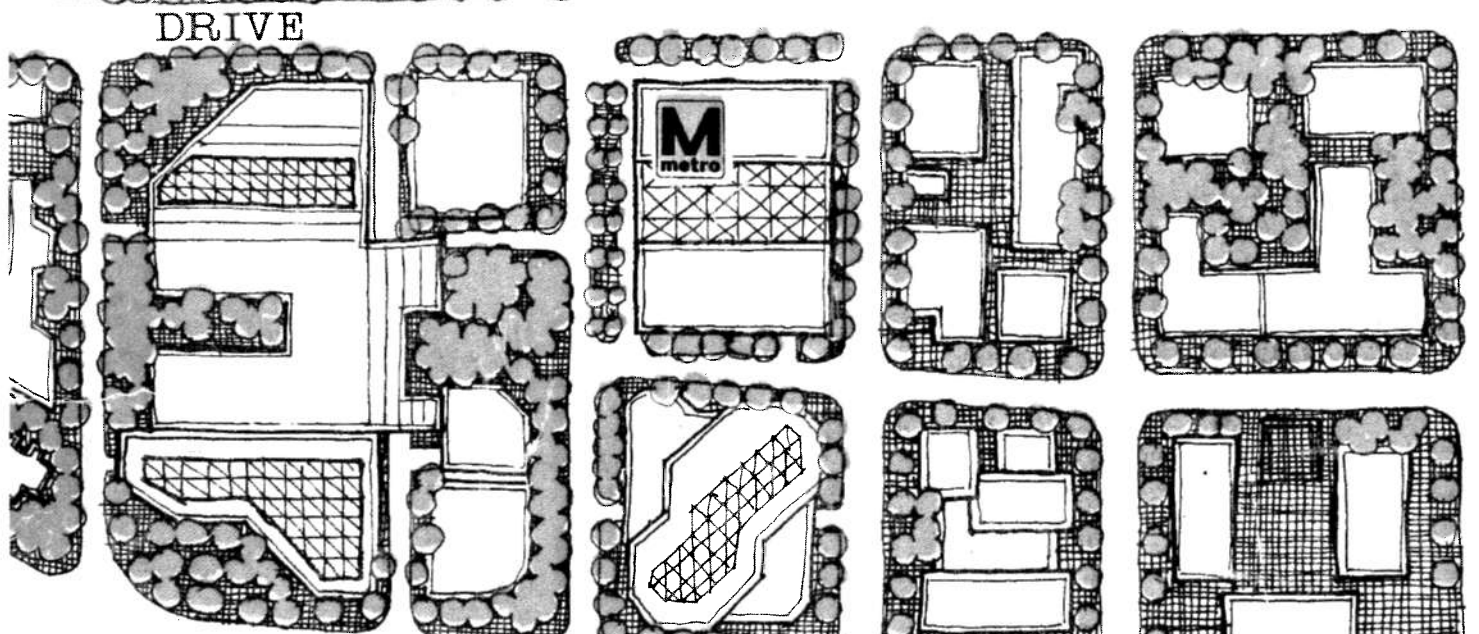
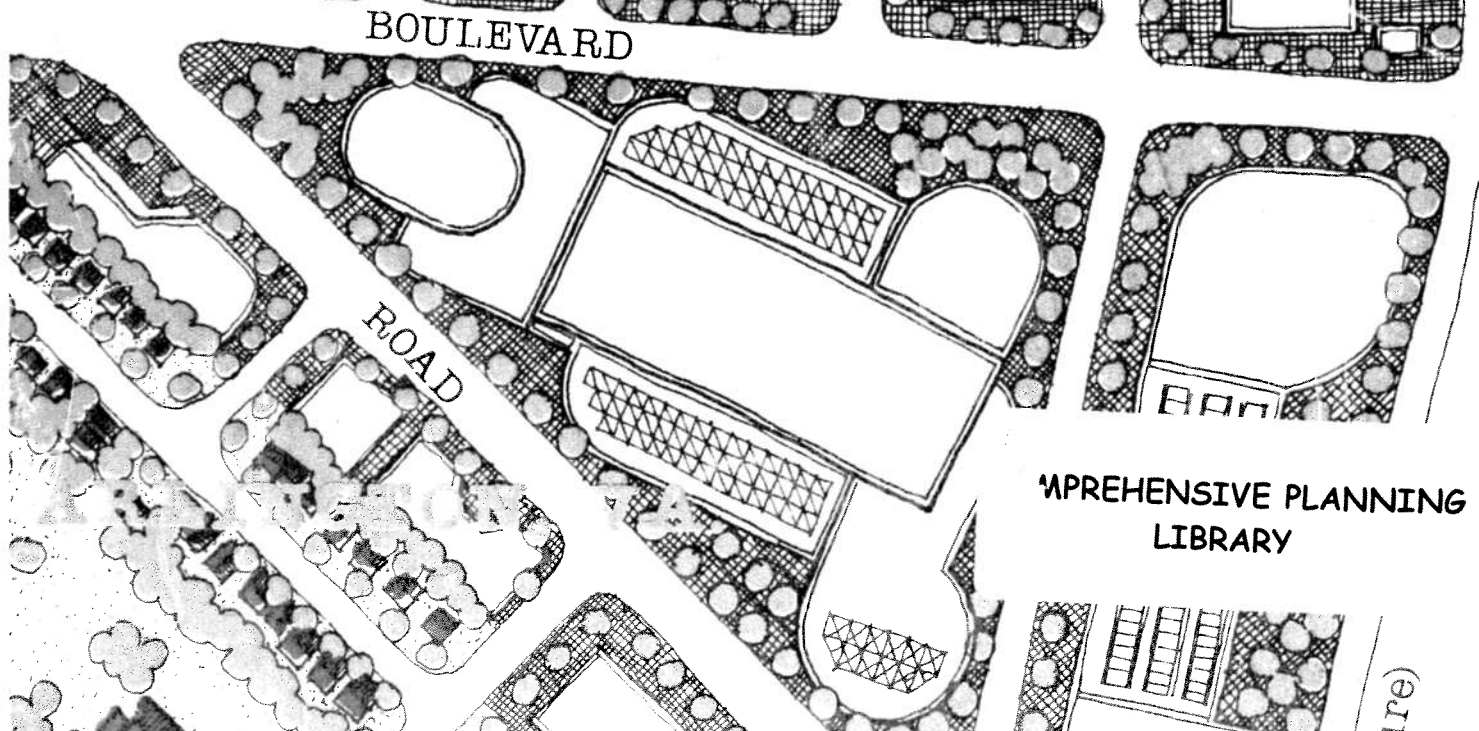


STREET



QUINCY



DRIVE

BOULEVARD

ROAD

COMPREHENSIVE PLANNING LIBRARY

(re)

BALLSTON Sector Plan



Arlington County Board Members

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**Prepared by
Department of Community Affairs
Planning Division — adopted May 1980**

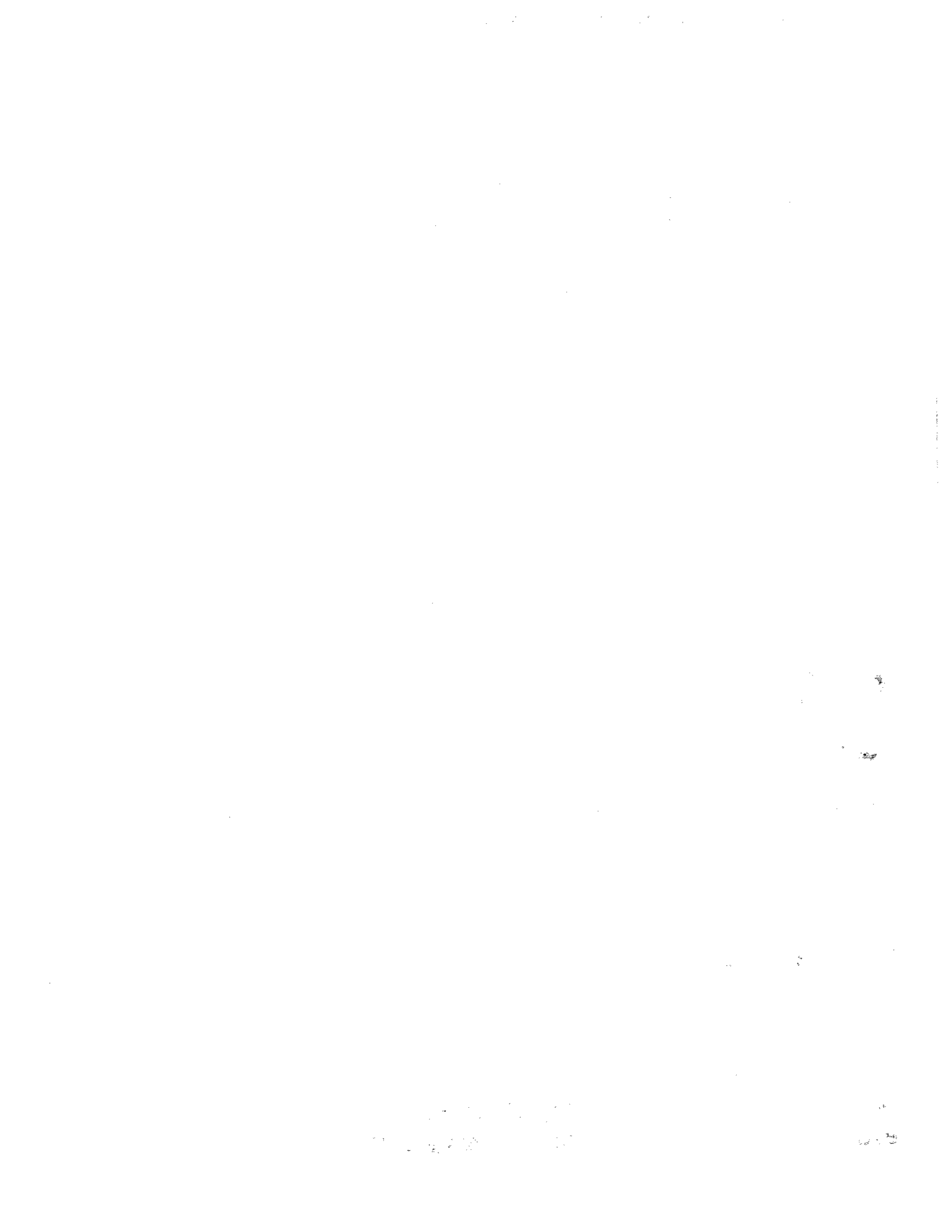


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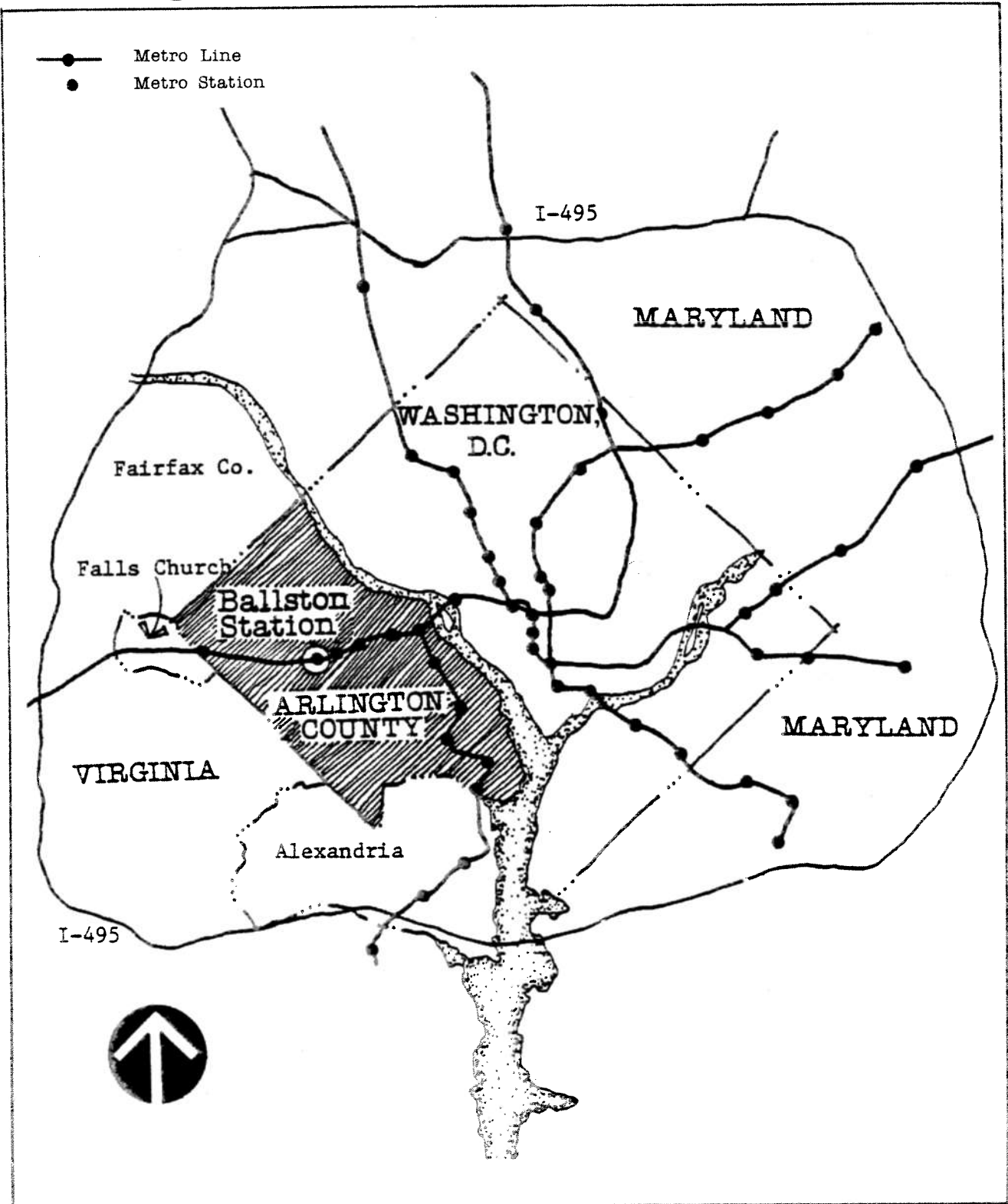
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Introduction and Recommendations

Map 1

Washington Metropolitan Area



The approved General Land Use Plan in Ballston establishes a policy for a new downtown in central Arlington. This plan envisions regional shopping facilities, major new offices, apartments, townhouses and shops designed to create a richly varied urban environment. The major streets of Glebe Road, Wilson Boulevard, and an improved Fairfax Drive "boulevard" provide both access and structure for this downtown redevelopment concept. Urban redevelopment is balanced by effective transition and implementation strategies to preserve nearby neighborhoods.

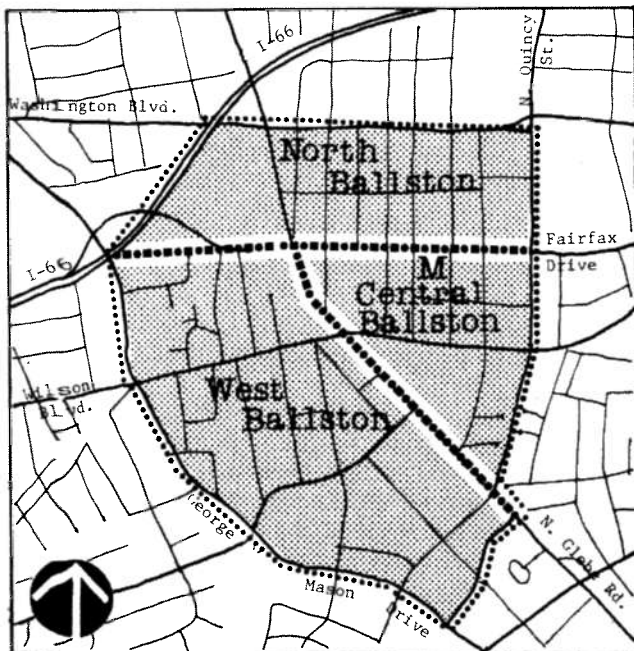
The purpose of the **Ballston Sector Plan** is to move beyond the broad policy of the General Land Use Plan in order to provide a more detailed framework for development. This sector plan should not be construed as either a final or unchanging picture of Ballston's future. Instead, it should be viewed as a forward looking document that expresses the current Board policy. In this context the plan will likely be most effective for the next three to five years, and it should be re-examined periodically during the development process.

STUDY AREA

The Ballston Station Area comprises approximately 250 acres of land surrounding the Ballston Metro Station. Within the sector plan, the station area is discussed in terms of the three subareas shown on Map 2. Recommendations in the sector plan apply

Map 2

Ballston Station Area



most directly to the North Ballston and Central Ballston subareas. During General Land Use Plan hearings in 1977, the County Board agreed to postpone amendments in West Ballston until final review of the Ball's Crossing Neighborhood Conservation Plan. In line with this position, the sector plan makes no specific recommendations in Ball's Crossing. Many of the sector plan ideas however can be considered in the neighborhood conservation planning process.

REPORT FORMAT

The body of the report begins with a concept section illustrating the major elements of the approved General Land Use Plan in Ballston. Next a brief background discussion is presented. This is followed by an urban design section presenting design guidelines for physical development. The remainder of the report is divided into sections dealing with land use and zoning, commercial development, transportation, utilities and community facilities. Each section contains a description of existing conditions, planned changes and recommendations. An appendix of supporting material is also provided.

SUMMARY AND RECOMMENDATIONS

The sector plan describes Ballston as a community with a mixture of residential, office and commercial land use. It is a community with older structures, interspersed with others constructed since 1960. Some properties are maintained while a large proportion have declined because of obsolescence and age. Metro and I-66 now provide an impetus for dramatic renewal.

Recommendations in the plan fall into several categories. Some propose amendments to master plan elements or zoning patterns. Others propose guidelines, such as those in the Urban Design Section, for application during the redevelopment process. Still others propose specific capital improvement projects. Many of the recommendations in the sector plan are not proposed for approval with adoption of the overall plan; instead these recommendations are proposed for consideration and possible adoption in the future. In this way the County Board can establish an overall policy framework for Ballston without taking action on those specific recommendations that require additional consideration and public review. Table 1 provides a listing of recommendations as adopted by the County Board.

With adoption of the sector plan and implementation of its recommendations, the Board will establish a receptive environment for private initiative and development in Ballston. As an early commitment to redevelopment, the sector plan proposed construction of a major pedestrian walkway along the east side of Stuart Street from the Metro station to the Parkington Shopping Center. During preparation of the sector plan the Board approved implementation of this project. The walkway was the only new project recommended for immediate funding. It will provide a safe, convenient and needed pedestrian facility. The design includes an ample walkway, large trees, attractive paving and coordinated street furniture. Implementation of the walkway will express Arlington's commitment to quality design in Ballston.

Table 1

Recommendations

	Page Reference
KEY RECOMMENDATION	
* The Ballston Sector Plan is adopted as a consolidated policy guide for development in Ballston.	—
URBAN DESIGN	
1. The County Board will adopt the design guidelines and "Stuart Street Mall" concept as policy for quality urban design in Ballston.	21-36
LAND USE AND ZONING	
1. The County Board will advertise for rezoning the "C-2" properties on the north side of Fairfax Drive to the "R-C" residential/commercial district.	41
2. The County Board will advertise a variety of land use and zoning designations for the Pocahontas tract and Pla-Mor bowling lanes property in order to establish revised policy for development of the site.	42
3. The County Board will continue to explore techniques for encouraging coordinated mixed-use office and residential development in Central Ballston.	44-45
4. The County Board will continue to encourage neighborhood preservation through neighborhood conservation planning.	—
5. The County Board will direct staff to develop and advertise alternative land use and zoning proposals to buffer the Balls Crossing neighborhood from Metro development pressures. These proposals should reexamine the tip of Wilson-Glebe-Fairfax presently shown as medium density office zoned "C-O-2.5" and include the area west of Glebe Road from I-66 to Henderson Road.	45-48

	Page Reference
6. The County Board will consider moving the "C-2" line east to Vernon Street between 11th Street and Washington Boulevard if a compatible townhouse office design was proposed by a developer.	41
7. The County Board will direct staff to develop the Fairfax Drive "Boulevard Concept" and its impact on adjacent land use for the Economic Development Commission review.	24, 25, 70
COMMERCIAL DEVELOPMENT	
1. The County Board should continue to encourage major revitalization of commercial facilities in Ballston. Emphasis should be placed on Parkington, however, alternative sites should also be explored.	56
TRANSPORTATION	
1. The County Board will continue to endorse implementation of Metro access improvements, including the "Stuart Street Walkway".	65-67, 71, 76, 83,85
2. The County Board will fund the Fairfax Drive landscaping proposal in FY 1980 or 1981 if the project is not implemented by the Virginia Department of Highways and Transportation.	68, 70
3. The County Board will continue to support the extension of Quincy Street from Wilson Boulevard to Glebe Road as shown in the Five Year Capital Improvement Program (funding proposed for \$515,000 in FY 1984).	68, 70
4. The County Board will consider amending the Master Throughfare Plan to include I-66 and to study how I-66 construction and development approvals might impact the current Master Thoroughfare Plan.	68, 70
5. The County Board will monitor the parking demand in Ballston and consider appropriate steps to improve the private market's ability to respond.	76
6. The County Board will consider immediate implementation of street closings (as approved in Passonneau Study) for Stuart, Taylor & Utah streets north of Fairfax Drive.	68
UTILITIES	
The County Board will continue to support implementation of the following utility projects in Ballston as currently shown in the Fiscal Year 1981-1986 Capital Improvement Program. Project priority and funding level will be reviewed annually as part of the capital programming process.	—
1. Construction of a water main in George Mason Drive from Little Falls Road to I-66 as shown in the approved C.I.P. for funding of \$2,742,000 in FY 1983.	81
2. Construction of a water main in North Quincy Street from Lee Highway to Wilson Boulevard as shown in the approved C.I.P. for funding of \$1,208,000 in FY 1983.	81

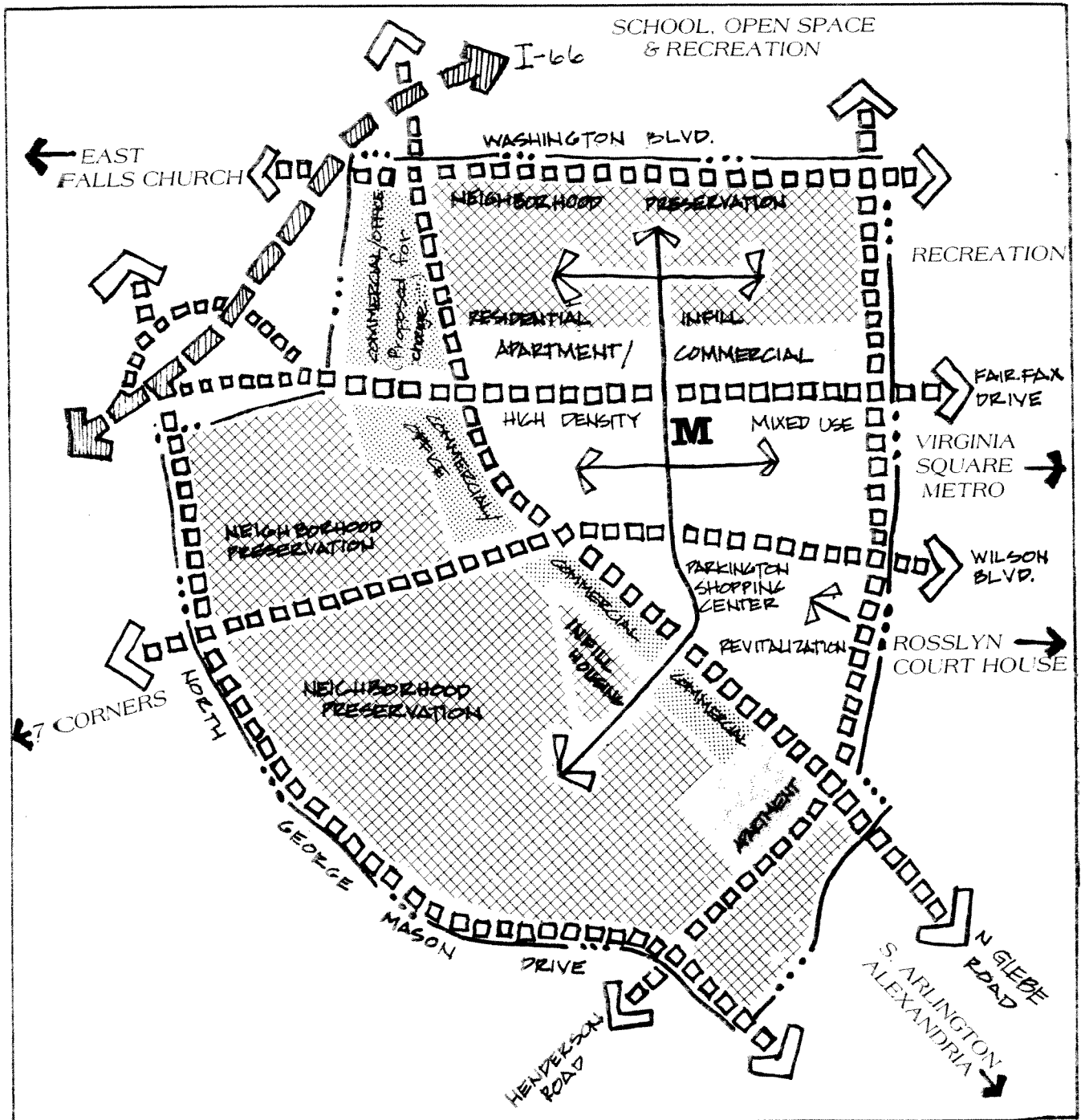
	Page Reference
3. Improvement of the water line in Carlin Springs Road from North Thomas Street to Glebe Road as shown in the approved C.I.P. for funding of \$105,000 in FY 1983.	81
4. Construction of a water main in North Park Drive from North Carlin Springs Road 4th Road, North as shown in the approved C.I.P. for funding of \$69,000 in FY 1982.	81
5. Construction of a water main in North Thomas Street from Henderson Road to Cathedral Lane as shown in the approved C.I.P. for funding of \$388,000 in FY 1983.	81
6. Construction of a main sanitary trunk sewer from George Mason Drive to Four Mile Run as shown in the approved FY 1980 Capital Budget for funding of \$1,555,000.	—
7. Improvement of the sanitary sewer in Wilson Boulevard from North Abingdon Street to Glebe Road as shown in the approved C.I.P. for funding of \$245,000 in FY 1983.	81
COMMUNITY FACILITIES	
1. The County Board will pursue acquisition of approximately 1.5 acres of land for park development as shown on the General Land Use Plan in Central Ballston.	89

Concept Plan

This section illustrates the type of urban environment envisioned in Ballston with emphasis on the major features of physical development.

Figure 1

Concept Plan



- **REGIONAL SHOPPING FACILITIES**
- **DIVERSE URBAN ENVIRONMENT**
- **COORDINATED URBAN DESIGN**
- **HIGH DENSITY MIXED USE**
- **NEIGHBORHOOD REVITALIZATION and TRANSITION**
- **TOWNHOUSE INFILL**
- **COMMERCIAL REVITALIZATION and GROWTH**
- **METRO-RAIL SYSTEM**
- **I-66**
- **CONVENIENT AUTOMOBILE ACCESS and PARKING**
- **COORDINATED PEDESTRIAN SYSTEM**
- **URBAN OPEN SPACE**

The General Land Use Plan establishes the basis for a diverse urban community in Ballston. High density office and residential development opportunities are provided immediately surrounding the Metro station. These high density uses and a regional shopping facility form the major focus for a new downtown in Central Arlington. North of the Metro station, the plan supports apartment development and townhouse infill to provide transition and reinforce existing residential develop-

ment. West of Glebe Road the plan supports neighborhood preservation and commercial revitalization.

The illustrative plan is a picture of future Ballston in accord with the General Land Use Plan. While the illustrative plan is hypothetical, it helps in understanding the scale of change envisioned within the area.

May 5

General Land Use Plan

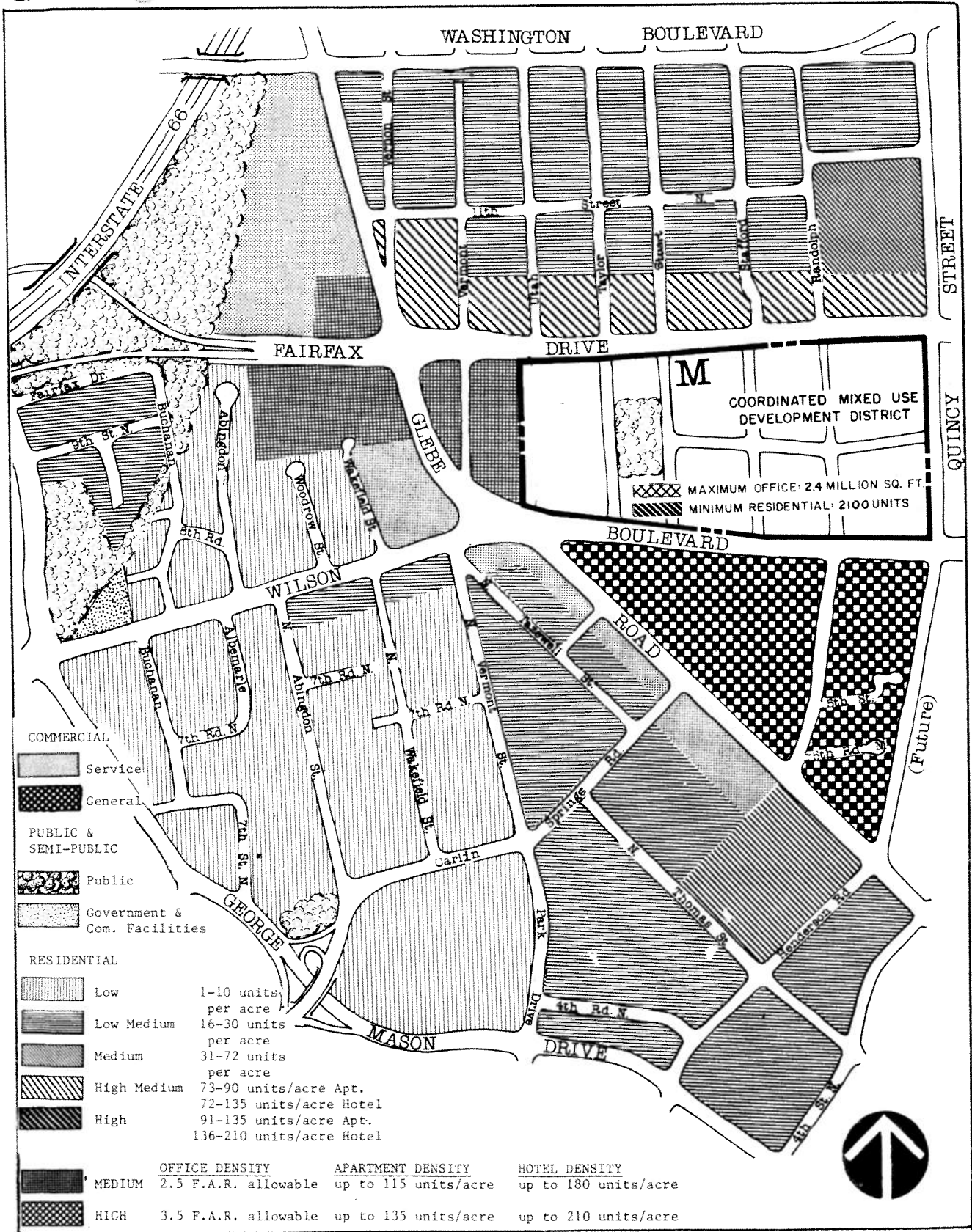


Figure 2

Illustrative Plan

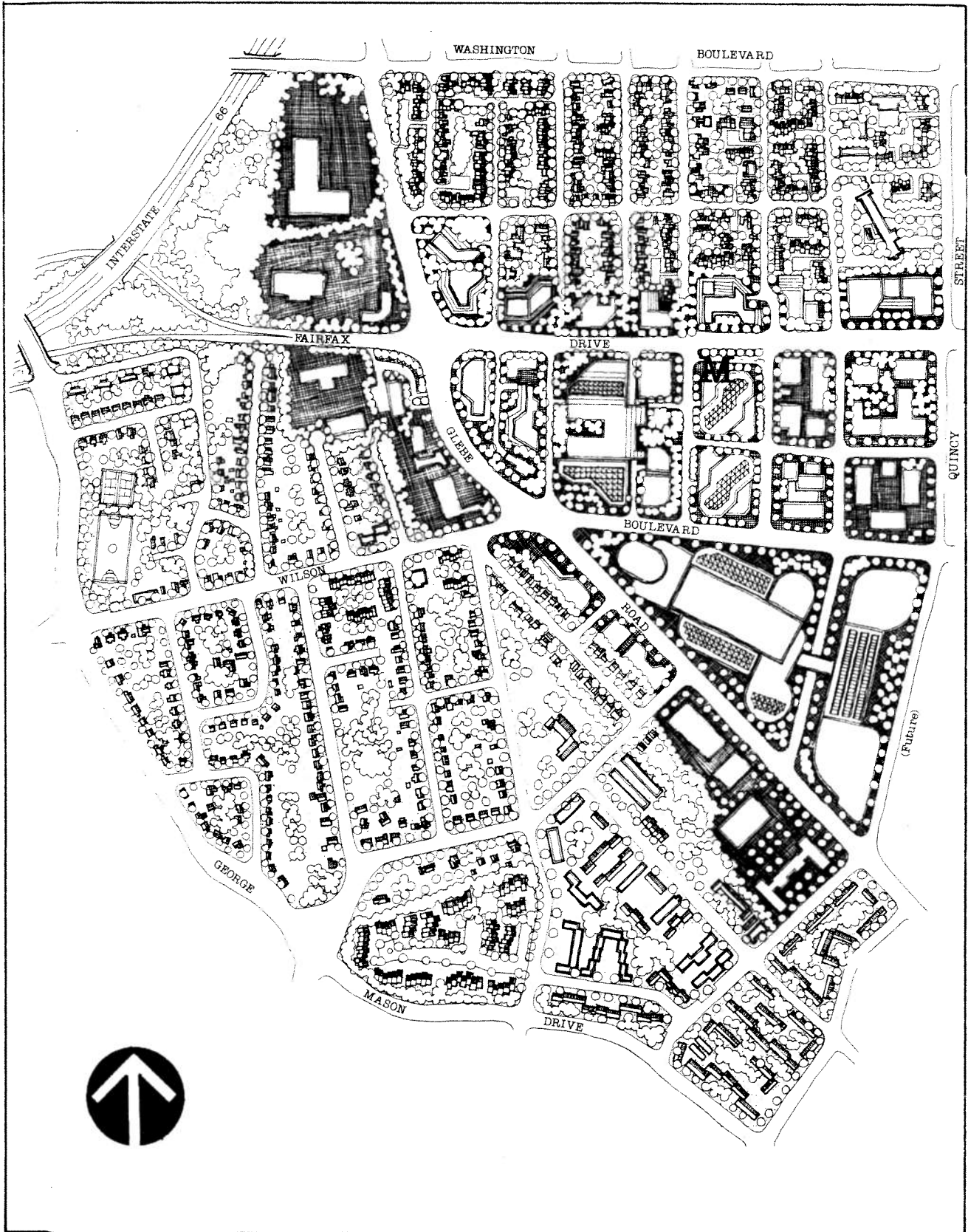
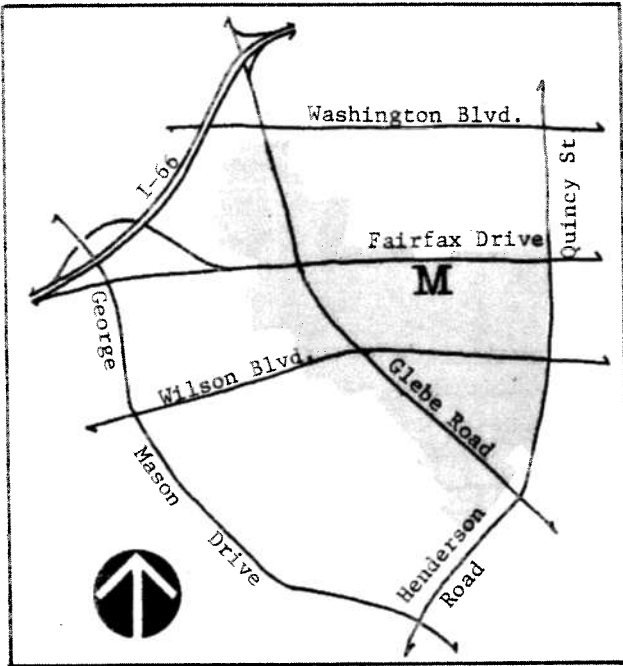


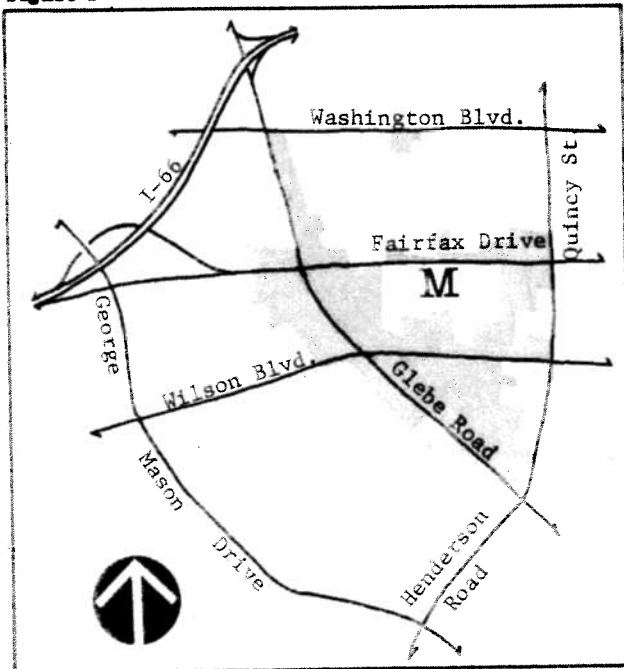
Figure 3



ZONING PATTERNS

The Ballston plan largely supports the retention of the predominant residential and commercial/office zoning patterns in Ballston. The shaded area represents the existing commercial and office zoning patterns.

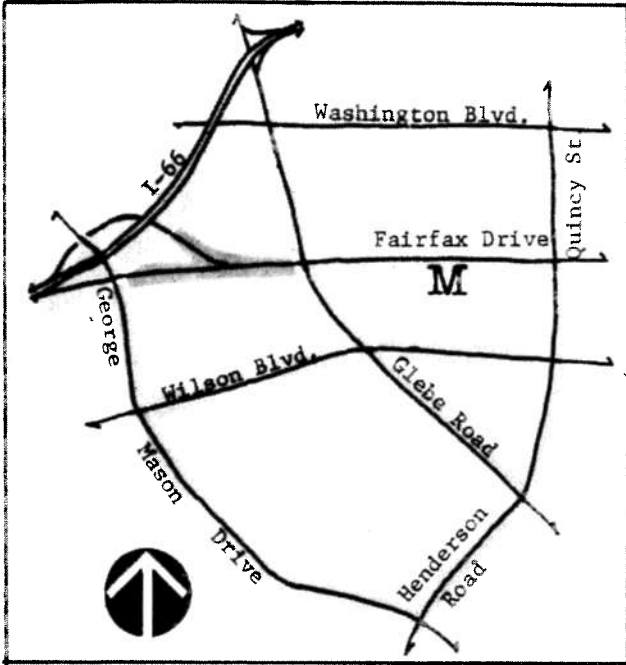
Figure 4



COMMERCIAL DEVELOPMENT

Existing commercial development is recognized as a key asset in the Ballston community. Parkington provides a focus for commercial expansion. The major thoroughfares in Ballston also provide fine opportunities for commercial growth.

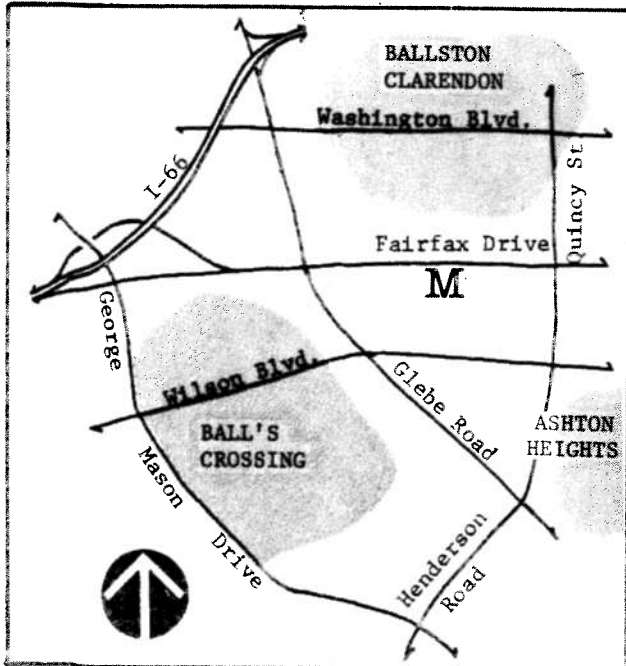
Figure 5



THOROUGHFARES

The Metro system provides a key impetus for revitalization and growth in Ballston. The existing street network and planned I-66 also contribute to the redevelopment potential in the station area.

Figure 6



NEIGHBORHOOD CONSERVATION

Preservation of the low density residential neighborhoods of Ball's Crossing, Ballston, Clarendon and Ashton Heights is fundamental to the Ballston plan. The plan stresses effective buffers and transitions between existing low density and planned high density areas. Selective infill of townhouses is planned to reinforce certain residential areas. Changes in the street network are proposed to protect neighborhoods from increased traffic. And other public improvements are recommended to enhance the vitality of these neighborhoods.

Background

Ballston is one of Arlington's oldest communities. This section briefly traces its development from the early 1800's to the present.

HISTORIC BALLSTON

Ballston was one of Arlington's earliest communities. Development began in the early 1800's when residential and commercial uses were built near the intersection of North Glebe Road and Wilson Boulevard. The intersection became known as Ball's Crossroads after a tavern was built at the crossing by the son of Moses Ball, one of the early landowners in Arlington. By the mid 1800's, Ball's Crossroads was one of the more settled areas in the County, with an established identity as a trading center.

By the turn of the century, Arlington was evolving from a rural area to a more populated community as village-like settlements were established along major roads and trolley lines. Ballston, its name derived from Ball's Crossroads, was one such village located along the main line of the Washington, Alexandria and Falls Church Railroad which ran along the present Fairfax Drive right-of-way. The Ballston Station was located near North Stuart Street, close to the present Metro station. Good access to employment in Washington created a market for residential growth in Arlington.

The first sizable subdivisions in Ballston were developed in the early 1920's and by the middle of the decade single-family homes with clapboard exteriors occupied much of the land. As the County population increased during the 1930's, part of the demand for additional housing was satisfied by construction of brick homes, a popular building material during that period. Garden apartment construction also occurred throughout the late 1930's and early 1940's. The Buckingham apartment community and a number of smaller apartment complexes throughout Ballston reflect this trend. By the mid-1950's, residential development in Ballston was largely complete.

Commercial development in the 1920's and 1930's was concentrated along Fairfax Drive, providing neighborhood shopping facilities for Ballston. During the 1940's and 1950's, commercial development was extended along Wilson Boulevard and North Glebe Road.

In 1951, commercial development in Ballston took on a new dimension with the construction of the Parkington Shopping Center. This regional shopping center attracted patrons from a broad geographic area and made Ballston the County's second most important retail center and one of the major service centers. Parkington served as a catalyst for additional commercial development

along the major thoroughfares in the area.

Ballston's commercial establishments prospered throughout the 1950's and 1960's. In the late 1960's, the metropolitan region experienced a shift in population growth toward the outer, less developed jurisdictions. This residential growth in the outer suburbs was accompanied by the construction of the Capital Beltway. With the development of regional malls along the beltway, Ballston's status as a major shopping district began to wane. Shoppers were attracted to the conveniences of these new malls with a more diverse mix of stores, a more pleasant atmosphere, and better access and parking facilities. Although Ballston's role in the regional market decreased, it continued to be one of Arlington's major commercial districts.

BALLSTON TODAY

Today Ballston includes a mixture of residential, commercial, office and public land use. Table 2 provides a breakdown of existing land use.

Table 2

Existing Land Use

Land Use	Land Area In Acres	Percent Of Total
RESIDENTIAL		
Single Family Detached.....	90.4	35.0
Single Family Other.....	7.1	2.6
Garden Apartment.....	40.9	15.9
High-Rise Apartment.....	9.4	3.7
COMMERCIAL.....	51.6	20.0
OFFICE.....	15.7	6.1
VACANT ¹	22.8	8.8
OPEN SPACE ²	4.8	2.0
OTHER ³	15.3	5.9
TOTAL⁴.....	258.0	100.0

¹All underdeveloped land, except County open space.
²County open space.
³Includes VEPCO & WMATA rights-of-way, cemeteries, church property, and a fire station.
⁴Excludes street rights-of-way.

SOURCE: Real estate assessment maps and real estate property tapes, field survey, and aerial photos.

Arlington has an estimated 164,000 residents. Ballston accounts for slightly less than three percent, with an estimated population of 4,500. A large number of Ballston's residents, an estimated 46 percent, live in garden apartments; an estimated 30 percent live in single-family detached units; an estimated 18 percent live in high-rise apartment buildings; and the remaining 6 percent of the population live in other types of housing.

Office development in Ballston includes six major

high-rise and several low-rise professional buildings. The majority of these office buildings are located in Central Ballston and were constructed in the 1960's. Two additional site plan office buildings have been approved by the County. One is a 5-story building presently under construction on a vacant site near the Chamber of Commerce building, and the other is a 12-story building approved as part of the Hyde Park apartment complex.

Ballston's commercial development continues to reflect the patterns established in the 1950's. The Parkington Shopping Center serves as the primary retail facility while establishments along the major thoroughfares add to the variety of goods and services. Since the late 1960's, there has been limited new investment in commercial properties in Ballston.

North Ballston

North Ballston is primarily a renter-occupied residential neighborhood. This however has not always been the case. The percentage of resident owners declined from 90 percent in 1950 to 71 percent in 1970 to 38 percent in 1978 (**Ballston: A Community Plan**). Although most of the housing was constructed during the early 1900's there are homes in this area which date back to the 1890's.

The homes in North Ballston have relatively small lots ranging in size from 5,000 to 15,000 square feet. Upkeep of the homes varies throughout the area. Generally speaking, the homes north of 11th Street have a higher owner-occupancy rate and are better maintained than those to the south. Over the past fifteen years an increasing number of properties have been bought for investment and maintained with few improvements.

Figure 7

North Ballston



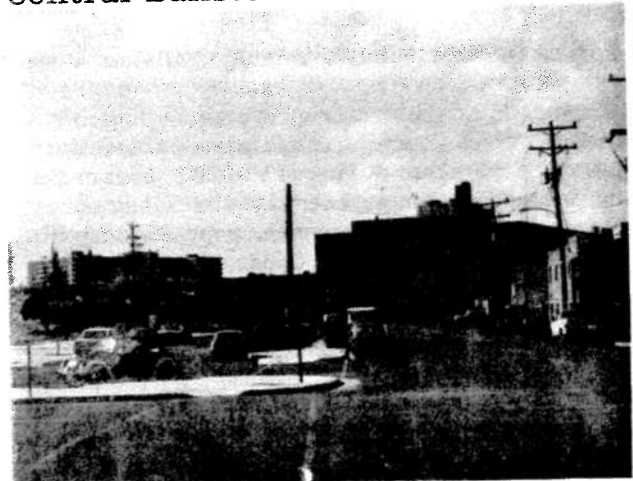
Central Ballston

Central Ballston is primarily a commercial area although it includes other uses. Prior to 1950, Central Ballston had a mixture of residential, commercial and light industrial zoning. With adoption of the 1950 Zoning Ordinance, the area was envisioned as a business district and for the most part zoned for general commercial use. Both the zoning history and anticipated growth stemming from the planned Metro system and I-66 have contributed to the uneven character of development in Central Ballston.

The area south of Wilson Boulevard is devoted to commercial and light industrial businesses. The area north of Wilson Boulevard is evolving from residential to commercial use. This transitional process is reflected in the number of single-family dwelling units that have been converted to commercial uses. While there are some well maintained businesses in Central Ballston, many of the area's properties are underutilized and have a run-down appearance often associated with marginal investment.

Figure 8

Central Ballston



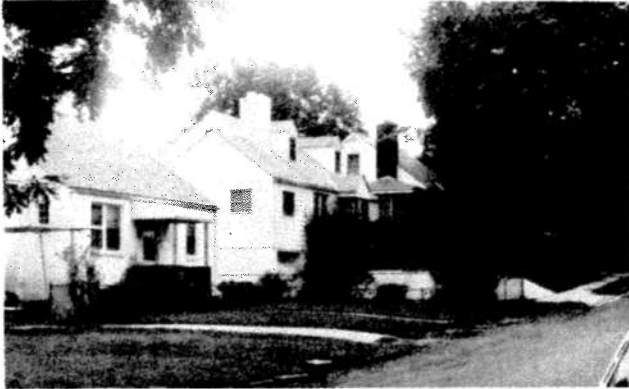
West Ballston

The majority of land in West Ballston is included in the designated Ball's Crossing Neighborhood Conservation Area. The single-family neighborhood is largely composed of cape cod style homes constructed prior to 1960. In addition to the single family neighborhood, a substantial number of garden apartments are located south of Carlin Springs Road. The Hyde Park high-rise apartments are located at the corner of North Glebe Road and North Henderson Road. Commercial development is generally restricted to the properties along North

Glebe Road, with auto-related businesses being the predominant commercial use.

Figure 9

West Ballston



PLANNING FOR BALLSTON'S FUTURE

Over the past several years, Arlington has been involved in an extensive land use planning process for the Metro station areas in the Rosslyn-Ballston Corridor. The planning process formally began with the description of hypothetical land use alternatives in the publication **RB '72**. These alternatives

were evaluated in the context of physical, social, economic and fiscal impacts as part of the Arlington Growth Patterns studies. The alternatives were also evaluated in the context of goals for Arlington as described in **A Long Range County Improvement Program**, adopted by the County Board in 1975. A revised General Land Use Plan for the Rosslyn-Ballston Corridor was approved in 1977.

In Ballston, the Land Use Plan supports major apartment and office construction, commercial revitalization and neighborhood preservation. Estimates of new construction indicate that office and apartment development may double by year 2000. These estimates, shown in Table 3, are largely based on consultant studies completed as part of the Long Range County Improvement Program. The consultant's work assumed that high-rise residential construction would take place during this time frame. Given current market conditions for high-rise apartment construction, these estimates may prove optimistic. Estimates of commercial development assume market demand for a 1.2 million square foot regional facility, with retention and possible restructuring of an additional .3 million square feet of commercial space throughout the station area.

Table 3

Estimated Development in Ballston

Type	Existing	Net New	Year 2000 Total
Residential	2,300 Units	2,900 units	5,200 units
Commercial Space	780,000 sq. ft.	720,000 sq. ft.	1,500,000 sq. ft.
Office Space	1,160,000 sq. ft.	1,700,000 sq. ft.	2,860,000 sq. ft.

NOTE: Commercial and office square footage indicate gross floor area.

Urban Design

The relationship between buildings and sidewalks, streets, open space and people must be coordinated to create a quality and successful environment. Urban design deals with the treatment of sidewalks and streets as the major structuring framework for these various elements. Through the treatment of the public right-of-way, the County government will largely determine the overall character of Ballston.

This section provides a series of guidelines which emphasize the development of a coordinated and attractive streetscape. The guidelines also deal with the relationship between the streetscape and adjacent buildings, commercial facilities, neighborhood preservation and open space. These guidelines form a standard which is intended to encourage and support quality private development. Within this public framework, there is full opportunity for individual architectural expression and initiative.

The design guidelines are divided into four categories: (1) coordinated streetscape, (2) commercial facilities, (3) neighborhood preservation, and (4) urban open space and plazas. The guidelines are presented in a practical format for use by residents, developers, businessmen, and County officials. The achievement of a functional and attractive community will depend upon a commitment to urban design by these groups.

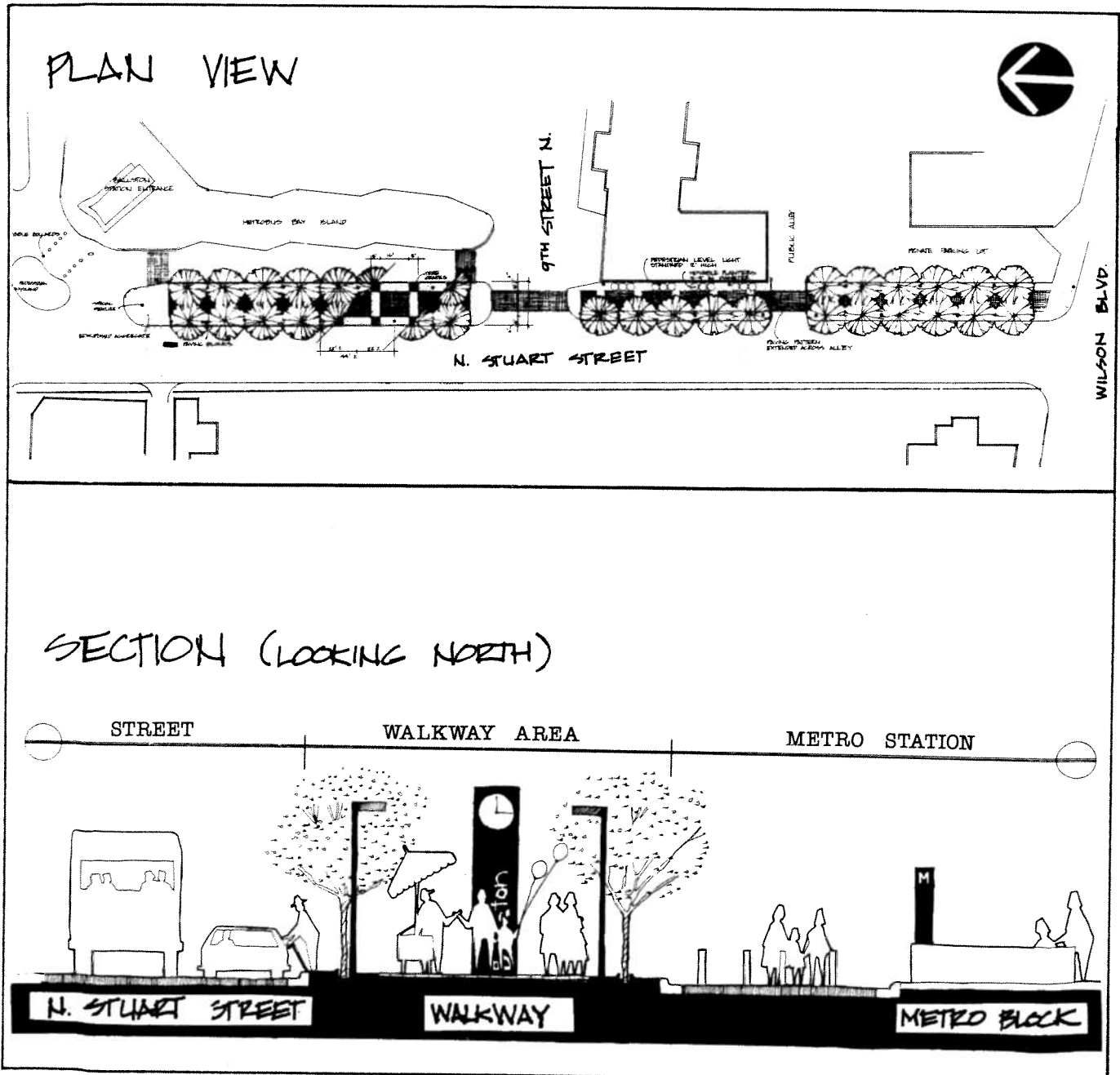


COORDINATED STREETScape

The following guidelines and recommendations aim toward achieving a safe, coordinated and attractive treatment of sidewalks and public right-of-way.

1. The Stuart Street Walkway will be constructed between the Metro station and Wilson Boulevard. This expanded sidewalk will set an overall theme of quality pedestrian facilities and streetscape. The Walkway, as shown below, provides safe and convenient space for pedestrian movement. It includes street trees placed in metal grates, coordinated paving, attractive and functional street furniture, and pedestrian level lighting.

Figure 10:



2. The Fairfax Drive "Boulevard Concept" should be implemented to establish a distinctive gateway into Ballston from I-66. The landscaping treatment of Fairfax Drive helps to achieve transition between the primarily residential character north of Fairfax Drive and the high density mixed-use character around the Metro station. As shown below this concept embodies large street trees along the sidewalks and median areas, vehicular level lighting, underground utilities and coordinated paving materials.

Figure 11

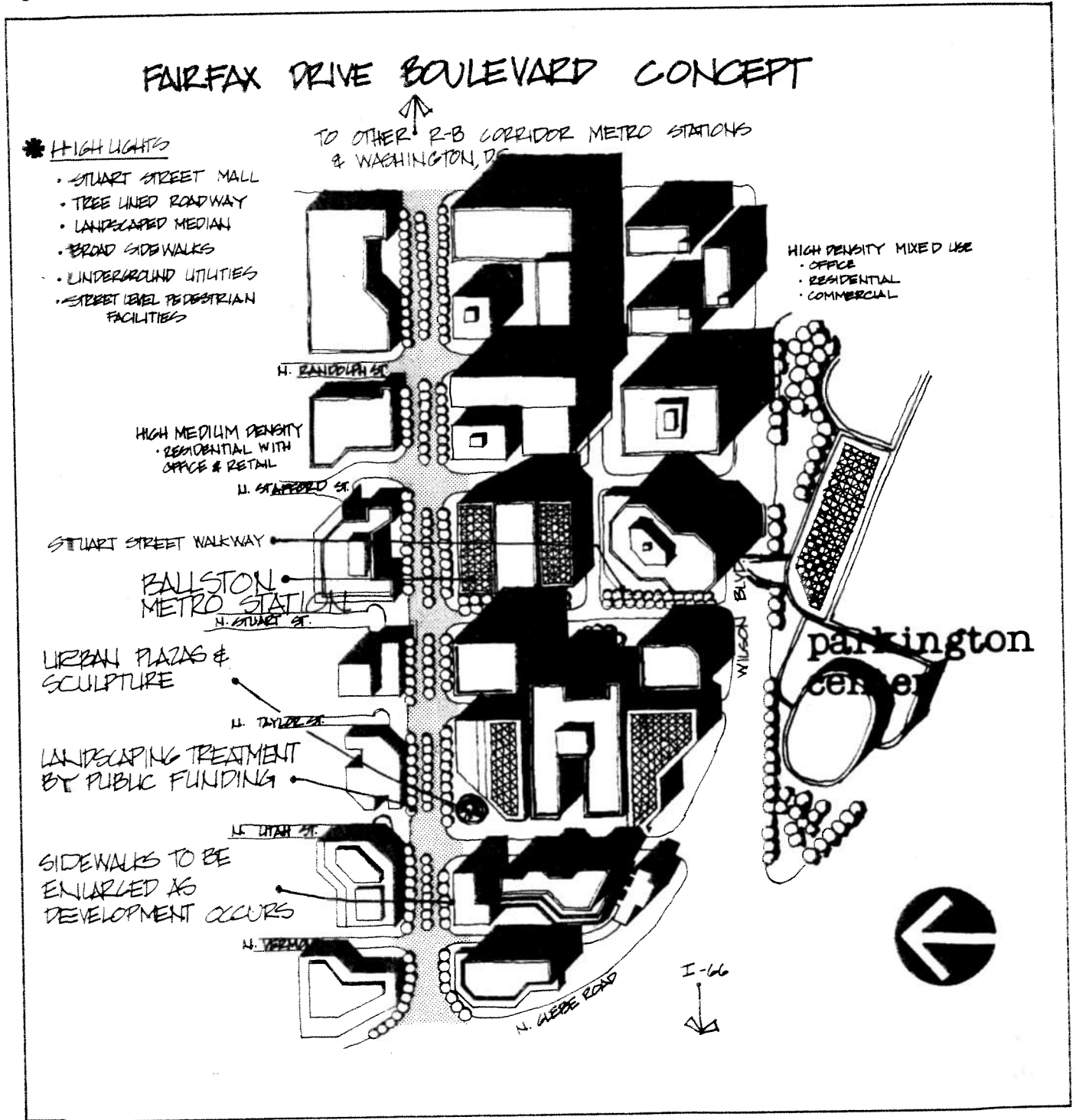
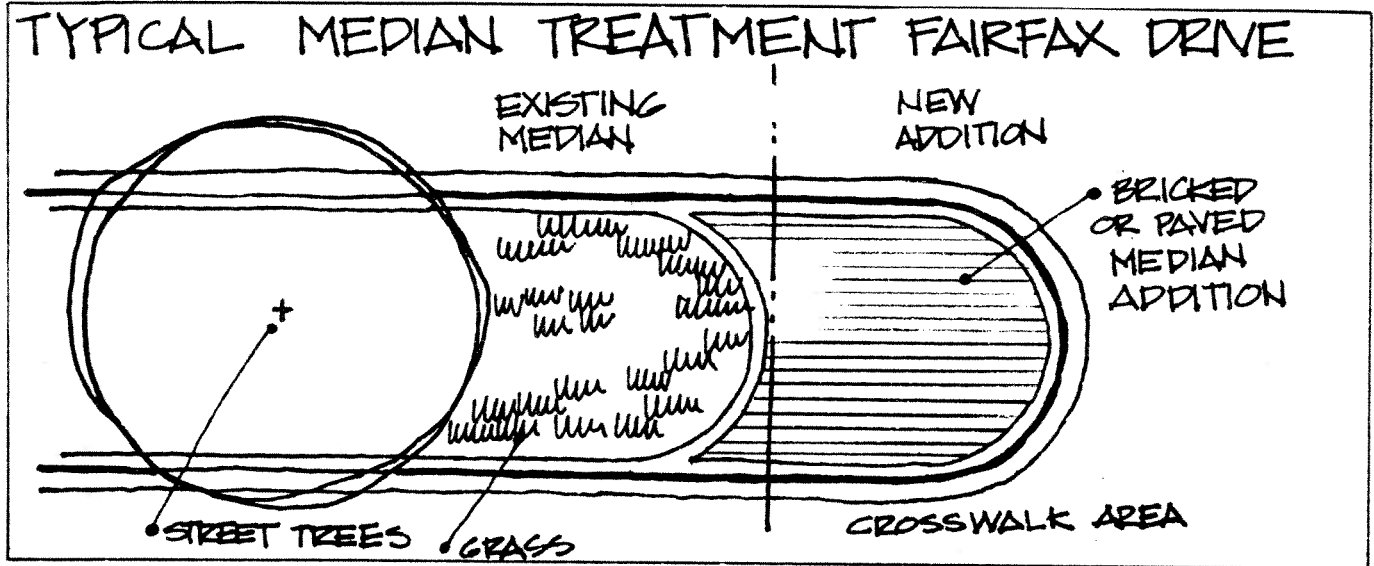
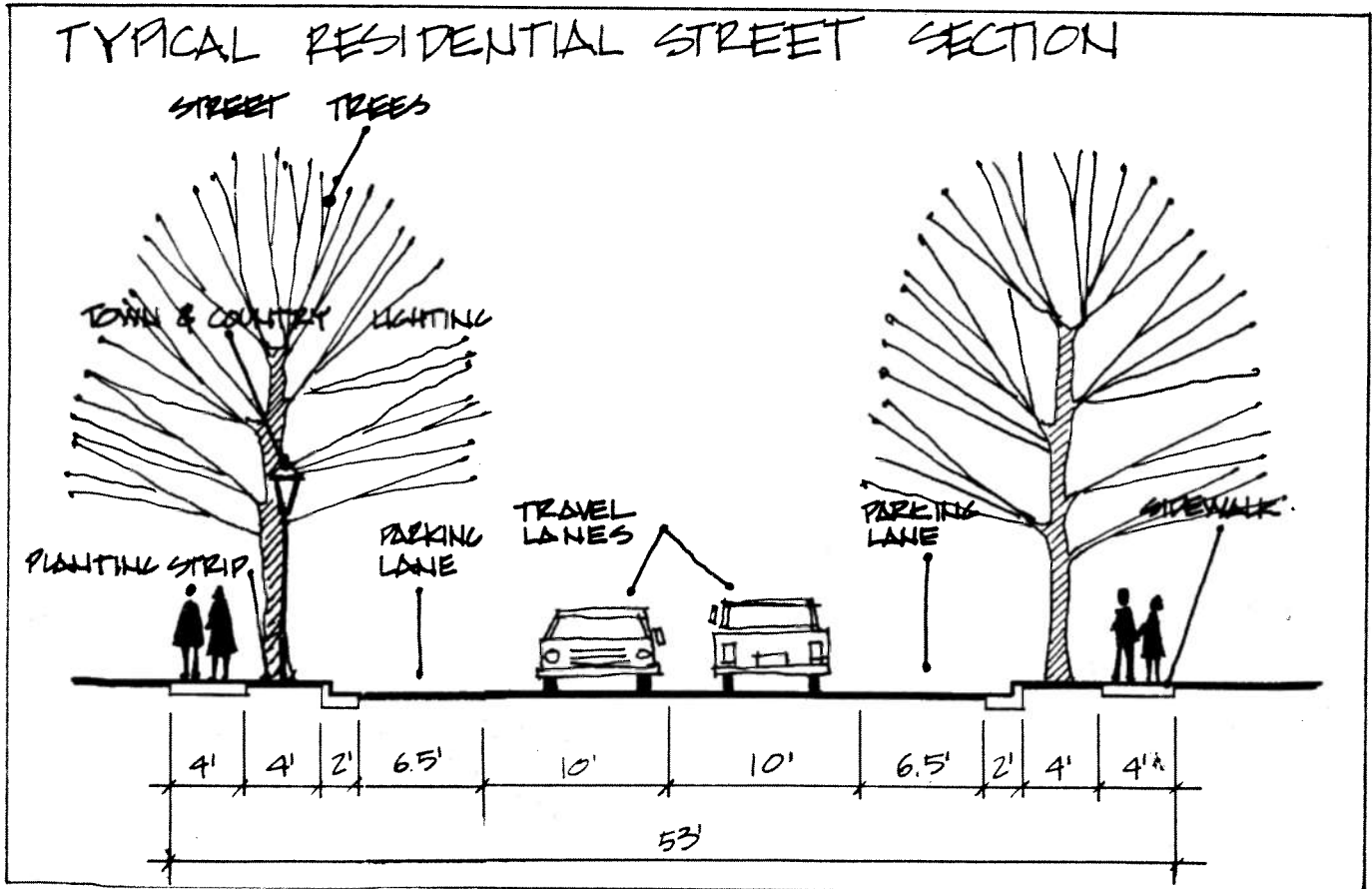


Figure 12



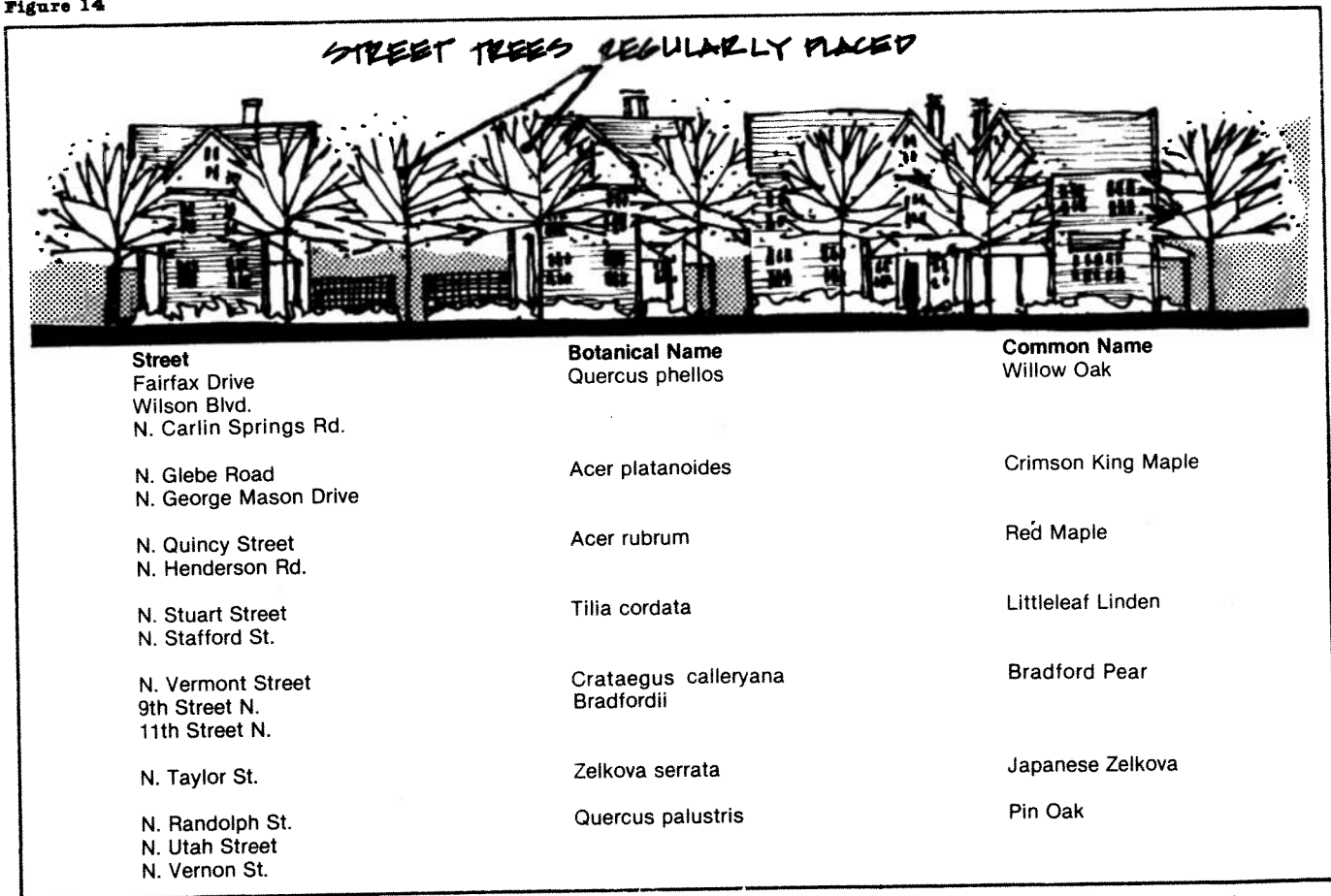
3. Sidewalks should be constructed to meet or exceed the standards of the Master Walkways Policy Plan. (Specific dimensions for planned sidewalks are discussed in the Transportation Section.) Alternative design schemes should be followed in areas where specific plans have been approved by the County Board.

Figure 13



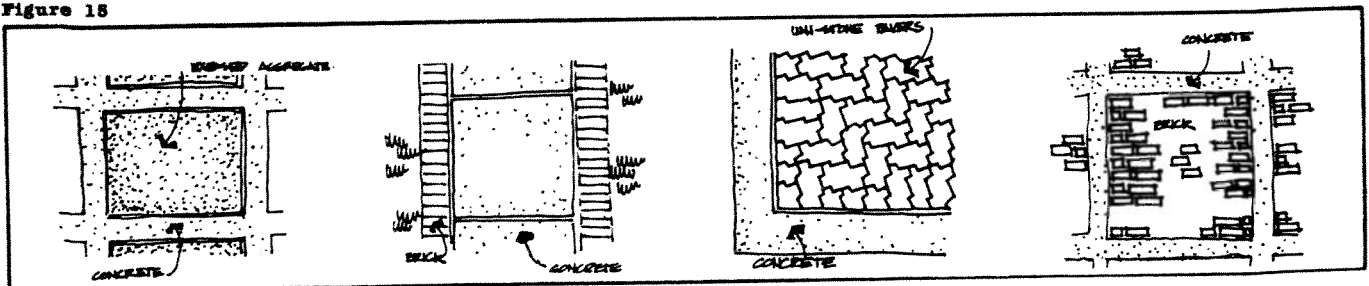
4. Electric, telephone, and other utility services should be placed underground in the street pavement area. When this is not feasible, aerial utilities should be placed along rear lot lines or similar areas which have low visibility. (The County Board has adopted a policy for undergrounding utilities in North Ballston. Site plan projects contribute to funding for undergrounding according to project density.)
5. Street trees should be placed in accord with the following plan in order to insure variety in bloom, color, size and intensity of shade, and to reduce the possibility of disease which might afflict one particular species thus devastating the entire area. (This plan represents a change from the Passonneau study which designated that Willow Oaks and Bradford Pears be planted on all streets in North Ballston.)

Figure 14



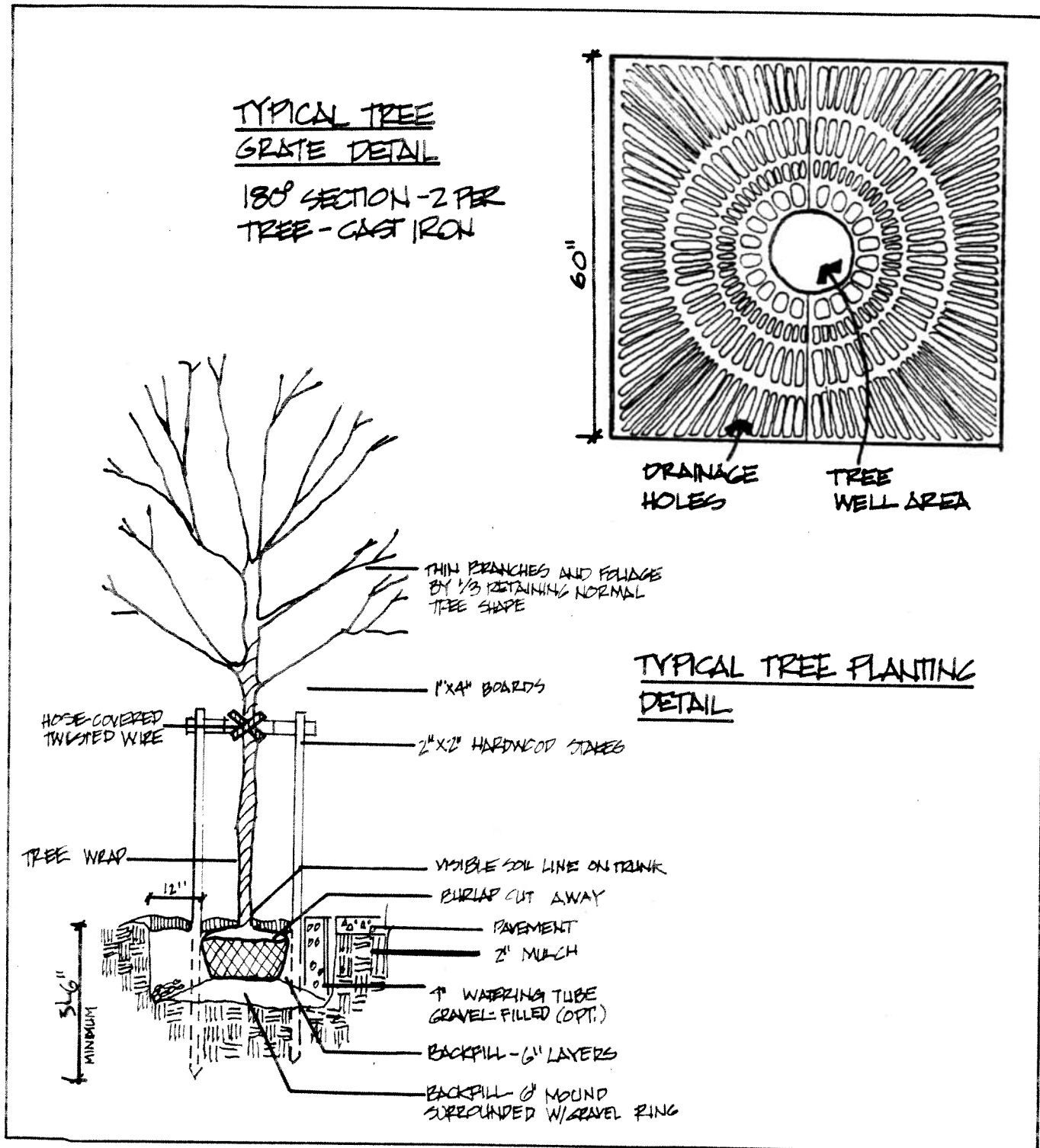
6. New development should include sidewalk areas constructed with durable textured surfaces such as concrete, exposed aggregate, pavers, or bricks. The treatment and materials should be coordinated in design and color with adjacent development and should extend for an entire block face. Unique treatment of sidewalk areas should be discouraged in areas of less than 100 feet of street frontage.

Figure 15



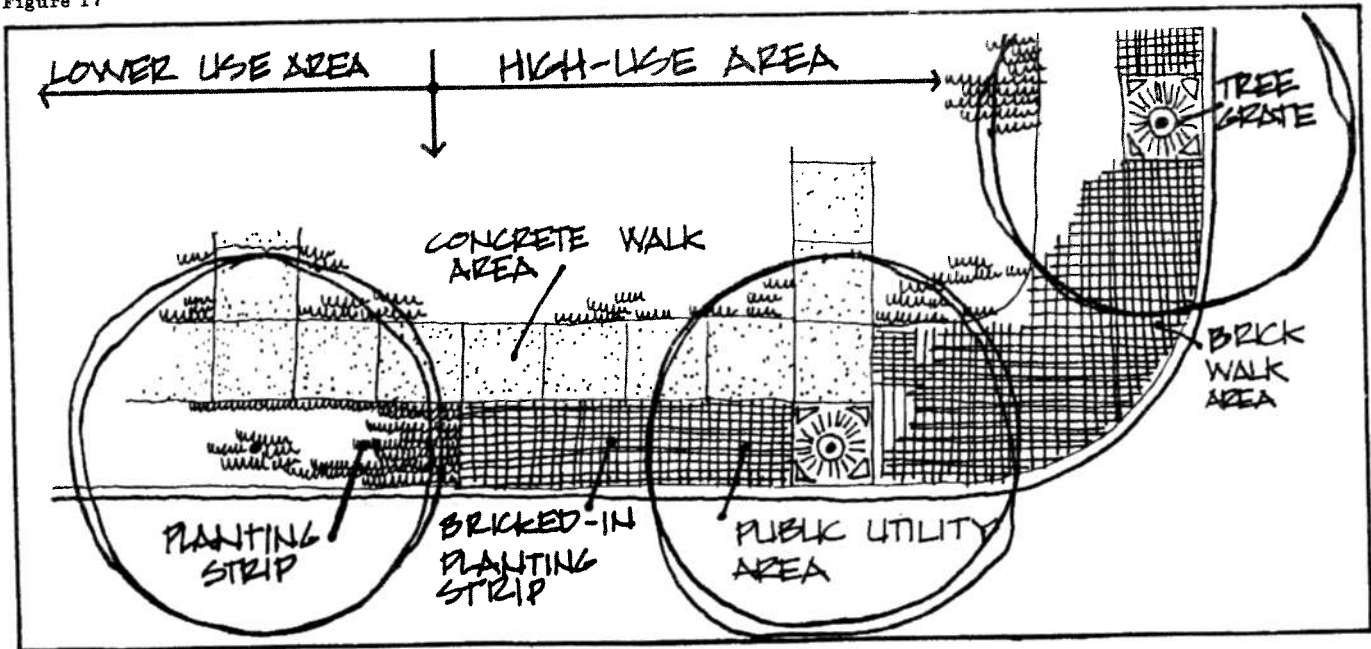
7. Street trees on public and private property should be planted in accord with "Administrative Regulation 4.3: Tree Planting Program of Public and Private Property". Tree grates should be used along North Glebe Road, Fairfax Drive, Wilson Boulevard, Washington Boulevard and all high-use pedestrian areas. The specifications below should be followed.

Figure 16



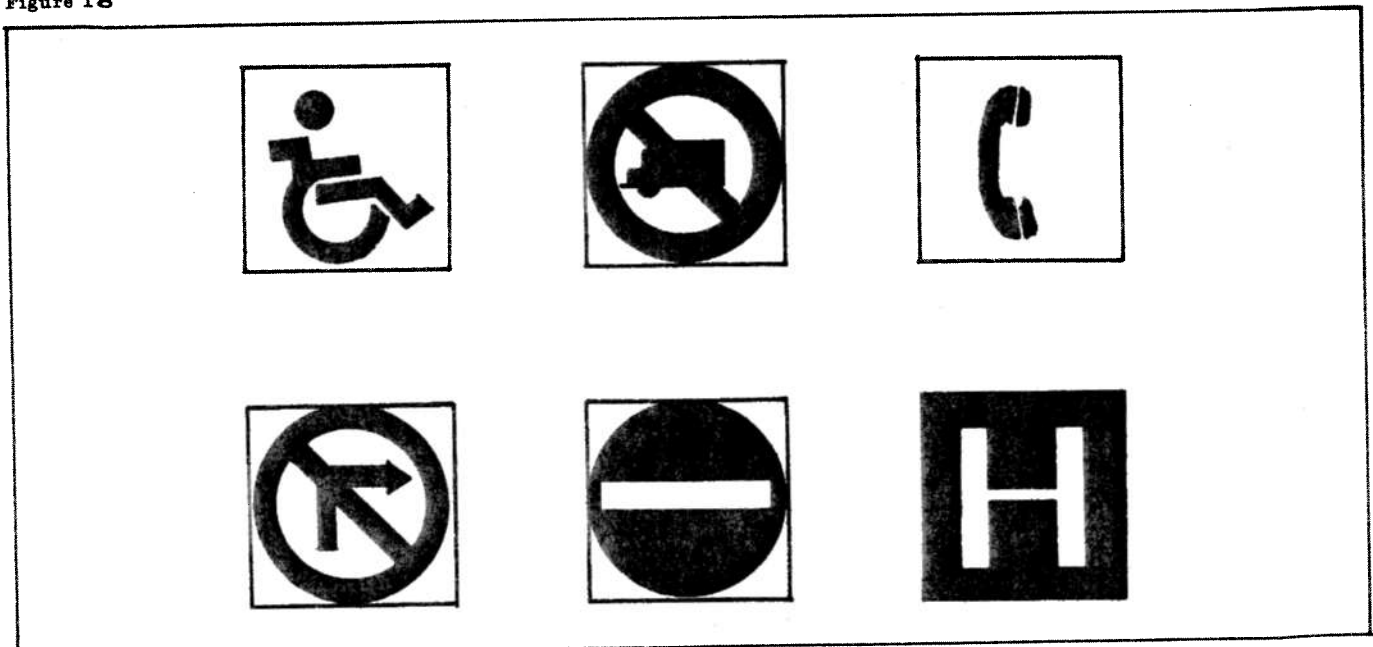
- 8. Planting strips along sidewalks in high-use pedestrian areas should be treated with pavers or other durable material.
- 9. Public utilities, poles, signs, and street furniture should be placed within the planting strip and should not obstruct or overhang into the pedestrian sidewalk area. Parking signs should be minimized to the extent feasible.

Figure 17



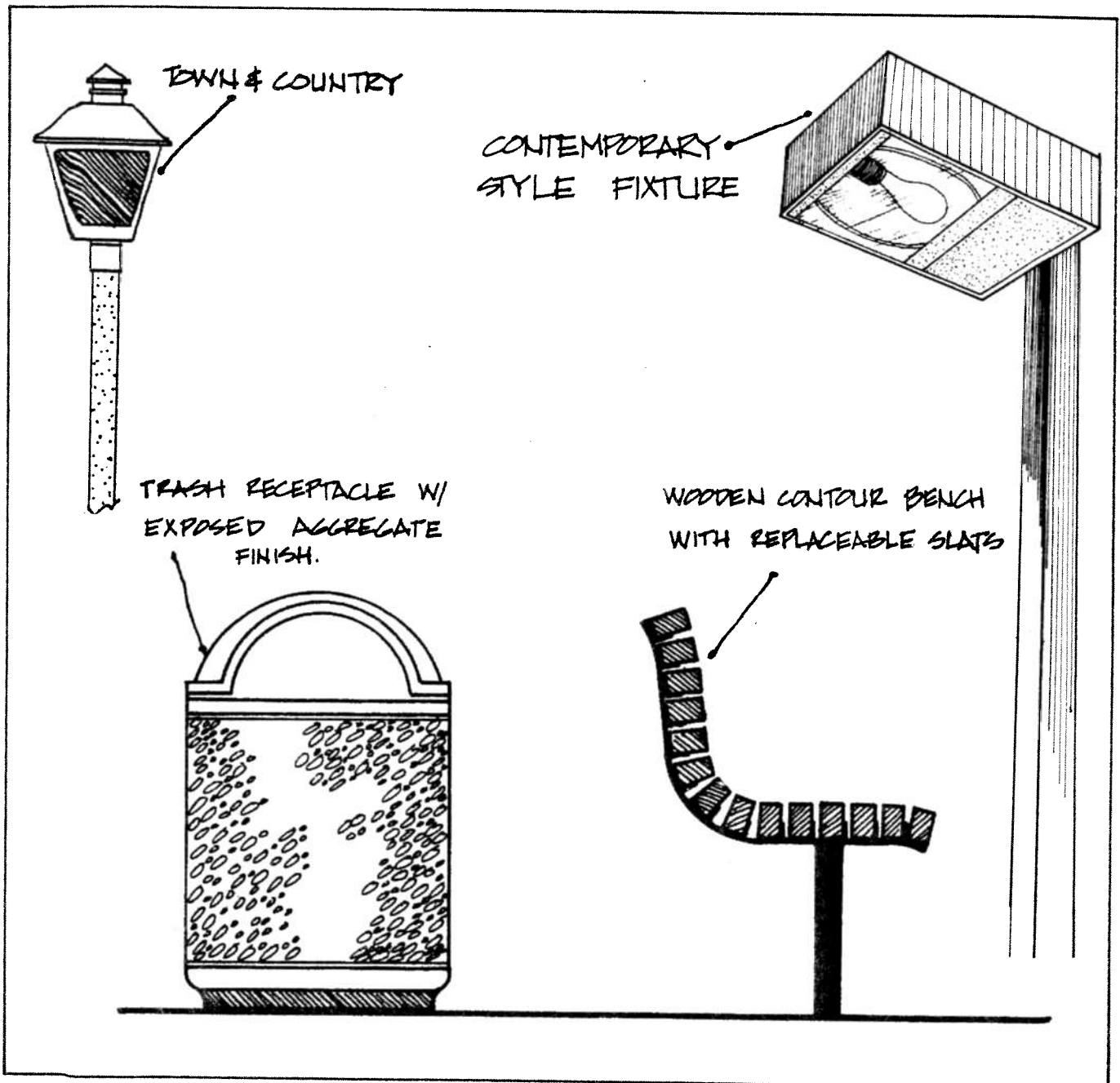
- 10. International street signs should be used.

Figure 18



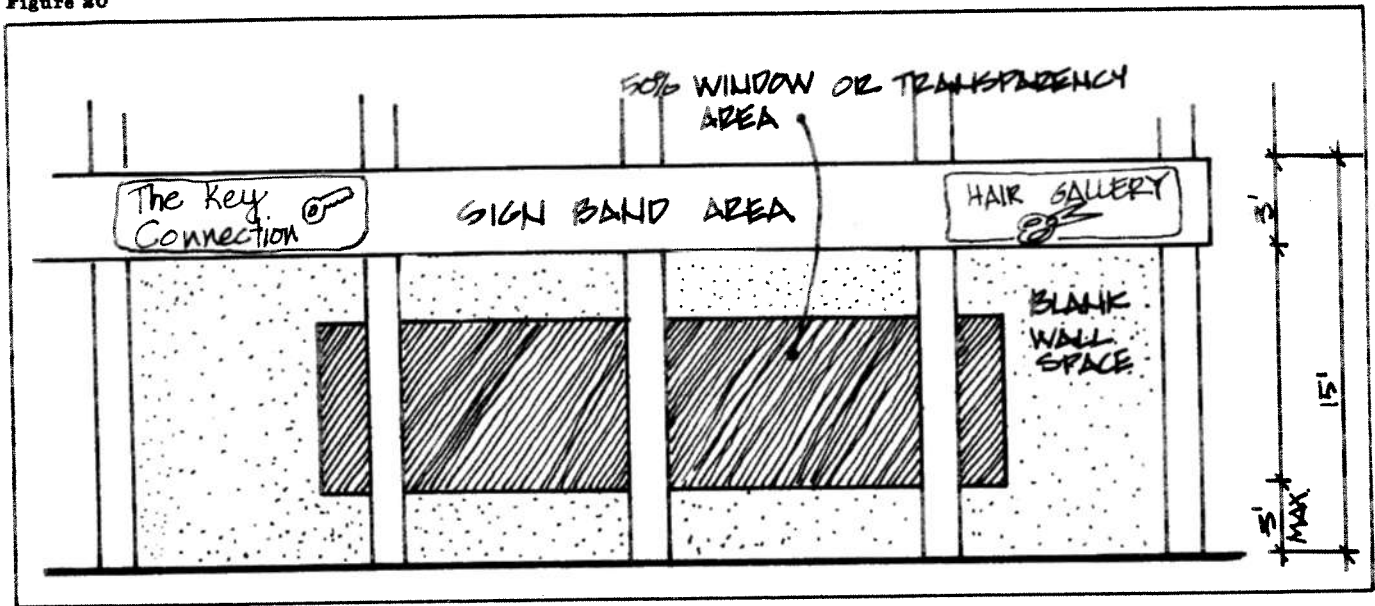
11. Street furniture should be functional, simple in form, and constructed of durable materials. Street furniture should be coordinated throughout an individual project. Seating should generally be oriented toward pedestrian facilities, plazas or other interest areas.
12. Pedestrian level lighting should be achieved by use of the coach style fixture in low density residential areas, and by use of a simplified modern design fixture in other areas. Pedestrian level lighting should be placed on poles or attached to buildings at a height of 12 feet. Where feasible, pedestrian lighting affixed to buildings should be incorporated into sign treatment. (The contemporary design shown is not a Vepco standard fixture. When this fixture is used in public right-of-way, Arlington County will be responsible for installing, maintaining and establishing an inventory of fixtures.)

Figure 19



13. Street furniture, utility fixtures, and mounting materials and equipment, to the extent feasible, should be painted a coordinated color, preferably dark non-gloss brown.
14. At least 50 percent of all building facades at street grade should be designed with storefront windows, open glass or other transparent treatment.

Figure 20



15. The use of pictographs should be encouraged in private directional and informational signs.
16. Coordinated signs, lights, windows, paving and planting materials should be used along entire block faces.
17. Blank, uninterrupted walls should be discouraged along public rights-of-way.
18. Mechanical equipment and loading facilities should be screened and placed in a way that will not disrupt the sidewalk area.
19. Interruption of sidewalks by driveways and alleys should be discouraged on major roads such as Wilson Boulevard, Fairfax Drive and Glebe Road, and minimized on other streets.

COMMERCIAL FACILITIES

The following guidelines aim toward improving the visibility, accessibility, attractiveness and viability of commercial space. Many of the guidelines apply to commercial business in general, but the primary emphasis is on commercial space in mixed use projects.

1. The Stuart Street Walkway concept establishes a general guide for the design of sidewalks along shopping streets.
2. Commercial space should be encouraged along the major streets which provide high pedestrian and vehicular visibility. As described in the Commercial Section, the Metro station, Glebe Road, Fairfax Drive, Wilson Boulevard and Parkington provide a framework for new commercial space. Plans for significant commercial facilities in isolated areas should be discouraged unless there are unique characteristics attending such proposed facilities.
3. Commercial space should generally be located in at-grade locations with direct and convenient access to pedestrian facilities.
4. Sidewalks in commercial areas should range from 10 to 20 feet in width in addition to a 4-foot planting and utility strip. Planting and utility strips should be paved.

Figure 21

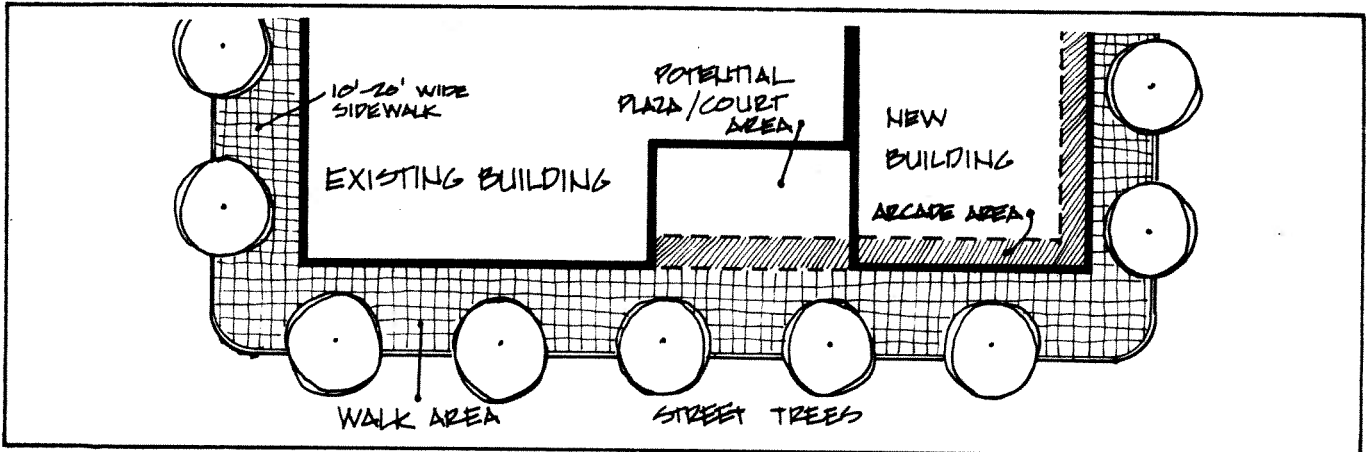
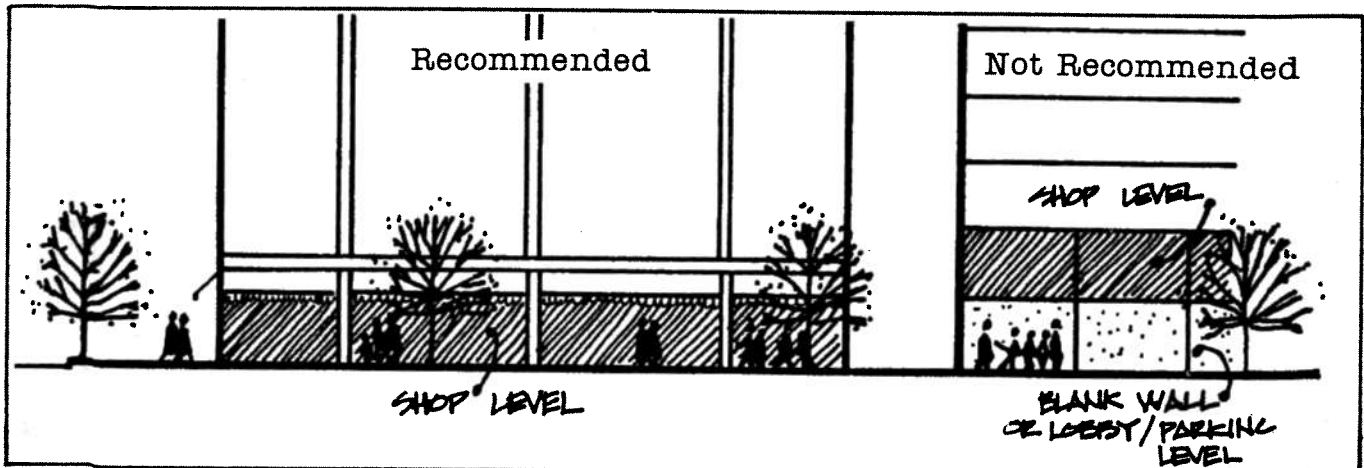
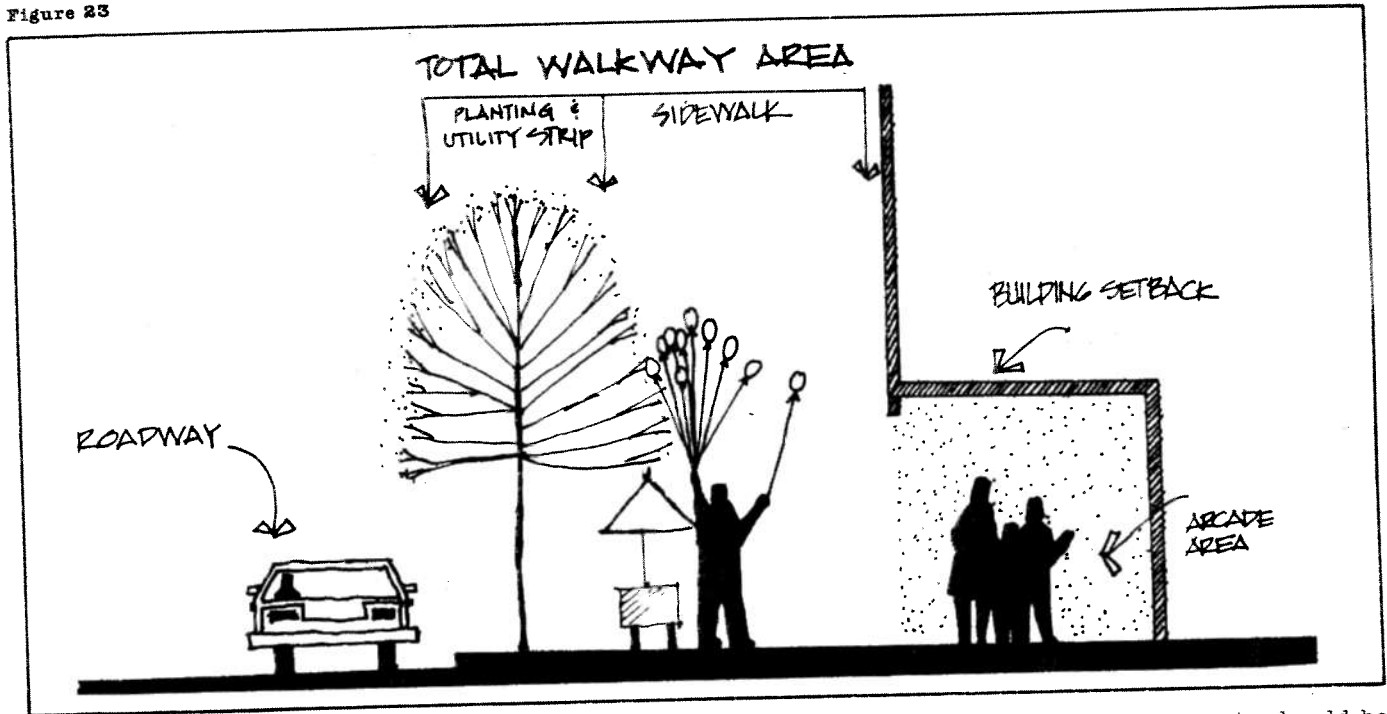


Figure 22



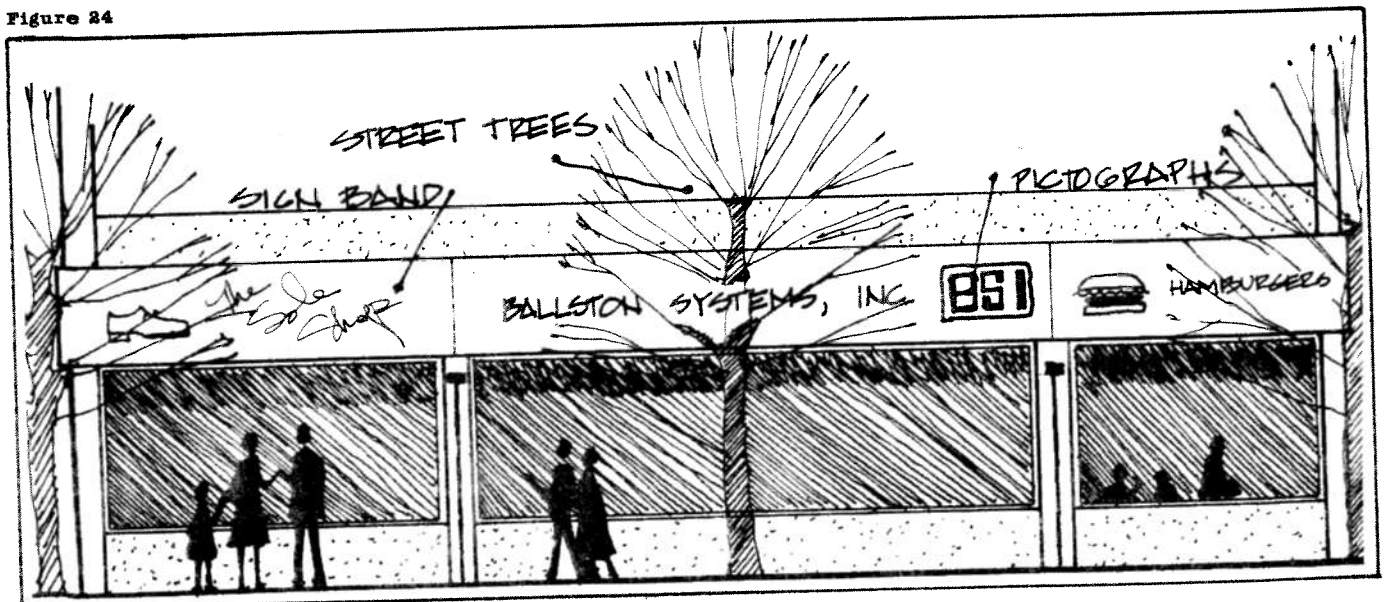
- Arcades should be carefully coordinated with adjacent sidewalk facilities in order to provide continuity in pedestrian facilities.

Figure 23



- Sidewalk cafes, attractive signing, kiosks, street vendors and special lighting arrangements should be encouraged to provide activity and interest along shopping streets.
- Where feasible, short-term convenient parking (i.e., metered parking) should be provided on streets near shopping facilities.
- Signs for shops and businesses should be placed within a 3-foot band, 15 feet above sidewalk grade. In order to create visual interest, a variety of colors and designs should be encouraged.

Figure 24

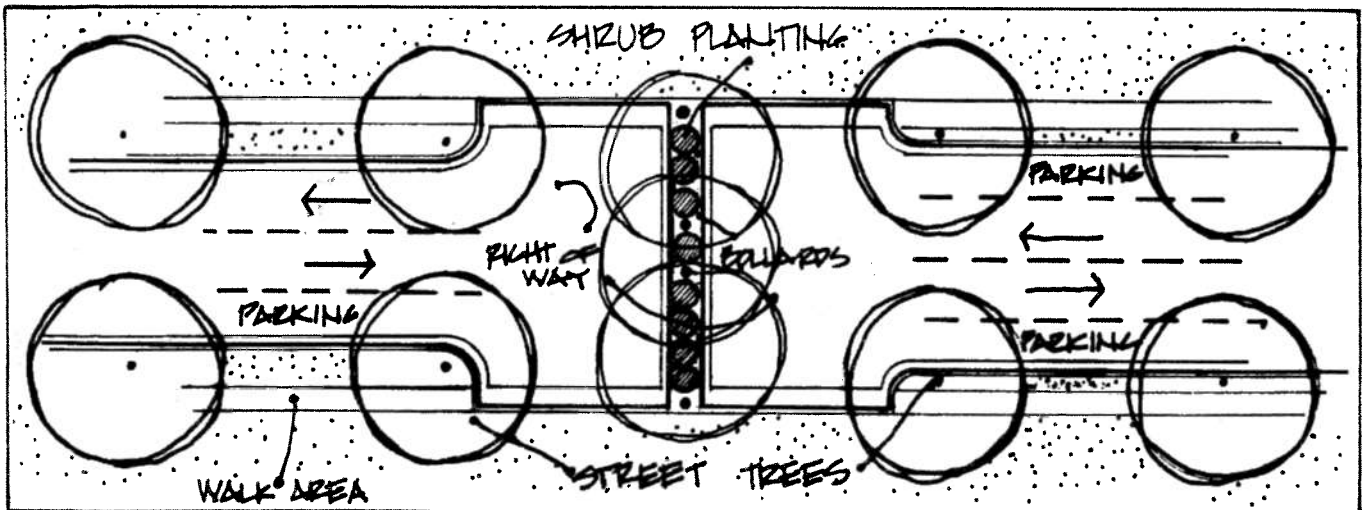


NEIGHBORHOOD PRESERVATION

The following guidelines and recommendations support neighborhood preservation in accord with the Land Use Plan.

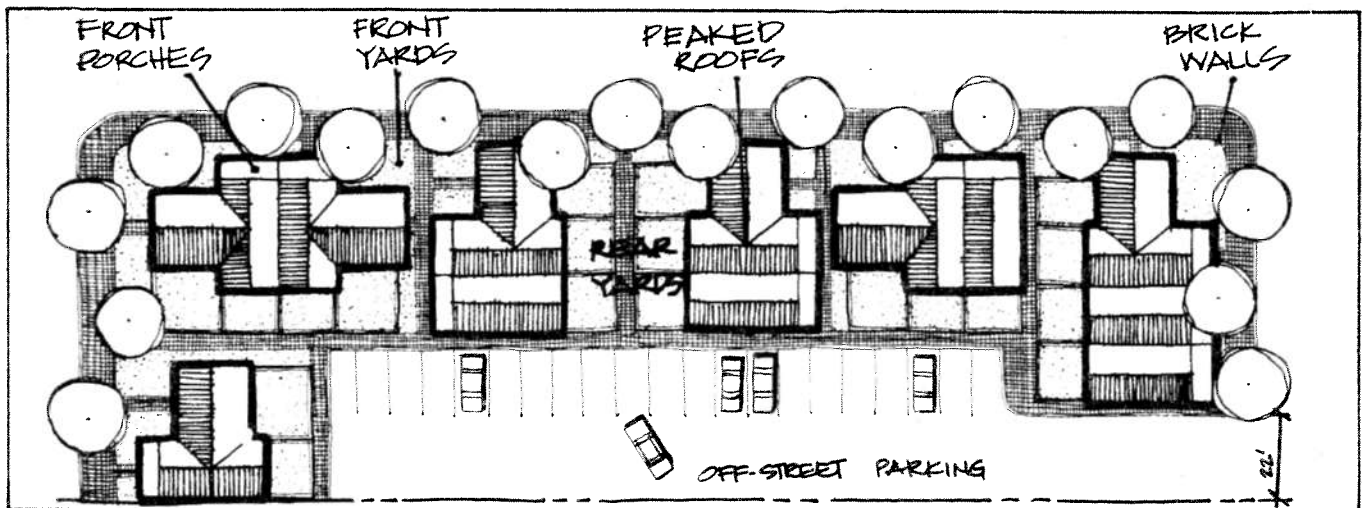
1. The County Board should continue to support completion of neighborhood conservation plans.
2. The completion of sidewalks in preservation areas should be encouraged in accord with the Walkways Policy or other plans as approved for specific areas. Design flexibility should be permitted in order to allow neighborhood preferences.
3. Street improvements on residential streets should be limited to existing right-of-way where feasible. The Passonneau study provides examples of this guideline.
4. Commuter traffic should be discouraged from local streets through neighborhoods by use of traffic engineering techniques and street closings as approved in the Passonneau study and Lyon Village Neighborhood Conservation Plan.

Figure 25



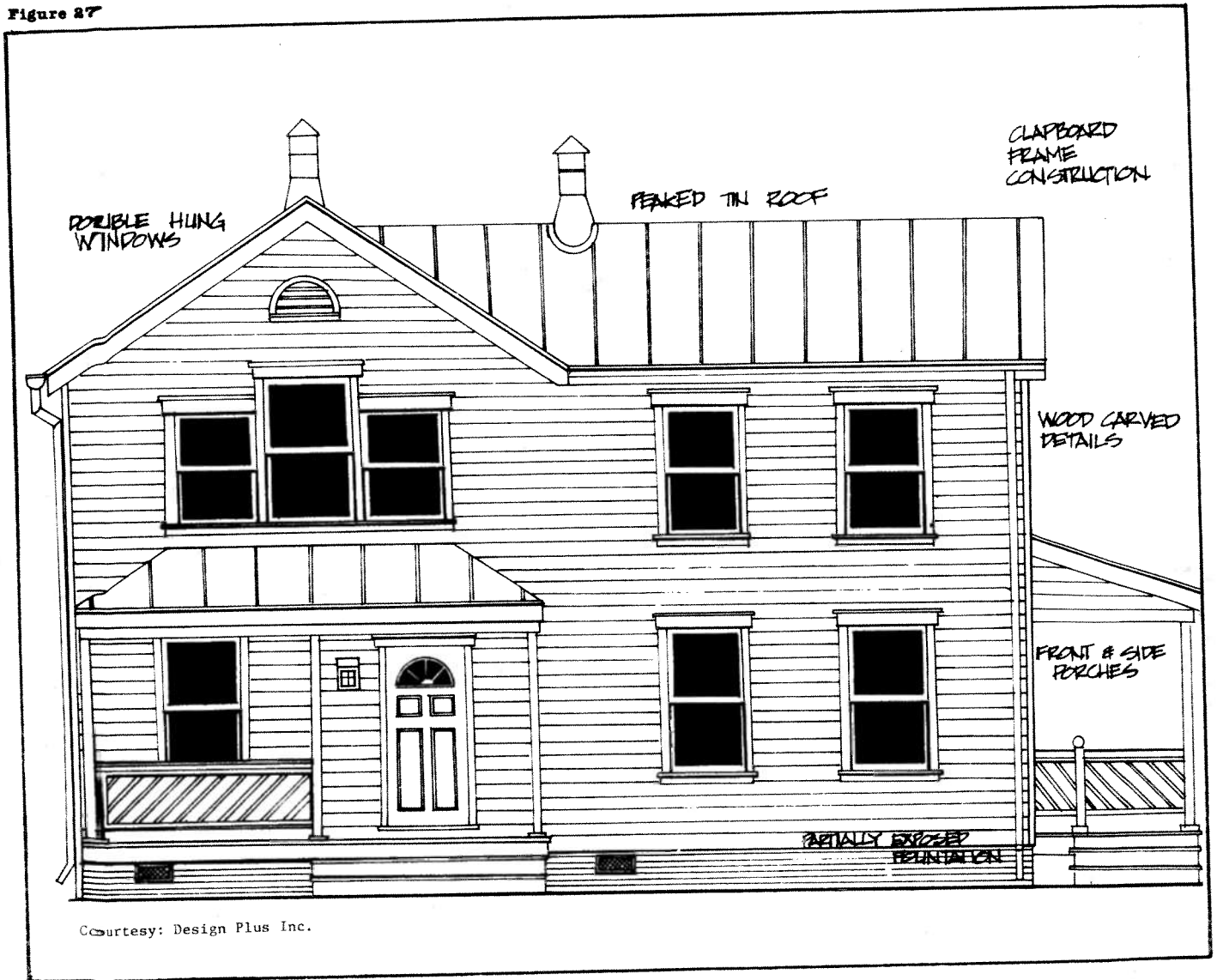
5. Private parking facilities for townhouse projects should be designed to minimize interruption of public sidewalks and street frontage areas.

Figure 26



6. Driveway entrances to townhouse projects should be a maximum of 24 feet in width to minimize interruption of sidewalks.
7. In order to reinforce the character of residential areas such as North Ballston, developers of infill housing projects should be encouraged to include architectural detailing and layout designs compatible with existing housing styles.

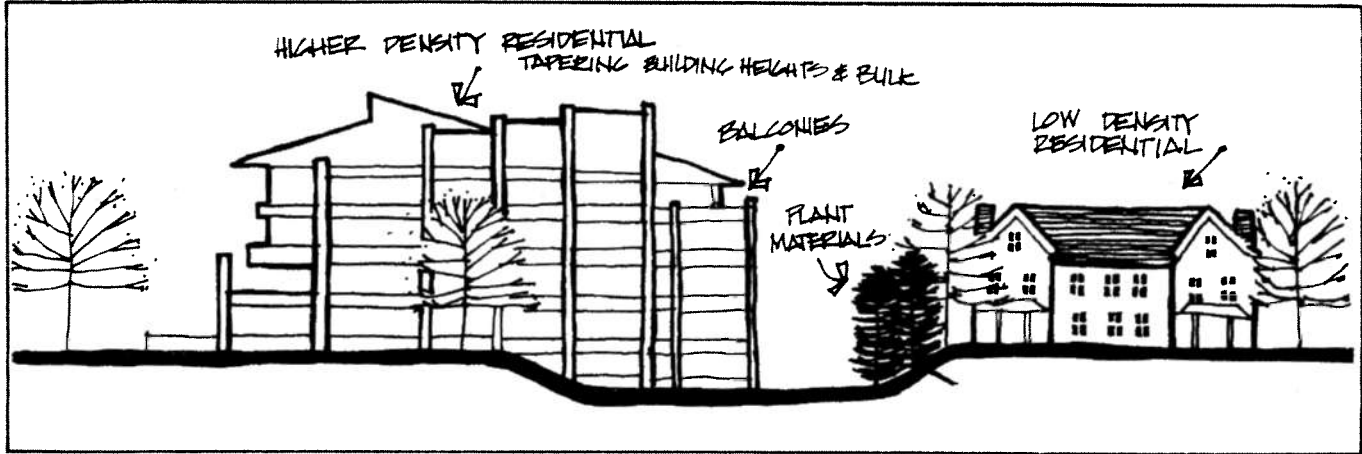
Figure 27



Courtesy: Design Plus Inc.

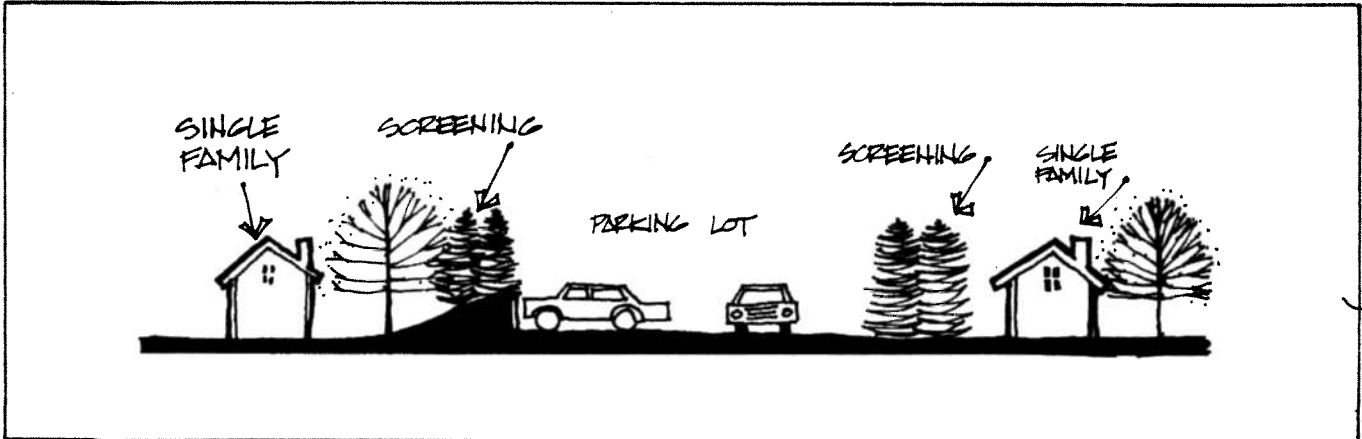
- Higher density commercial and residential projects adjacent to low-rise residential areas should include effective transition through the use of plant materials, tapering of building heights, balconies, open space, topography, walls and fencing.

Figure 28



- At-grade parking facilities should be screened from adjacent residential areas by use of dense plant materials, topography and walls.

Figure 29



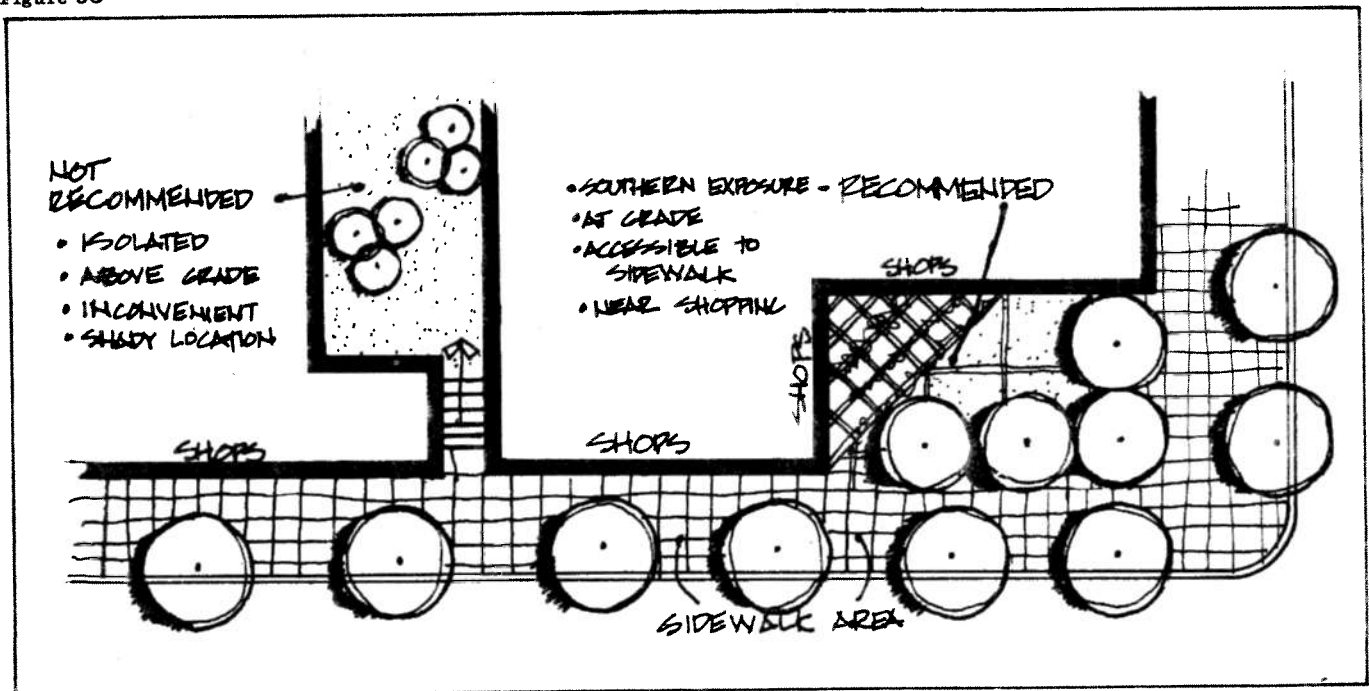
- The extension of the commuter parking ban should be encouraged in low density residential neighborhoods.

URBAN PLAZAS AND OPEN SPACE

The following guidelines aim toward the development of attractive open space facilities which provide visual interest and serve the recreation and leisure needs of workers, shoppers and residents in high density areas.

1. The County Board should encourage development of functional and aesthetically pleasing open space in site plan projects.
2. Plazas should be approved at locations which are visible from the street in order to provide interest and variation in the streetscape. Isolated locations should be discouraged.
3. Where plazas are designed for public use they should be located at-grade with convenient access to public sidewalks.
4. Open space and plazas which blend with shopping facilities can provide a focus for shopping areas; however, plaza placement must be carefully handled in order to avoid disruption of continuity along shopping streets.

Figure 30

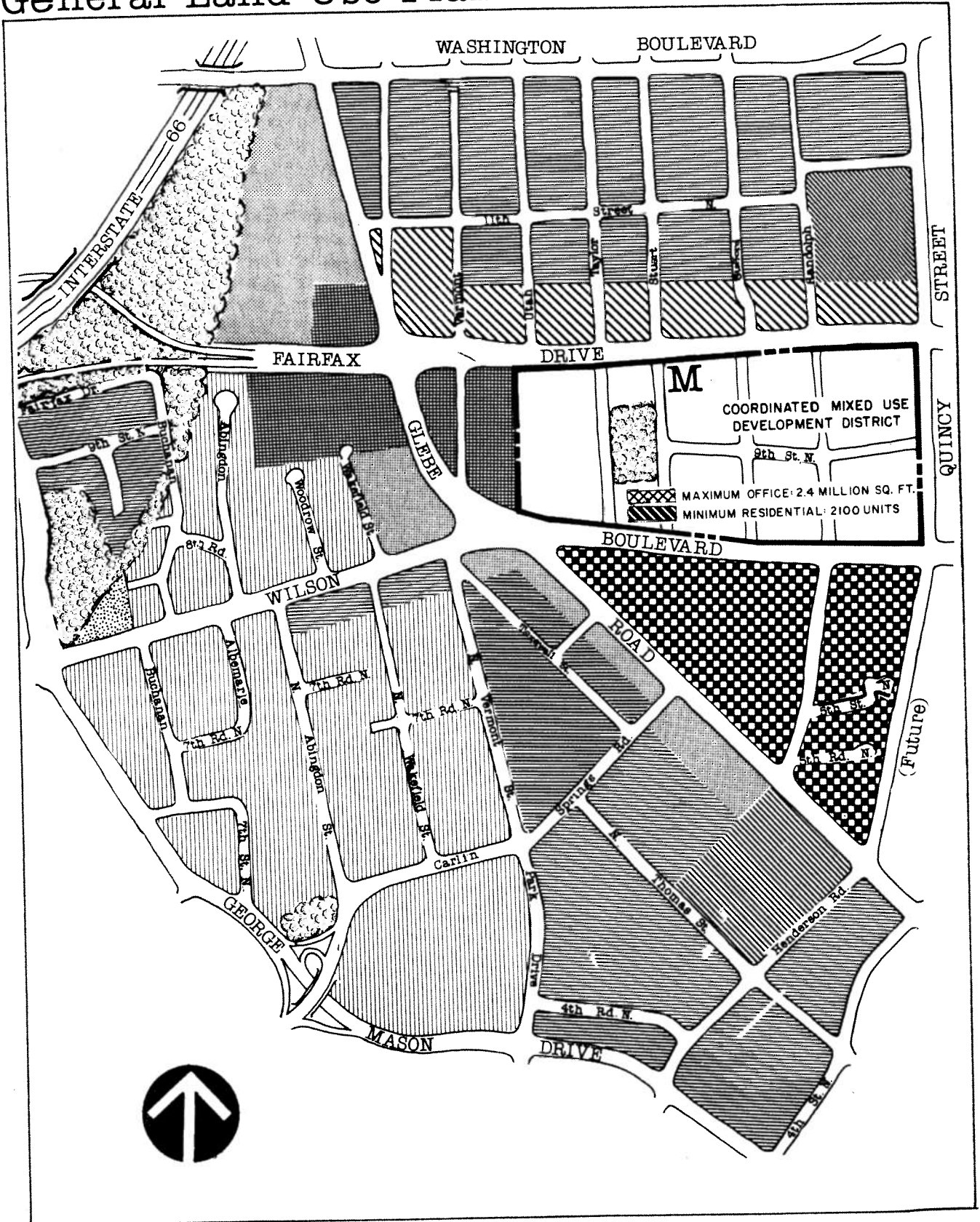


5. Plazas for public use should have a minimum area of 750 square feet.
6. Plazas should contain a minimum of one tree per 500 square feet, one linear foot of seating per 50 square feet and 150 square feet of grass or groundcover per 1,000 square feet of plaza area. Paving patterns and materials should be coordinated with adjacent buildings and sidewalks.
7. Furniture used in plazas should be of simplified design, constructed with durable materials and coordinated with nearby street furniture.
8. The County Board should encourage the inclusion of aesthetic features such as fountains, statues and sculpture in urban plazas as part of the site plan process. Special emphasis should be placed on obtaining these features as aesthetic focal points in highly visible locations along Glebe Road, Wilson Boulevard and Fairfax Drive.

Land Use and Zoning

This section presents a description of the existing land use, zoning and General Land Use Plan designations for each area in Ballston. Specific issues are raised and several recommendations proposed.

General Land Use Plan



The General Land Use Plan, as shown on Map 4, presents the County Board's policy for future development in Ballston. As a policy tool the General Land Use Plan establishes the overall character, extent and location of various land uses. The plan serves as a guide to communicate the Board's policy to residents, businessmen and developers involved in the Ballston community; it also serves as a guide to the County Board in their future decisions and actions concerning development in Ballston.

The Zoning Ordinance, on the other hand, is a specific implementation tool which defines legal rights and constraints regarding the use of land. The Zoning Ordinance regulates the type of use, placement, height, bulk and coverage of structures for each zoning category. Map 14 displays the present zoning in Ballston and Appendix B contains a summary of the different zoning districts.

NORTH BALLSTON

In broad terms, the General Land Use Plan in this area provides for apartment development along

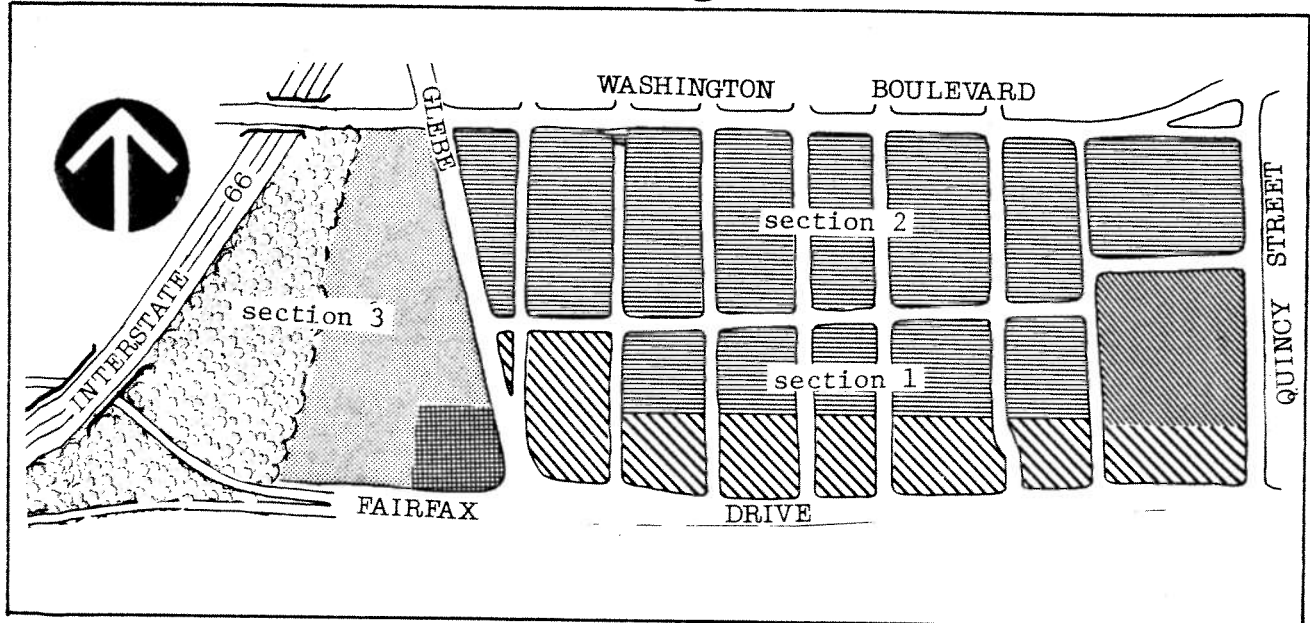
Fairfax Drive with transition into the low density neighborhoods north of Washington Boulevard. North of the Fairfax Drive apartment designation, the General Land Use Plan provides for townhouse infill and selective preservation of existing dwellings.

Existing Land Use

As shown on Map 5, North Ballston includes a variety of land use. Along Fairfax Drive there are low density commercial uses and vacant land. Many structures along the north side of Fairfax Drive were demolished during Metro construction. North of the commercial uses, the area contains a mix of single and two-family dwellings, apartment buildings and newly constructed townhouses. West of the residential uses there is a small strip of commercial development fronting on Glebe Road. On the west side of Glebe Road there is a 14+ acre site which includes an office building, the Pla-Mor bowling lanes and the vacant Western Pocahontas tract.

Map 5

North Ballston Existing Land Use



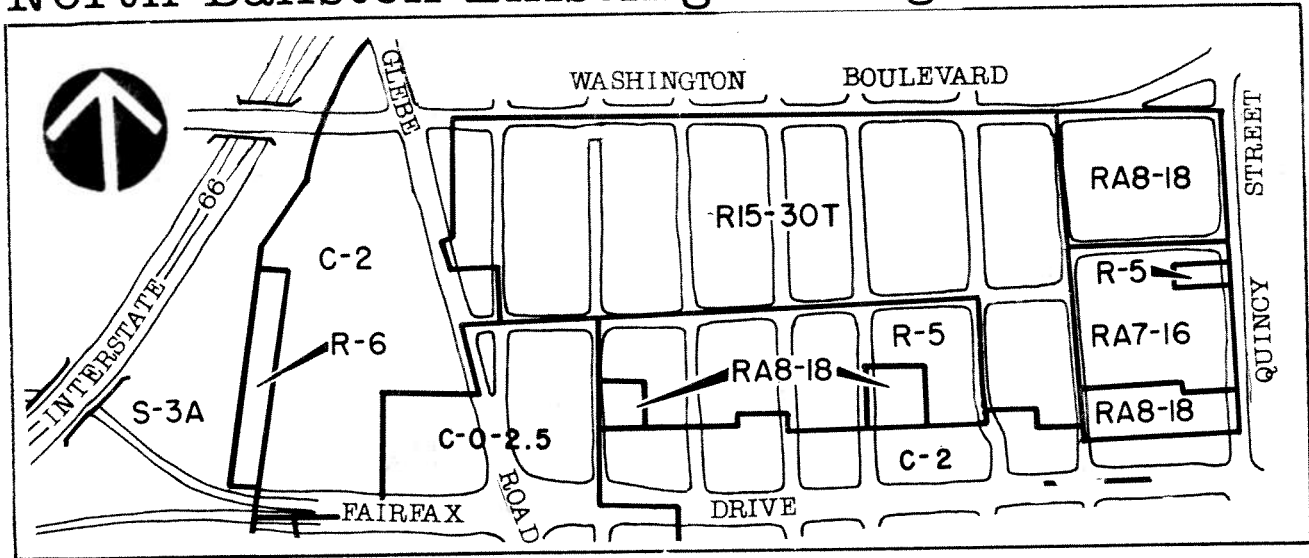
Existing Zoning

North Ballston is generally zoned for commercial uses along Fairfax Drive and Glebe Road with the remainder of the area zoned for residential uses. The Fairfax Drive and North Glebe Road frontage is zoned "C-2", except for approximately 5 acres zoned "C-0-2.5" at the intersection of Fairfax Drive and

North Glebe Road. The area between 11th Street North and Washington Boulevard is zoned "R15-30T". South of 11th Street, the residential area includes "R-5", "RA8-18", "RA7-16" and "R15-30T" zoning. Map 6 displays present zoning in the area.

Map 6

North Ballston Existing Zoning

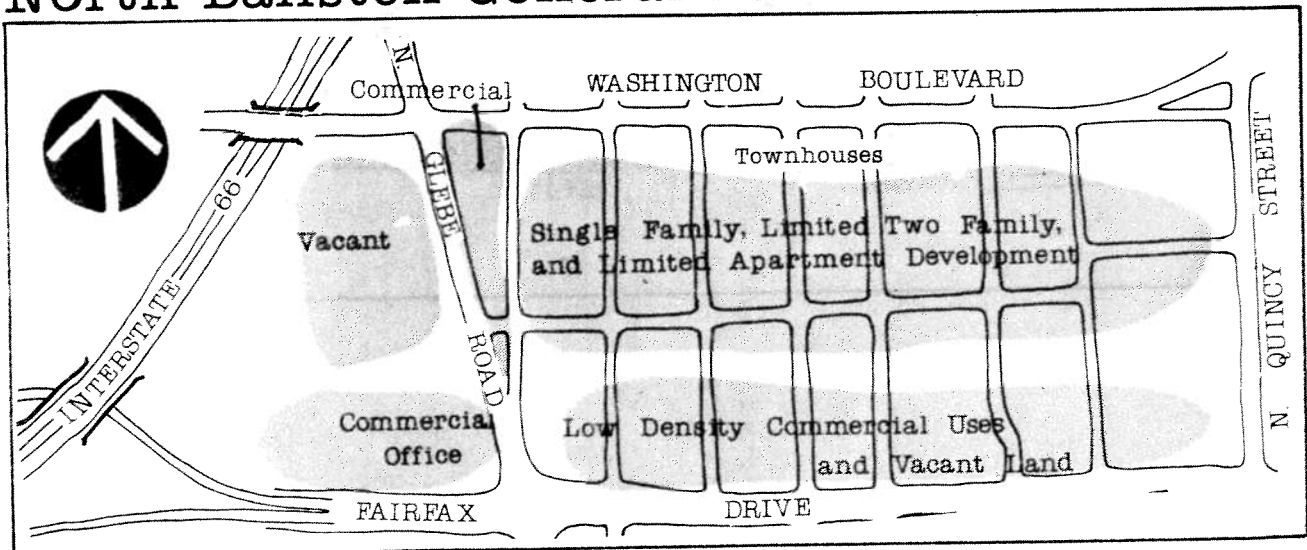


General Land Use Plan and Potential Development

Map 7 displays the General Land Use Plan for North Ballston. Discussion of the plan is presented below for each of the three sections identified on the map.

Map 7

North Ballston General Land Use Plan



SECTION 1. This area is generally shown for "high medium" (73-90 apartment units per acre) and "low medium" (16-30 units per acre) residential development. The "high medium" designation covers about 13 acres, generally extending from Fairfax Drive northward for approximately 200 feet. The "low medium" designation also covers about 13 acres and extends from 11th Street for approximately 200 feet to the south.

The boundary between the "high medium" designation along Fairfax Drive and the "low medium" designation along 11th Street North is viewed as general, and no attempt has been made to describe a specific line for zoning purposes. The zoning line separating these densities should be based on the merits of subsequent requests for rezoning and site plan approval. The "high medium" area along Fairfax Drive should be planned and buildings situated to achieve a transition into the lower density areas immediately to the north.

Much of the area along the north side of Fairfax Drive that is planned for "high medium" residential is currently zoned "C-2". The "C-2" zoning is inconsistent with the plan designation and may represent an obstacle to achieving the planned residential development. In order to respond to this situation, the Board has adopted a new zoning district designed to encourage "high medium" density apartments. The new district generally allows "C-2" commercial development by right. By site plan, the district provides for up to 90 units per acre in addition to a maximum of 1.24 FAR commercial/office development.

It is recommended that the Board consider rezoning the "C-2" properties to the new district to help insure that subsequent development is consistent with land use policy. The application of the new district to additional properties in this area should be based on the merits of subsequent consolidations and rezoning requests. It is also recommended that the Board continue to monitor the effectiveness of the new "R-C" district.

The "low medium" residential designation along the south side of 11th Street provides for development of up to 30 dwelling units per acre. At present this area is zoned "R-5", "RA8-18", "RA7-16", and "R15-30T". The "R15-30T" district would be appropriate for the entire area. It would allow townhouse infill and selective preservation of well-maintained dwellings, and thereby reinforce the preservation planned for the area immediately north of 11th Street.

At the corner of Fairfax Drive and North Glebe Road, the General Land Use Plan shows "high medium" residential. This designation provides for apartment density up to 90 units per acre and hotel density up to 135 units per acre. The area is currently zoned "C-O-2.5" which could allow development inconsistent with the General Land Use Plan. The actual uses and densities in this area will be established through site plan approval.

SECTION 2. This section is shown for "low medium" residential development (16-30 units per acre). In July 1978, the majority of this section was rezoned to "R15-30T" in accord with the Land Use Plan. Plans have already been approved for six "R15-30T" townhouse projects and it appears that the "R15-30T" district will achieve the selective infill and preservation which is envisioned for this area.

Section 2 includes "C-2" zoning with low-rise commercial buildings along North Glebe Road. While the plan supports residential redevelopment of these properties, it is unlikely that these commercial uses will be discontinued. The rezoning of these properties to a more restrictive district consistent with the "low medium" residential designation does not appear feasible from a legal standpoint. Future action in regard to the "C-2" properties should therefore be focused on improving the viability of the commercial uses and enhancing their relationship to nearby residential properties. In the future it may even be advisable to expand the commercial in order to allow implementation of well designed commercial redevelopment proposals.

SECTION 3. Land use in Section 3 includes an office building, the Pla-Mor bowling lanes and the 9 acre vacant Pocahontas tract. The General Land Use Plan designates Section 3 for "service commercial" development, except for the office building site which is shown for "medium" density office-apartment-hotel development. The existing "C-2" and "C-O-2.5" zoning is consistent with the General Land Use Plan.

During the General Land Use Plan revision hearings for the Rosslyn-Ballston Corridor in 1977, the Board postponed action on plan amendments for Section 3. The Board preferred to consider amendments west of Glebe Road in the context of the Ball's Crossing Neighborhood Conservation Plan presently being prepared.

While this report generally defers consideration of the area west of Glebe Road, a recommendation is proposed for Section 3 in response to the major

development opportunity of the Pocahontas tract. Given the site's size and location, it could be reasonably considered for a variety of uses. It has direct access to North Glebe Road and Washington Boulevard. Access to the site will be improved with completion of I-66 and the site will have high visibility at the gateway into the Rosslyn-Ballston Corridor.

Since 1972, the County Board has formally considered two proposals for use of the site. In February 1972, the Board denied a "C-0" rezoning and site plan for 930 apartment units, 300 hotel units, 230,000 square feet of office space and 70,975 square feet of commercial space. In December 1978, the Board denied a use permit which proposed use of the site for a Metro bus yard.

As part of the 1977 revision hearings, the staff recommended that Section 3 be designated for a mixture of office, residential and public use. The existing office site was to be retained in the "medium" density office-apartment-hotel designation. Approximately one-half of the remainder of Section 3 was to be shown for "medium" density (31-72 units per acre) residential development with the other half being shown for "public" open space. The Rosslyn-Ballston Corridor Committee of the Planning Commission supported the mixture of uses on the site; however, the Committee recommended the "low medium" (16-30 units per acre) residential designation for the northern portion of Section 3 as opposed to the staff recommendation which placed "public" in this area.

In the 1977 recommendations, the residential component was viewed as a transition from the mixed uses planned around the Metro station to the nearby low density residential neighborhoods. The residential component was also seen as helping to achieve a balance between residential and office development in the Rosslyn-Ballston Corridor. The "public" designation was recommended to help serve open space needs.

Several changes have occurred since 1977 which reduce the need for the "public" designation on a portion of the site. The County Board has purchased the nearby "Fields" tract and the Board has approved an extensive renovation and redesign for the Quincy Street Playfield. The Board has also agreed to pursue the acquisition of additional open space near the Ballston Metro Station. These recent changes and the desire to reduce government expenditures mitigate against acquiring a portion of the Pocahontas tract for open space.

From the policy standpoint, it is important to retain the concept of tapering densities away from the Metro station when considering development in Section 3. It is also desirable to encourage residential use in the area. From a practical standpoint, the existing "C-2" zoning provides a base for considering future use of the properties having major development potential. Both the Pocahontas tract and the Pla-Mor bowling lanes property are zoned "C-2". This district has a maximum density of 1.5 F.A.R. and allows a broad range of commercial uses. While the existing "service commercial" designation and "C-2" zoning provide a logical tapering of density in this location, the "C-2" zoning provides little incentive for residential use, limited encouragement for mixed use and limited flexibility in site design.

In order to provide a policy framework for development of this area, it is recommended that the County Board consider adopting a revised General Land Use Plan designation for the properties in the block. From the above discussion, it is clear that a coordinated mixed use alternative should be considered. The review process for the sector plan draft also revealed support for other specific alternatives ranging from commercial/retail development to mixed use development with a residential emphasis. It is recommended that the Board direct staff to prepare a separate report to advertise a variety of General Land Use Plan and zoning alternatives for the block.

CENTRAL BALLSTON

Plans for this area include high density office and apartment development as a major focal point in Ballston. The General Land Use Plan also supports commercial growth and revitalization of the Parkington Shopping Center.

Existing Land Use

As shown on Map 8, Central Ballston is largely a commercial area with a variety of retail, service and office development. The area also includes several single-family dwellings and apartment complexes.

Parkington is the major commercial center and is reinforced by a concentration of commercial establishments along Wilson Boulevard. Commercial uses in the area are typically housed in low-rise structures and converted single-family dwellings. In general, the commercial properties are underdeveloped from the standpoint of allowed density.

Since the early 1960's, several significant office

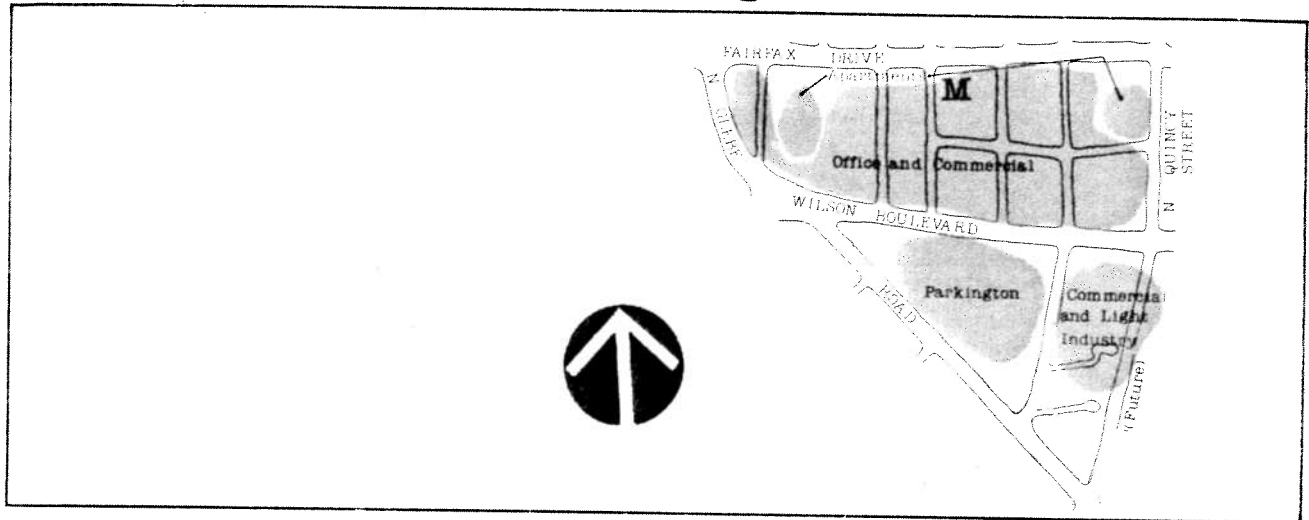
buildings have been constructed in Central Ballston. Map 15 in the Commercial Section shows the location of these buildings which constitute the bulk of nearly 853,000 square feet of office space in the area.

viding a total of 155 units. Glebe Courts, lying west of Taylor Street, is the largest complex with 76 units. The area also includes a limited number of single-family dwellings which have remained in residential use.

There are five garden apartment complexes, pro-

Map 8

Central Ballston Existing Land Use

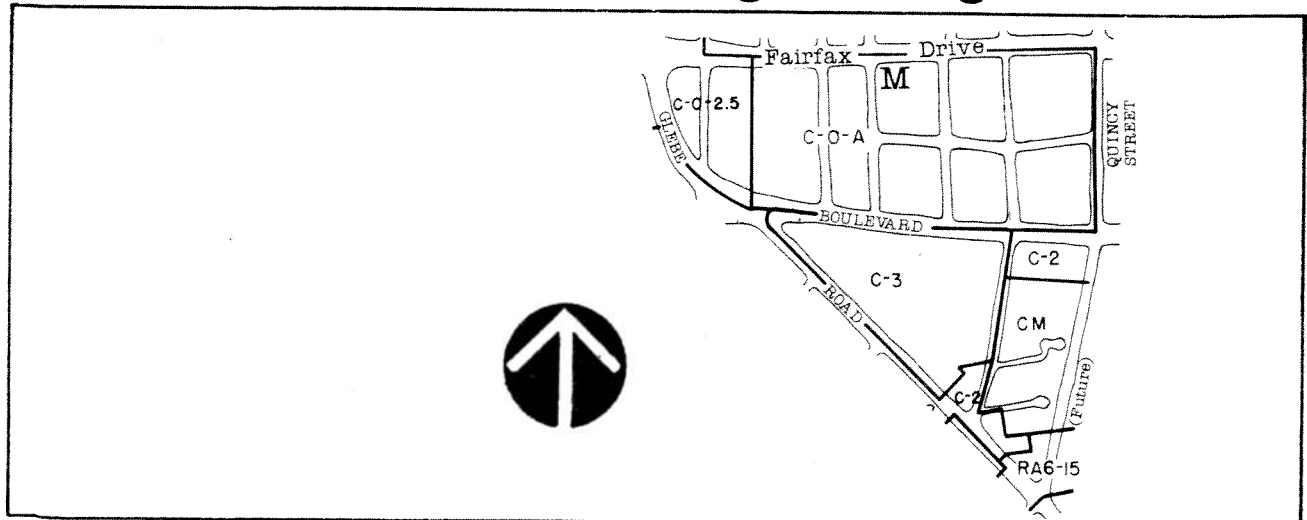


Existing Zoning

Land in Central Ballston is generally zoned for commercial or office-apartment-hotel development. There is an isolated segment of apartment zoning south of Parkington. Map 9 displays the existing zoning.

Map 9

Central Ballston Existing Zoning

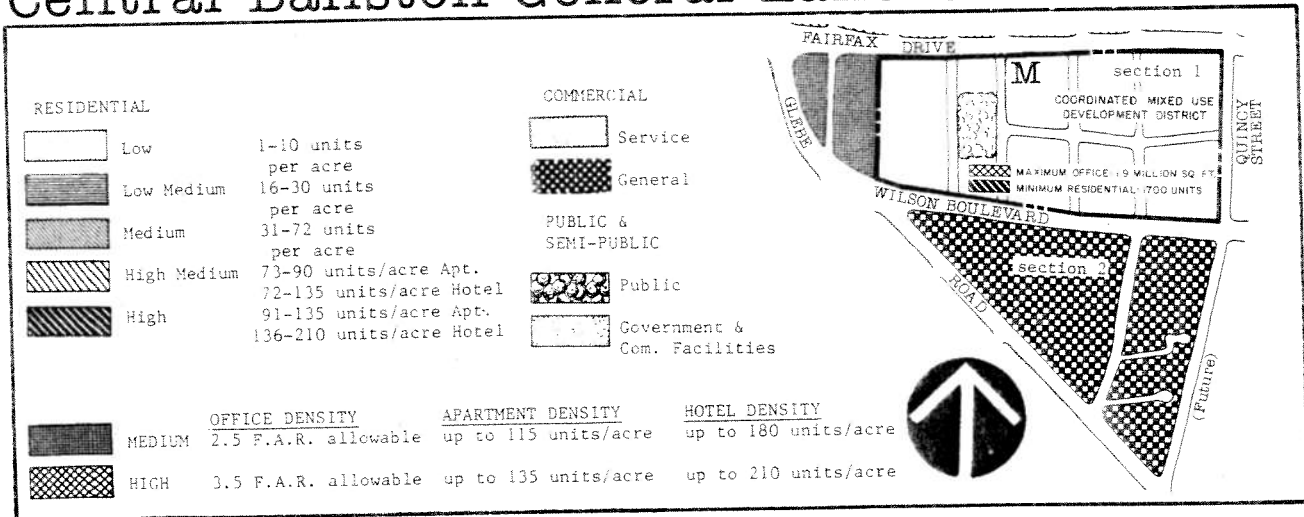


General Land Use Plan and Potential Development

Map 10 displays the General Land Use Plan for Central Ballston. Discussion of the plan is presented for the two sections shown on the map.

Map 10

Central Ballston General Land Use Plan



SECTION 1. This area contains approximately 31 acres and provides the major development potential in Ballston. The westernmost portion of the section is designated medium density office - apartment - hotel and the remainder is designated as a "Coordinated Mixed Use Development District".

The "Coordinated Mixed Use Development District" as approved by the Board to help achieve a balance between employment and residential growth in the station area. The district responds to the Long Range County Improvement Program goal to:

Coordinate office development with development of new housing and community facilities in the vicinity of Metro stations, to balance new jobs and new housing supply, avoid nighttime office canyon "ghost towns", encourage commuter use of public transportation, provide walk-to-work opportunities and reduce suburban sprawl.

The "Coordinated Mixed Use Development District" provides for a maximum of 1.9 million square feet of office gross floor area and a minimum of 1,700 dwelling units. This provides for approximately one-half of the land to be developed in high density apartments and one-half in high density office. The

coordinated district does not allocate the office and apartment development to specific block locations. All blocks can qualify for office development throughout the build-out period until the maximum office limit for the district is achieved.

The "Coordinated Mixed Use Development District" is planned as the major high density, urban or downtown center for Ballston. The General Land Use Plan provides maximum flexibility in the development of this area with substantial apartment, office and retail/service commercial facilities. The plan also provides for County acquisition of approximately 1.5 acres of open space in the area. Furthermore, the application of design guidelines should provide additional open space in the form of urban plazas in new site plan projects.

In order to achieve the large scale coordinated development of this core area as envisioned in the General Land Use Plan, it is essential that the land use policy be reinforced with effective and realistic zoning mechanisms. While mixed use high density development is a clear goal of the Land Use Plan, it is realized that the private market has not supported construction of high-rise residential projects in Arlington during the past few years. To a large extent this situation is caused by construction costs and interest rates which have pushed new construction rental schedules beyond the regional

market. The high-rise condominium market has also been depressed in the recent past because of over building, but this situation seems to be correcting itself.

The County is seeking to improve the potential for high-rise residential development in several ways. The amount of commercial space that can be approved in apartment projects was recently increased. In early 1980 the County Board adopted the "C-O-A" zoning district as a mechanism to encourage coordinated mixed use development in the vicinity of the Metro station. The "C-O-A" district is designed to encourage consolidation of property by establishing the maximum density based on the site area. The maximum total density ranges from 1.0 F.A.R. on sites which are 4,999 square feet or smaller to 6.0 F.A.R. on sites which are 80,000 square feet or larger. The ordinance stipulates that only half of the total maximum density may be developed as office, hotel and commercial with the remainder developed as residential. In order to encourage residential development, an additional .5 F.A.R. may be approved within any project that is at least 90% committed to residential use. The additional density may be used for apartment, commercial or office space.

The Metro Station lies within the "Coordinated Mixed Use Development District". At present this block is largely owned by WMATA and consumed by bus bays for the loading and unloading of buses. This use of the block may preclude development until the Metro-rail system is extended beyond Ballston; however, the County should continue efforts to secure earlier development of the block.

Section 1 also provides redevelopment potential near North Glebe Road under the "medium" density office-apartment-hotel designation. The area is zoned "C-O-2.5" in accord with the land use designation. This district provides for up to 2.5 F.A.R. office development, 115 units per acre apartment development and 180 units per acre hotel development. The area includes two significant office buildings and a commercial complex along North Glebe Road. The commercial complex is largely comprised of auto sales, auto parts sales and auto repair establishments. Under the "C-O-2.5" zoning, revitalization of this shopping area is possible but the district provides a density incentive for redevelopment.

SECTION 2. The Parkington block with a total of 13+ acres comprises about two-thirds of Section 2. This block includes the Parkington Shopping Center, a small group of retail stores along North Randolph

Street and several commercial buildings along North Glebe Road. Section 2 also extends across North Randolph Street to the future North Quincy Street alignment. In this area there are a variety of light industrial, retail and service uses including the American Service Center car dealership and a portion of the WMATA bus yard.

As shown on Map 10, the General Land Use Plan designates the Parkington block as "General Commercial". This category provides for "shopper goods and other major mixed commercial uses, including offices". The existing "C-2" and "C-3" zoning is compatible with the plan and will allow revitalization of the shopping area at greater density. Increased flexibility for redevelopment however could be achieved through a site plan zoning district. The County is currently investigating the potential for Parkington revitalization. If the area is not revitalized, the plan for section 2 should be reconsidered.

In the block east of Parkington, the "General Commercial" designation provides for extension of the commercial uses in support of Parkington revitalization. At present the area contains "C-2" and "C-M" zoning, with commercial and light industrial uses. The General Land Use Plan envisions the elimination of light industrial uses such as the WMATA bus yard and the C&P storage and repair yard. In July 1978, the Board rezoned some "C-M" properties in this area to the "C-2" district. The remaining "C-M" properties should be considered for rezoning after the North Quincy Street extension is completed.

WEST BALLSTON

The Ball's Crossing Neighborhood Conservation Area outlined on Map 11 makes up the majority of this area. The neighborhood conservation plan is now being prepared by residents of the area. During the plan revision hearings for the Rosslyn-Ballston Corridor in 1977, the County Board agreed to postpone action on plan amendments west of Glebe Road until completion of the conservation plan. This section provides a brief summary of the area but specific zoning and land use recommendations are not made at this time.

Existing Land Use

As shown on Map 11, this area includes a mixture of residential, public and commercial land use. Residential development is the most predominant use, with commercial uses found primarily along North Glebe Road. There are a total of 377 single family dwellings in West Ballston. Most of the

dwellings were built prior to 1960, but several detached homes have been constructed on infill lots since that time. In 1978 the Board approved a site plan for construction of 72 townhouses on the "Paden" tract at North George Mason Drive and North Park Drive. Two additional townhouse projects have been approved since 1978.

The area has a total of 1,134 multi-family units. Most of these units are found south of Carlin Springs Road. The Hyde Park apartment building on North Henderson Road is the area's only highrise residential building. A small portion of the Buckingham garden apartment community lies adjacent to Hyde Park.

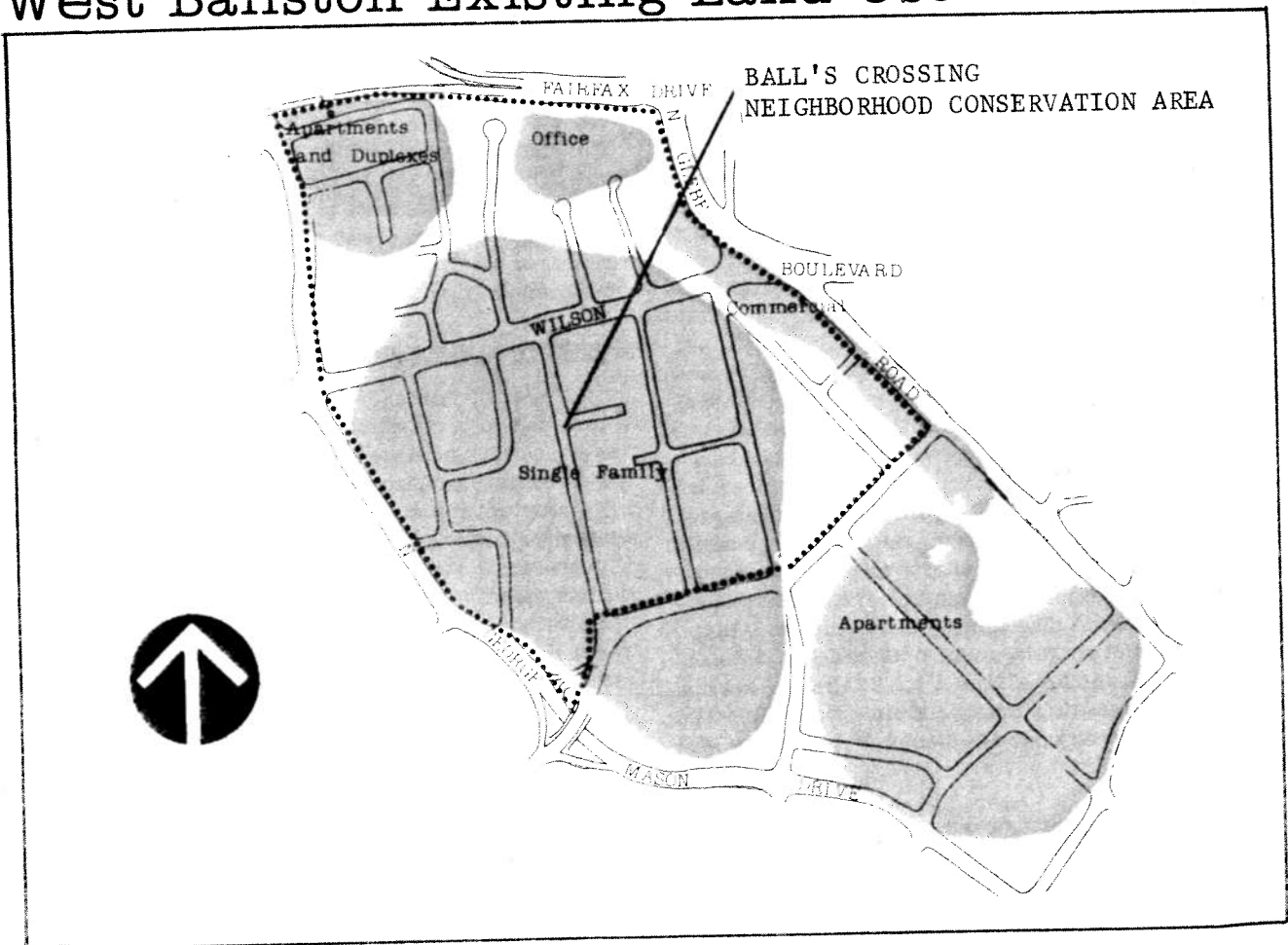
Commercial development in the area includes office, retail and service commercial establishments. The Chamber of Commerce building on Fairfax Drive and a newly constructed five-story office building adjacent to the Chamber of Commerce are

the major office buildings in the area. The vacant site adjacent to Hyde Park was approved for a 12-story office building in 1968. In addition to the office development, there is an approved site plan for a 221 unit hotel adjacent to the Chamber of Commerce building. This hotel was approved in 1967 in conjunction with the Chamber of Commerce plan.

Automobile sales and service is the predominant commercial use along North Glebe Road. This area includes three major dealerships: Larry Buick, Bob Peck Chevrolet and the Rosenthal Foreign Car dealership. In addition, there are several used car businesses, repair garages, a car wash, a service station and auto parts businesses. The non-auto related commercial uses are for the most part found in the block directly across from Parkington. These commercial uses include both service and retail establishments.

Map 11

West Ballston Existing Land Use

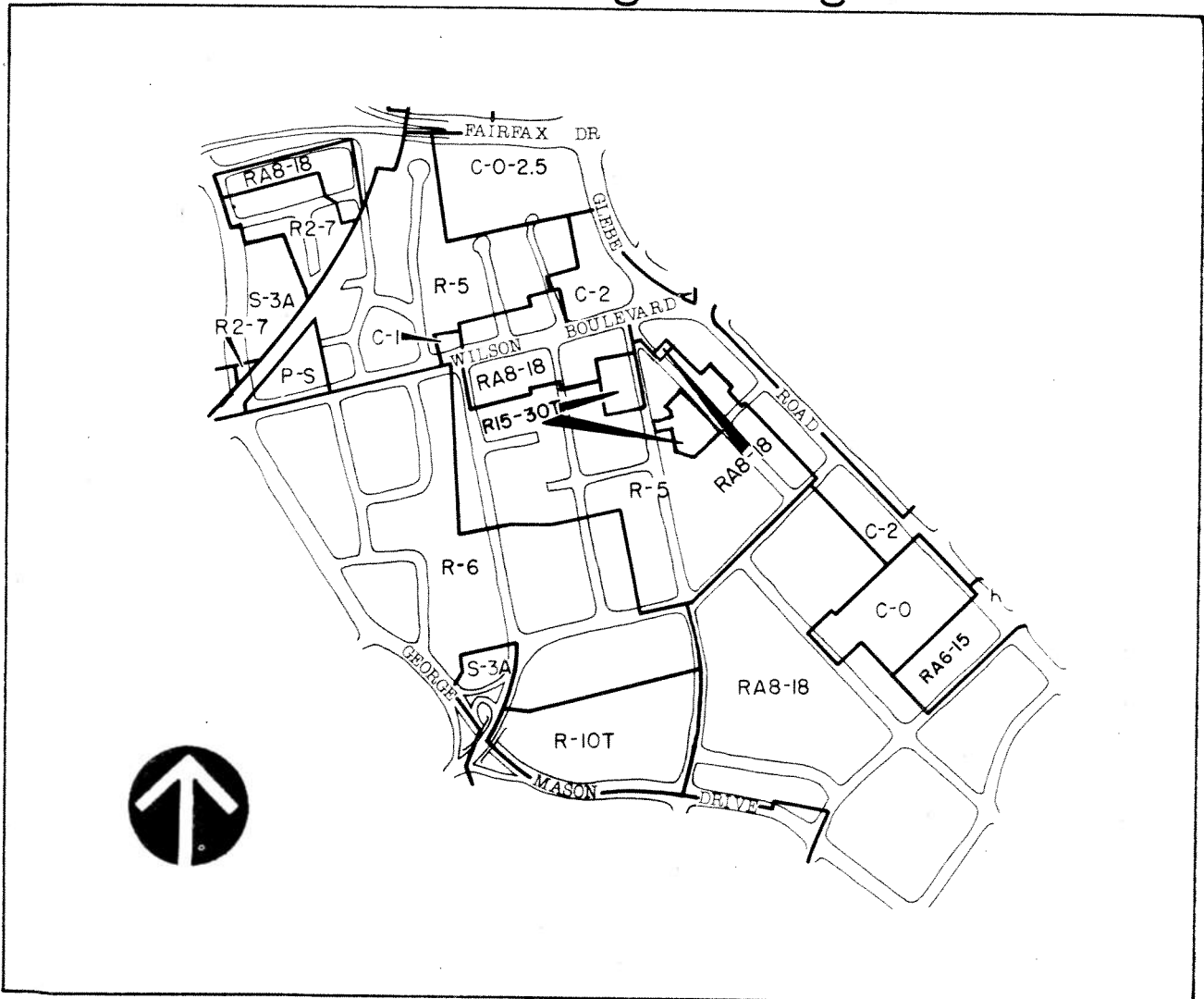


Existing Zoning

Zoning in West Ballston is generally consistent with the established uses. The commercial frontage along Glebe Road includes "C-2", "C-O-2.5" and "C-O" zoning. Apartment development is zoned "RA8-18" and "RA6-15" and the sites for the three approved townhouse projects are zoned "R-10T" and "R15-30T". Single-family development is zoned "R-5" and "R-6", and the two-family homes are zoned "R2-7". Map 12 displays the existing zoning.

Map 12

West Ballston Existing Zoning



General Land Use Plan and Potential Development

The General Land Use Plan, as shown on Map 13, is largely consistent with existing zoning and established land use. The General Land Use Plan designates the majority of the area for low density residential development. It supports retention of the existing apartments south of Carlin Springs Road. The General Land Use Plan also supports the retention of low intensity commercial uses along North Glebe Road. This commercial frontage provides a transition between the more intense development planned east of Glebe Road and the residential neighborhood to the west.

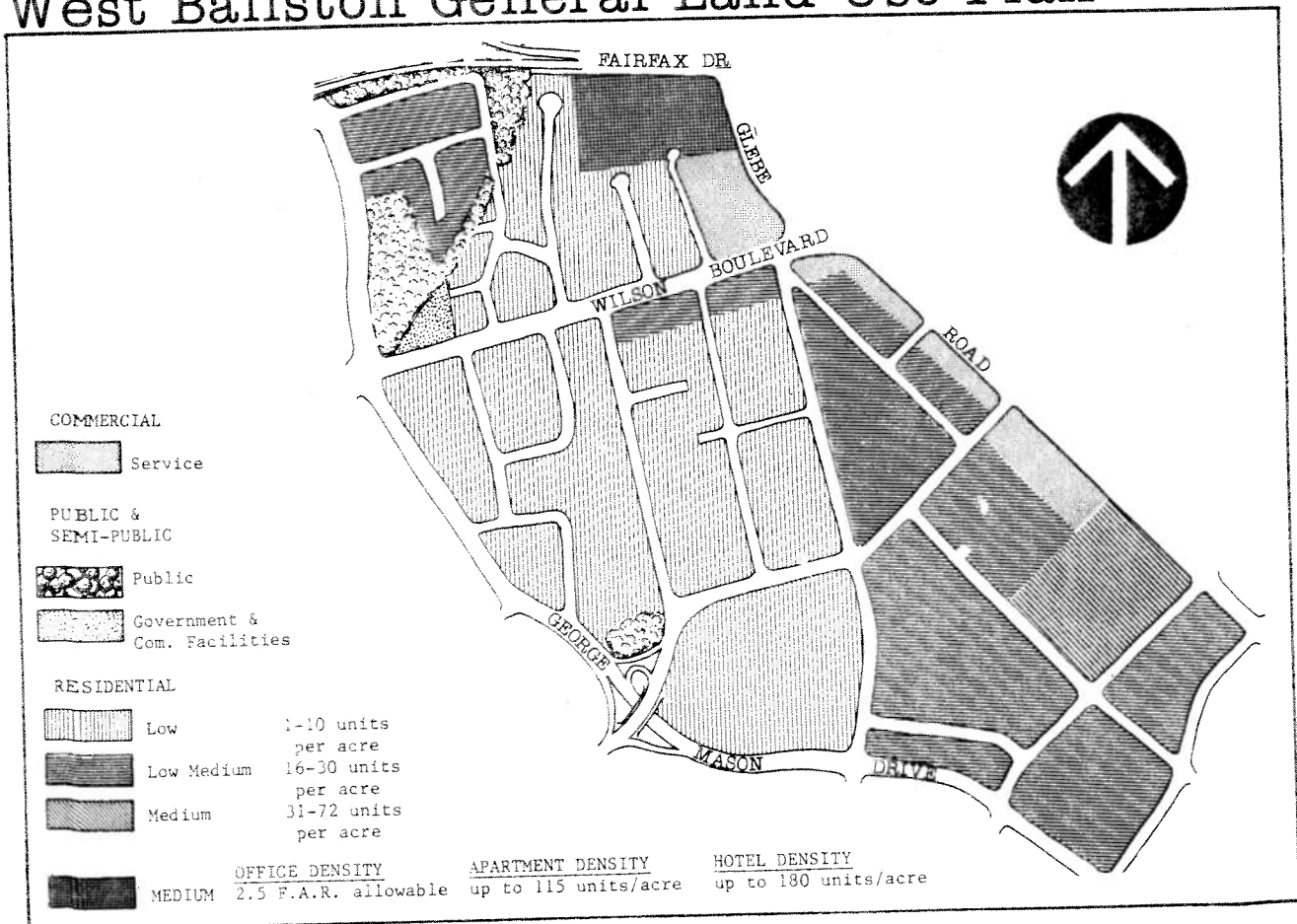
In May of 1980 the County Board amended the General Land Use Plan for the area bounded by North Vermont Street, Wilson Boulevard, North Carlin Springs Road and the commercial frontage along Glebe Road. The land use designation was changed from "low" density residential (1-10 units per acre) to "low medium" density residential

(16-30 units per acre). This change, in response to increase pressure for redevelopment in the area, reinforces the tapering of uses and densities from the Glebe Road commercial frontage into the established Ball's Crossing neighborhood.

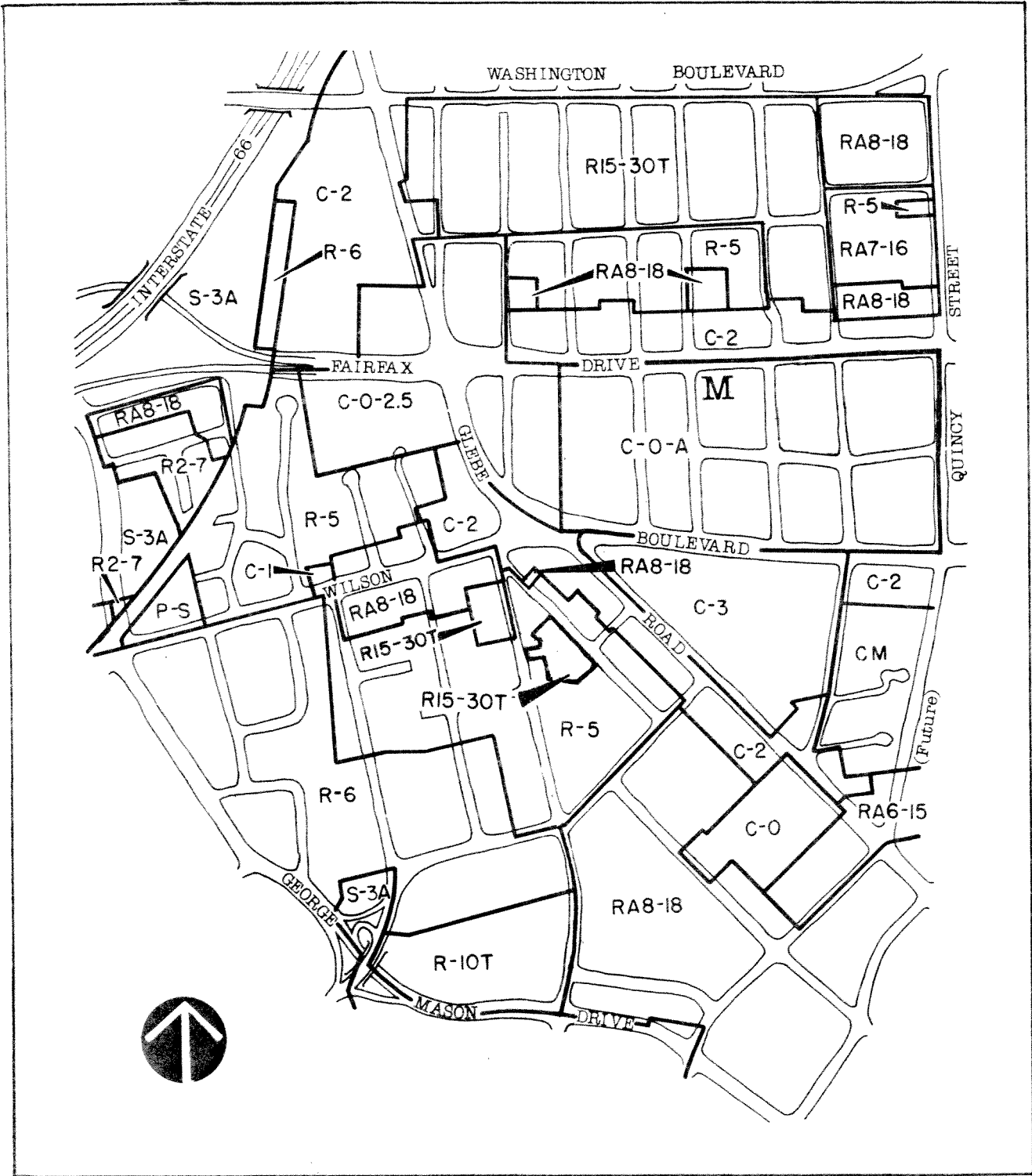
In general, the draft portions of the Ball's Crossing neighborhood conservation plan support preservation of established residential uses in West Ballston, while providing for "high medium" residential redevelopment of some commercial properties along Glebe Road. Staff recommendations in 1977 supported the preservation of residential uses and the retention of commercial uses along Glebe Road. Plans for the area along North Glebe Road should be resolved during the process of approving the neighborhood conservation plan. A number of issues including the potential impact from Parkington revitalization, the strength of the existing commercial uses and the viability of residential redevelopment will need to be considered. The nearing completion of Metro and I-66 emphasize the need to finalize land use policy in West Ballston.

Map 13

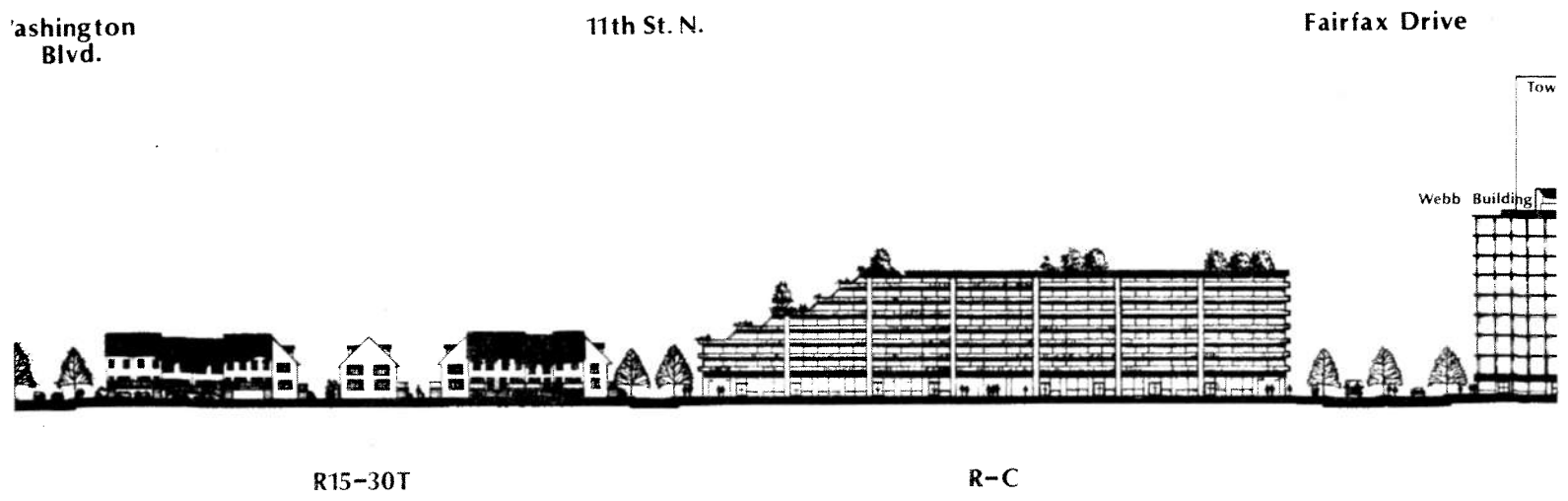
West Ballston General Land Use Plan



Existing Zoning



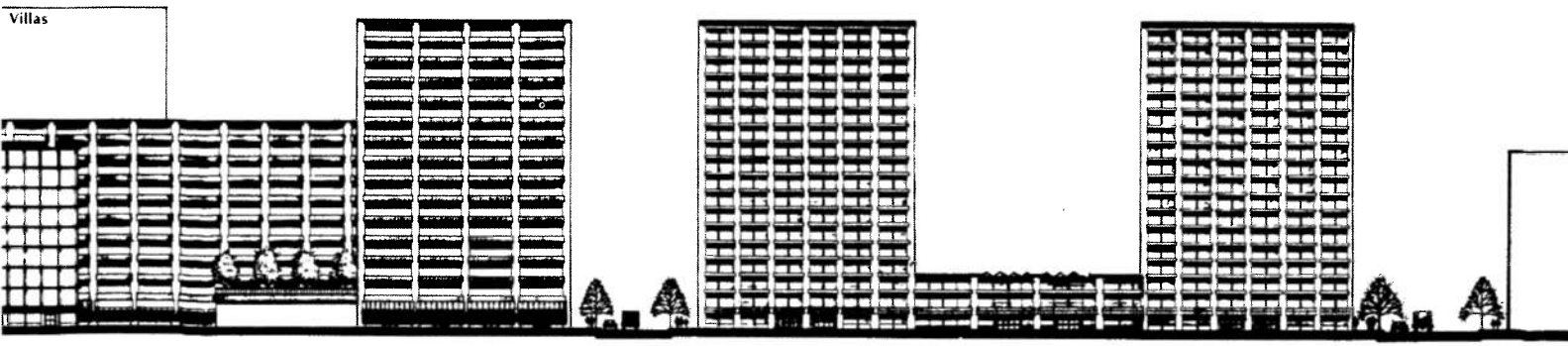
Section (North-South); Wilson



Bld. to Washington Blvd.

9th St. N.

Wilson Blvd.



C-O-A

C-O-A

C-3

Commercial Development

The General Land Use Plan supports substantial commercial growth in Ballston. This section identifies existing conditions which can provide direction for future commercial activity.

Ballston's status as a commercial center dates back to the 1940's when commercial uses were established along Wilson Boulevard, Fairfax Drive and North Glebe Road. By 1950 Ballston contained forty commercial establishments including seven non-chain grocery stores, five gas stations, four delicatessens and an equal number of restaurants, all having a neighborhood orientation.

The opening of the Parkington Shopping Center in 1951 dramatically changed Ballston's commercial character from a neighborhood to a regional orientation. Ballston became one of Arlington's most important shopping districts in terms of sales and

physical size. As shown in Table 4, the number of retail establishments doubled and annual sales increased almost sevenfold from 1950 to 1952.

In the late 1960's, with completion of the Capital Beltway and several regional shopping malls, Parkington's position in the regional market began to decline. Although Ballston declined as a regional center, it retained a significant portion of Arlington's retail sales.

Table 4
Gross Retail Receipts for Ballston

Calendar Year	Establishments	Actual	Constant 1967	Percent of County Retail Sales
1950	40	\$ 3,970,094	\$ 5,506,372	3.4%
1952	81	27,210,161	34,226,618	17.6%
1956	90	33,872,053	41,611,859	16.6%
1960	99	33,511,192	37,780,374	13.8%
1967	102	50,941,380	50,941,380	15.8%
1970	107	44,968,226	38,665,715	11.7%
1975	102	48,997,258	30,395,321	9.4%
1976	106	70,679,398	41,772,694	13.2%
1977	89	55,957,379	30,984,152	11.2%

SOURCE: Arlington County Commissioner of Revenue (as of 1977)

COMMERCIAL ZONING

Ballston encompasses approximately 258 acres of land with 98 acres zoned for commercial/office use. Table 5 provides a breakdown of commercial land by zoning district.

Table 5
Commercial Zoning in Ballston

District	Land Square Feet (Acres)	Percent Of Total
C-1	9,583 (0.22)	0.1
C-2	1,322,654 (30.36)	31.1
C-3	571,507 (13.12)	13.5
C-O & C-O-2.5	632,928 (14.53)	14.9
C-O-A	1,363,863 (31.31)	
C-M	356,584 (8.19)	8.4
Total	4,257,119 (97.73)	100.0

The statistics used in this section are drawn from the "Ballston Commercial District" as compiled by the Commissioner of Revenue. This district extends slightly beyond the Ballston station area boundaries.

COMMERCIAL LAND USE

There are approximately 52 acres of land in Ballston devoted primarily to commercial uses. These contain a gross floor area of about 780,000 square feet. Office uses occupy approximately 19 acres of land and provide about 1,160,000 square feet of gross floor area. There are approximately 27 acres of commercially zoned land presently not used for commercial purposes. Map 15 identifies the location of commercial establishments and office buildings.

The number of commercial establishments in Ballston are almost equally divided between the retail and service categories. Table 6 provides the most recent data on the number of retail and service establishments.

Table 6
Commercial Establishments
by Retail and Service Categories
in Ballston

Commercial Activity	# Of Establishments
RETAIL TRADE	
Restaurant	13
Auto Dealer	8
Gas Station	8
Furniture/Appliance	7
Clothing/Shoe	5
Grocery/Deli	5
Department Store	2
Drug Store	2
Miscellaneous ¹	52
TOTAL	102
SERVICE	
Repair	26
Personal	22
Finance/Insurance/Real Estate	18
Professional	18
Contract Construction	15
Business	12
Government	2
Education	2
Miscellaneous	4
TOTAL	119

¹Examples of miscellaneous retail trade establishments include antique shops, book stores, newsstands, florists, gift and novelty shops, sporting goods stores, jewelry stores, and art and curio shops.

SOURCE: 1975 Field Survey — Office of Community Affairs, Planning Division and Commissioner of Revenue.

Gross receipts for retail establishments in the Ballston Shopping District totaled \$55,957,379 in 1977. Automobile dealers and department stores accounted for almost 64 percent of gross receipts with \$17,810,774 and \$17,702,737, respectively. Drug stores, restaurants and gas stations accounted for another 14 percent of total sales with \$3,289,145, \$3,184,823 and \$1,387,236, respectively. Gross receipts for service establishments are not maintained on an individual shopping district basis.

The largest concentration of retail establishments is in the Parkington Shopping Center. The 12+ acre Parkington site contains thirty-two stores, including a major department store, small clothing and specialty shops, a pet store, bookstore, hair salon and two restaurants. The center includes a 5-story parking garage and 356,000 square feet of commercial gross floor area. Additional retail shops are found along Wilson Boulevard and Glebe Road in close proximity to Parkington.

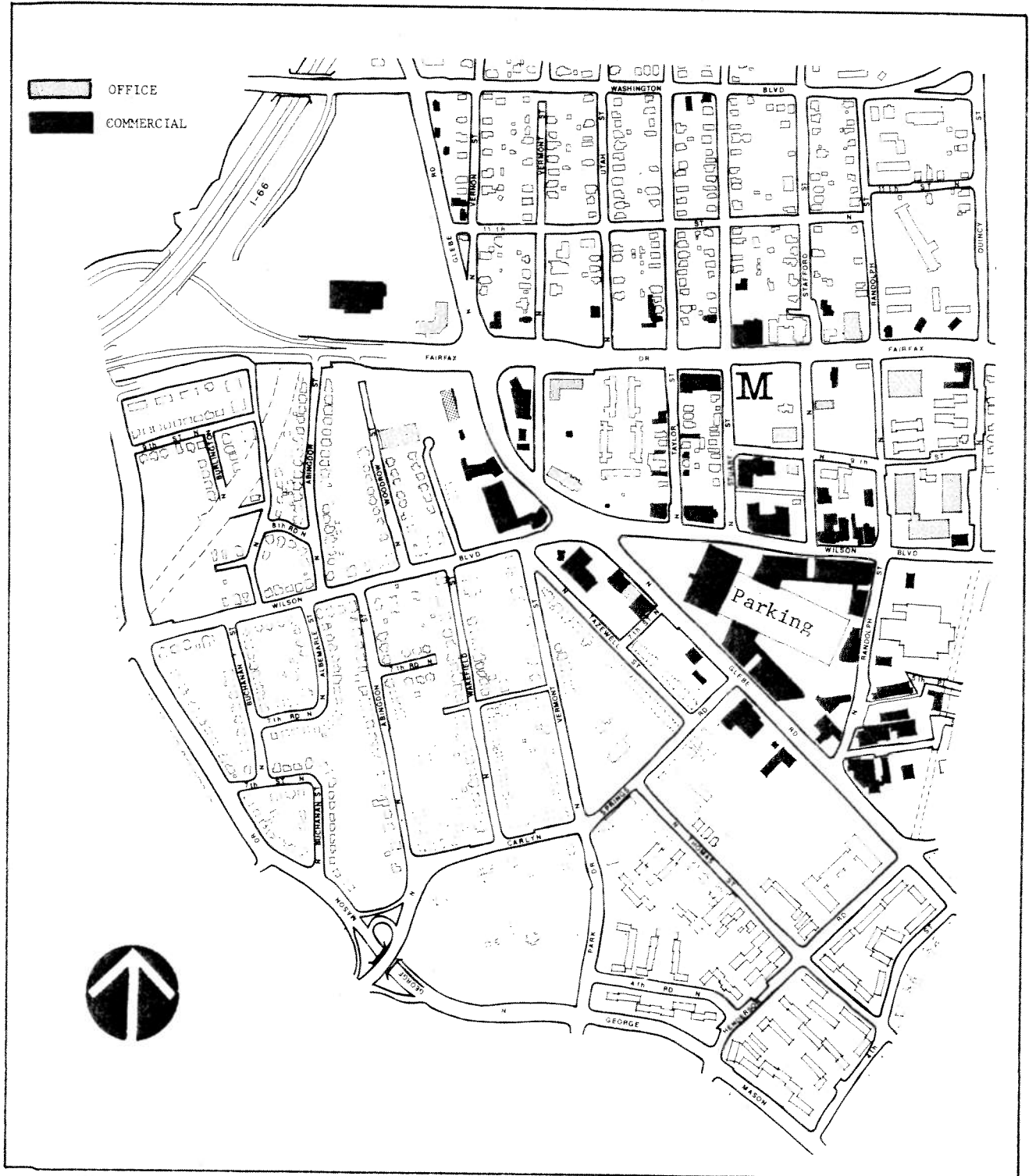
COMMERCIAL GROWTH POTENTIAL

Theoretically the General Land Use Plan can support in excess of 3 million square feet of commercial space in areas presently designated as general and service commercial. Clearly, the General Land Use Plan and appropriate zoning categories do not place constraints on commercial growth in Ballston; the extent of commercial space will instead be defined by market considerations.

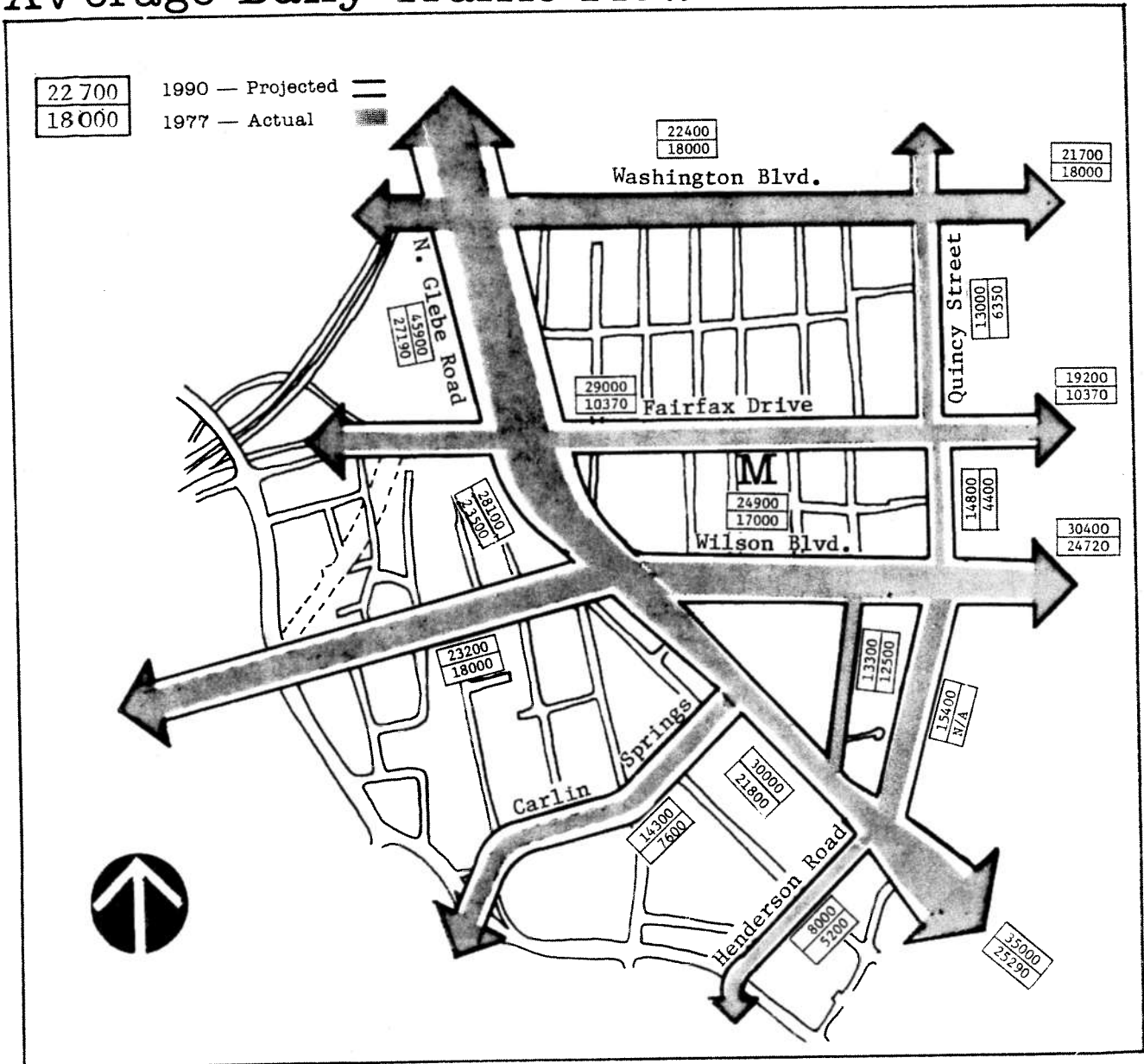
There are a number of existing and planned features in Ballston which support commercial growth. As discussed previously, Ballston is established as a commercial center and new office and apartment development will have a positive impact on commercial demand. Ballston also benefits from excellent access and visibility provided by the major streets of North Glebe Road, Wilson Boulevard and Fairfax Drive. As shown on Map 16, traffic on these high volume facilities will continue to increase. Extension of the Metro system will bring more people through Ballston; and as importantly, completion of I-66 will provide improved automobile access into Ballston.

Preliminary staff studies indicate that there is clearly sufficient market demand to support a regional retail center in Ballston. This finding is reinforced by a proposal now under study for renovation of the Parkington facility into a modern regional shopping center.

Office and Commercial Use



Average Daily Traffic Flow



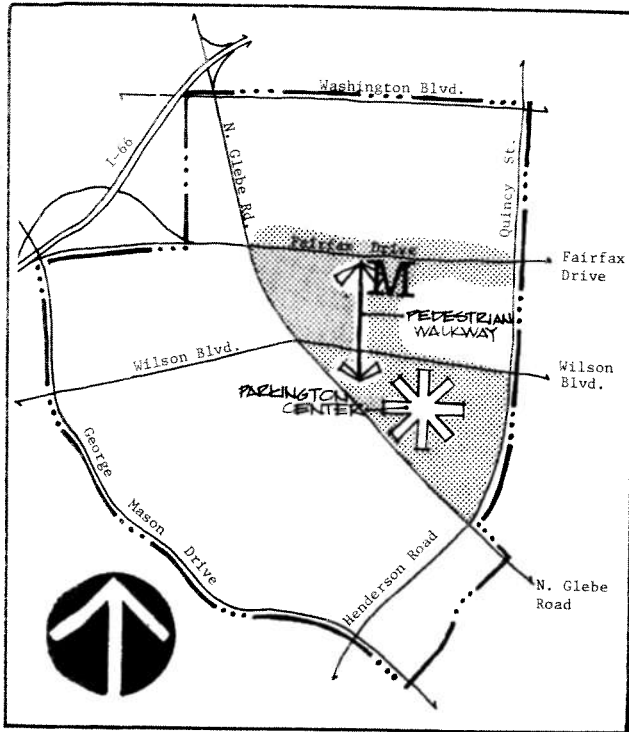
FRAMEWORK FOR FUTURE DEVELOPMENT

There are several features in Central Ballston which help define a framework for the physical location of commercial development. As shown in Figure 32, Parkington, the Metro station, Fairfax Drive, Glebe Road and Wilson Boulevard form a pat-

tern with high visibility and excellent access. Experience with site plan projects in Arlington indicates that these attributes are essential for commercial success. While Figure 32 establishes a commercial district concept which can provide some direction, the final location of commercial space will depend upon market conditions, site constraints and architectural design.

Figure 32

Commercial District Concept



Pedestrian Mall

As part of the walkway improvements for Ballston, the County Board has approved construction of Stuart Street Walkway between the Metro station and Parkington. A description and illustration of the Stuart Street Walkway is presented in the Urban Design Section.

The Walkway offers an opportunity to demonstrate the County's commitment to a quality pedestrian system and commercial revitalization. The County should encourage extension of the walkway concept along adjacent portions of Wilson Boulevard and Fairfax Drive. Extension of the walkway concept on these streets could be achieved through the site plan process as redevelopment occurs.

Parkington

In September 1979, the owners of Parkington introduced a proposal for development of a regional shopping center in the Parkington block. The proposal would provide approximately 800,000 square feet of commercial floor area. It would contain two department stores and an intervening mall. The mall would be placed on top of a two story parking structure which would cover most of the Parkington block. A five story parking garage would be

constructed adjacent to Glebe Road. The mall could be expanded across Wilson Boulevard or North Randolph Street at some time in the future. The present proposal would involve substantial participation by the County. One alternative means for this participation would be the provision of a publicly funded parking facility. The County is currently evaluating the Parkington proposal and several other approaches to a regional shopping facility. Two concepts for Parkington revitalization are discussed below.

Concept 1, as shown in Figure 33, largely depicts the alternative proposed by the owners of Parkington. It includes full revitalization of Parkington using the existing block area bounded by Wilson Boulevard, North Glebe Road and North Randolph Street. Two department stores are proposed with an intervening mall area placed atop a two level parking structure which covers most of the site. A five level parking garage would be constructed along Glebe Road. This proposal could be expanded in the future across North Randolph Street or Wilson Boulevard. The elevated mall might suggest the use of a pedestrian bridge to tie into adjacent development.

Concept 2, as shown in Figure 34, is similar to the Parkington proposal; however, the mall is shown with a direct connection across Wilson Boulevard to the Metro station. A third department store could be developed in the block adjacent to Wilson Boulevard. This block would be tied into both Parkington and development of the Metro block via an elevated pedestrian system. This concept provides a convenient and sheltered connection between Parkington and the Metro-rail system.

CONTINUED PLANNING

Commercial facilities in Ballston can be seen to benefit the community in several ways. Service and retail businesses can broaden the tax base, provide convenient shopping opportunities and contribute to the vitality of the community.

Planning efforts in recent years have focused on Parkington as the center for commercial revitalization in Ballston. This orientation stems from Parkington's present status as a commercial facility and the owner's expressed intent to consider renovation.

While the County continues to encourage revitalization of Parkington as a desirable element of the Ballston plan, there is also a need to maintain a posture of flexibility in regard to commercial

Figure 33

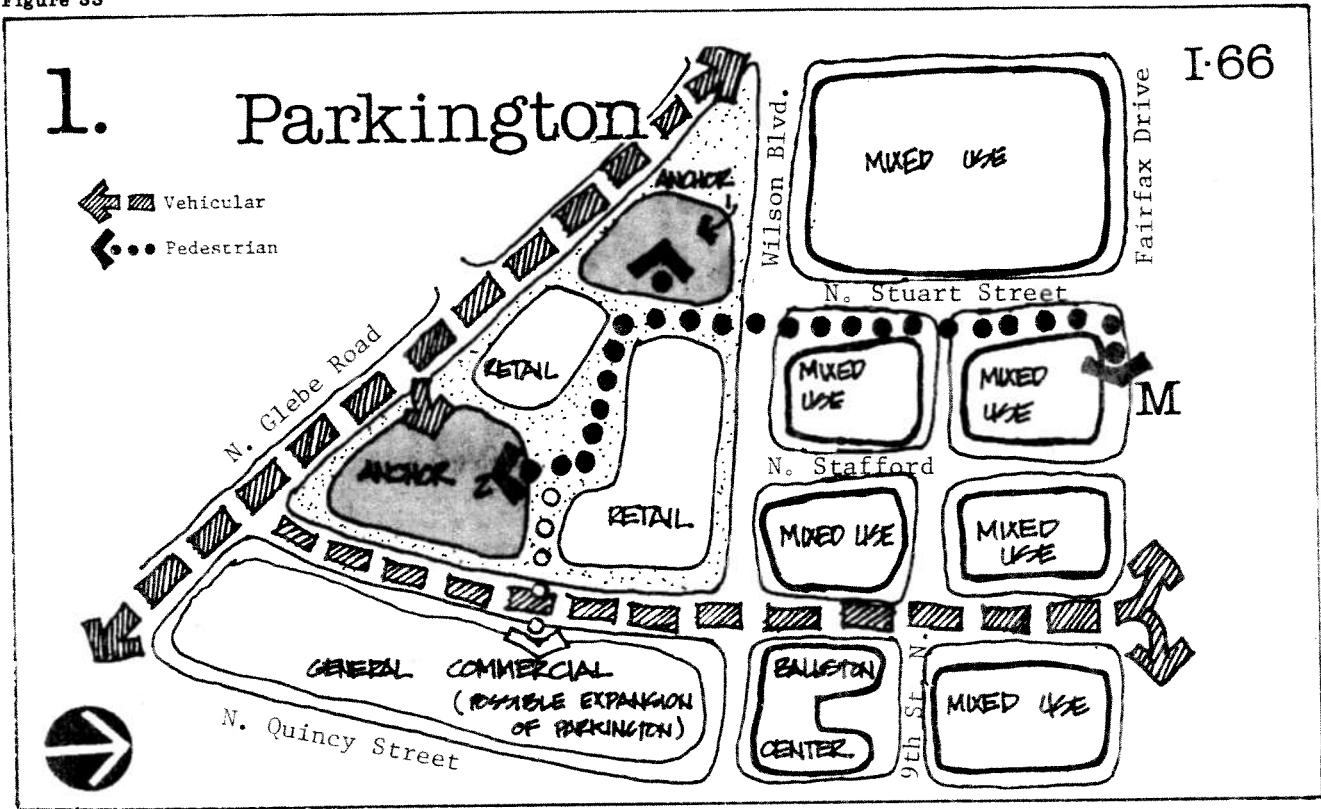
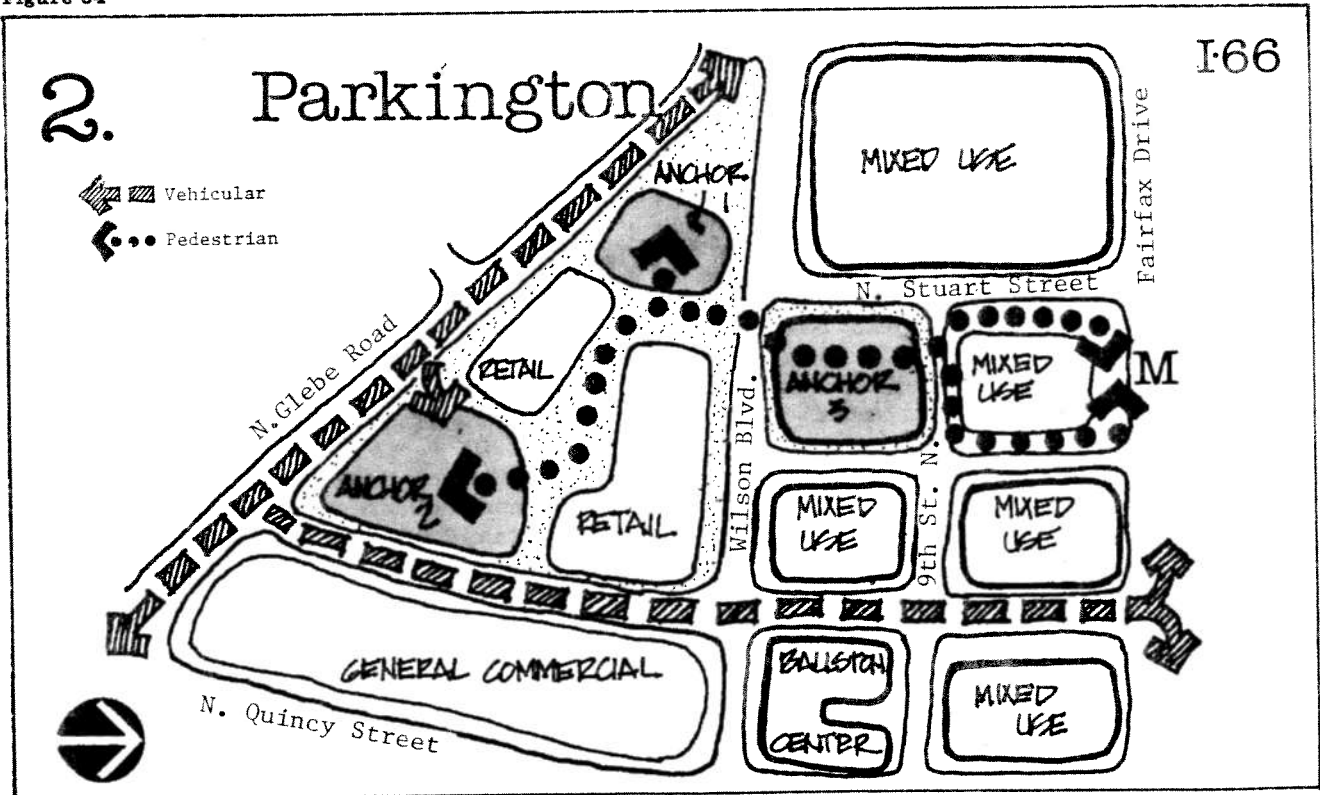


Figure 34

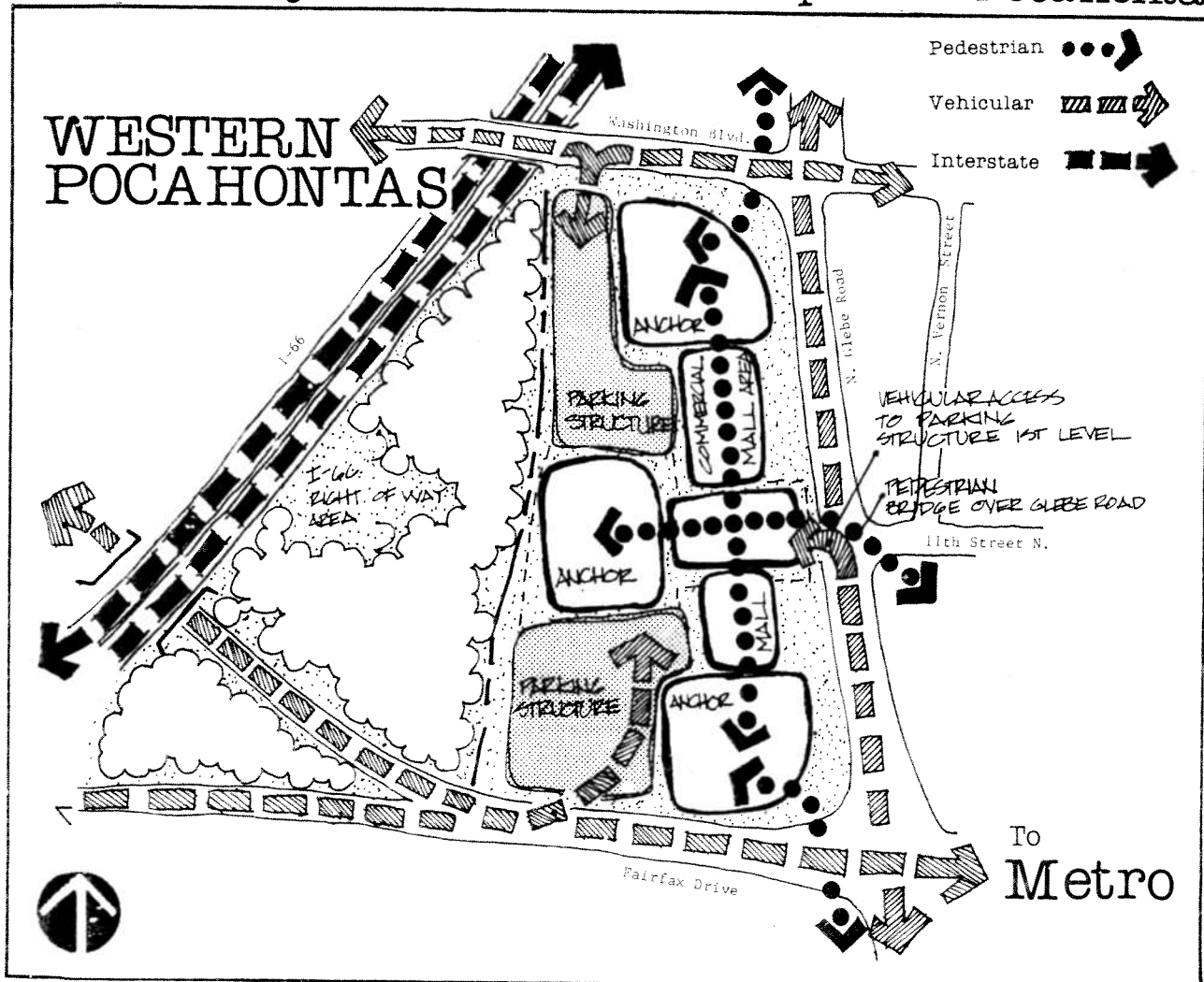


growth. The revitalization of Parkington fits well into the General Land Use Plan policy and sector plan discussion. However, if Parkington proves infeasible, commercial growth in Ballston may need to take a different direction.

The block containing the Western Pocahontas tract, for example, could be considered for commercial development. At present the 9+ acre Pocahontas tract is the largest vacant property in Ballston on which commercial development is possible. Consolidation of the three parcels in the Pocahontas block could yield a site comparable in size to the Parkington block. Figure 35 illustrates a conceptual plan for commercial development on the Pocahontas site. Figure 36 displays another alter-

Figure 35

Preliminary Commercial Concept – W. Pocahontas

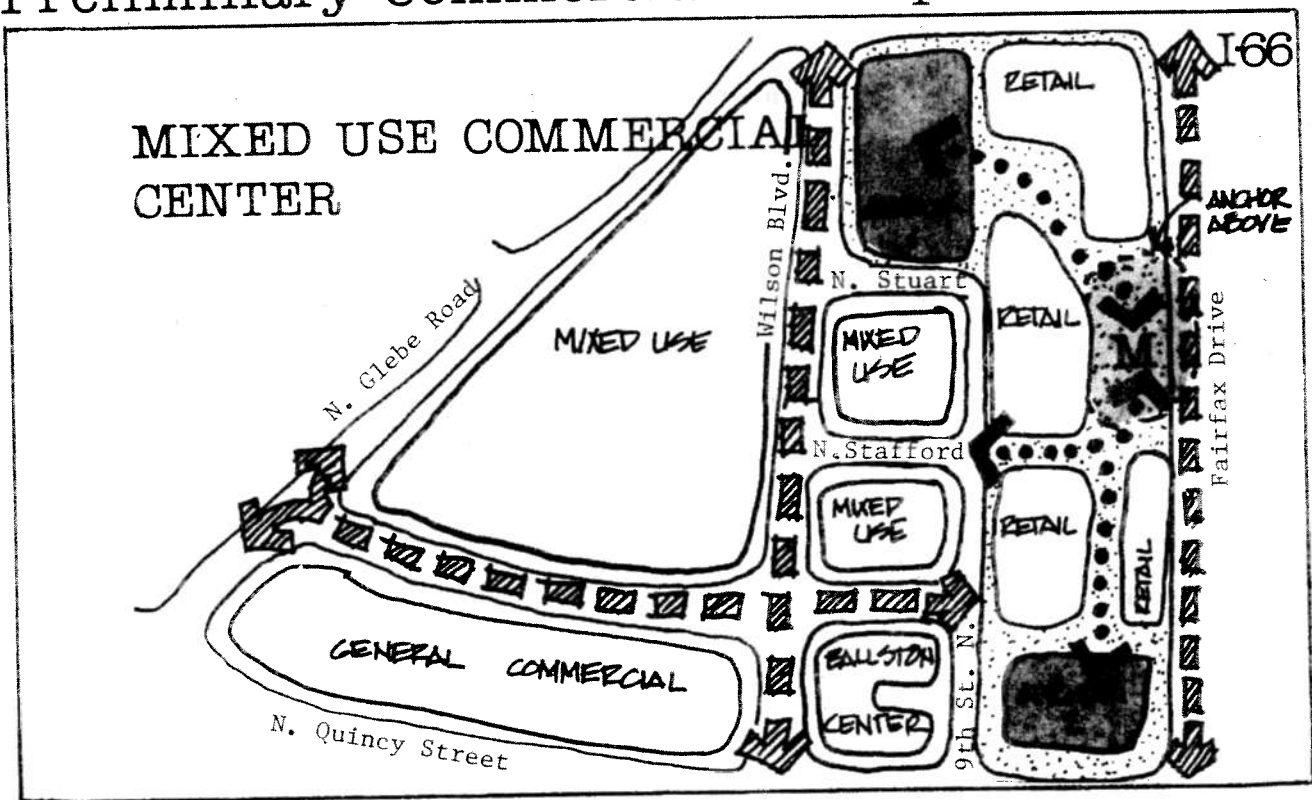


native which has been discussed. This concept provides for development of a regional mall in the area immediately surrounding the Metro station. This concept would take maximum advantage of accessibility provided by both the Metro system and I-66.

As discussed above, commercial revitalization is seen as an essential feature in the Ballston plan. Therefore, the County Board should continue to encourage major revitalization of commercial facilities in Ballston with particular emphasis on Parkington. At the same time, the County should remain flexible in order to achieve a timely and workable policy for commercial growth.

Figure 36

Preliminary Commercial Concept--Metro Site



Transportation

This section describes the existing and planned transportation system. Mass transit, thoroughfares, walkways, bikeways and parking issues are discussed.

Transportation planning is an integral part of planning for the Rosslyn-Ballston Corridor. As a result of a variety of technical studies, plans have been approved for transit, thoroughfares, walkways and bikeways. These plans support the kind of community envisioned in the General Land Use Plan.

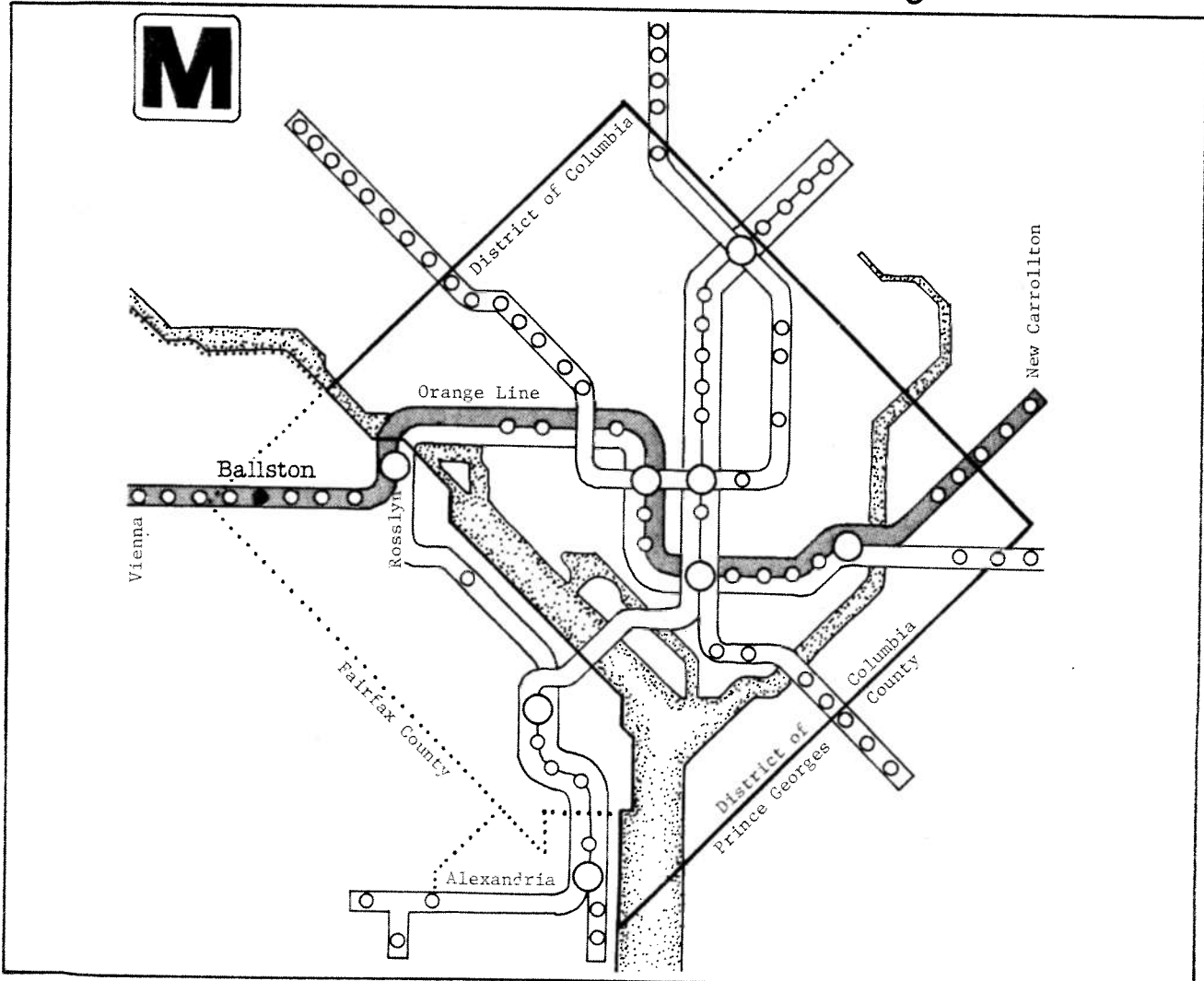
This section presents a summary of the existing and planned transportation facilities in Ballston. In general, the approved plans envision retention of much of the street system. Modifications to the system, including street widenings, closings, operational changes, construction of curb and gutter and walkway improvements are planned. Most of these changes can be achieved as redevelopment occurs, but several projects are recommended for implementation by the County.

TRANSIT SYSTEM

The Washington Metropolitan Area Transit Authority provides transit service in Arlington. Transit service includes both rapid rail and bus operations. At present, transit service is provided along east-west corridors by bus routes which generally terminate at the Rosslyn and Pentagon Metro stations. With the opening of the Ballston Metro Station in December 1979, the majority of the bus operations in north Arlington were formed into a feeder system for the five Metro stations in the Rosslyn-Ballston Corridor. The Ballston station is now the temporary terminus for the Orange Line of the rapid rail system which will eventually extend to Vienna (See Figure 37).

Figure 37

Washington Rapid Rail Transit System

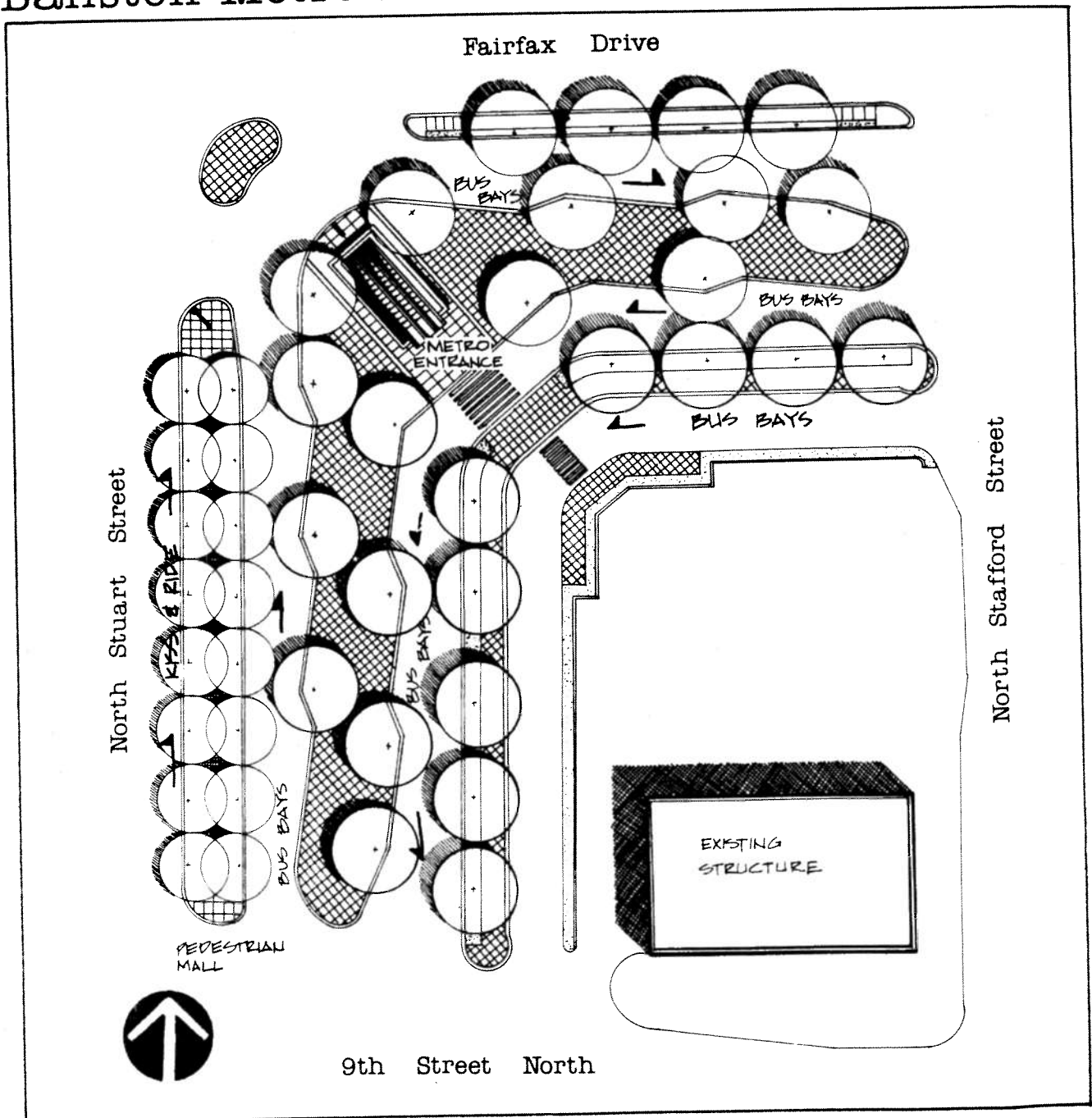


The Ballston Metro Station has been designed as a major interface between the automobile, bus and rapid rail system. Bus transfer and automobile drop-off ("kiss-and-ride") facilities are provided in the block between Fairfax Drive, 9th Street, North, North Stafford Street and North Stuart Street.

Escalator access to the station is provided at the southeast corner of North Stuart Street and Fairfax Drive. Handicapped access is located at the northwest corner of Stuart Street and Fairfax Drive. Figure 38 shows the surface facilities at the Metro station.

Figure 38

Ballston Metro Station



The surface facilities of the Ballston station were not designed to handle the traffic projected during the interim period that the station serves as terminus for the Orange Line. It is now projected that up to 110 buses will arrive in peak hour during this period; however, this number may increase if more service from Fairfax County is routed over I-66 to the Ballston station. After extension of the Orange Line, the surface facilities should be adequate to handle the 75 buses projected during peak hour.

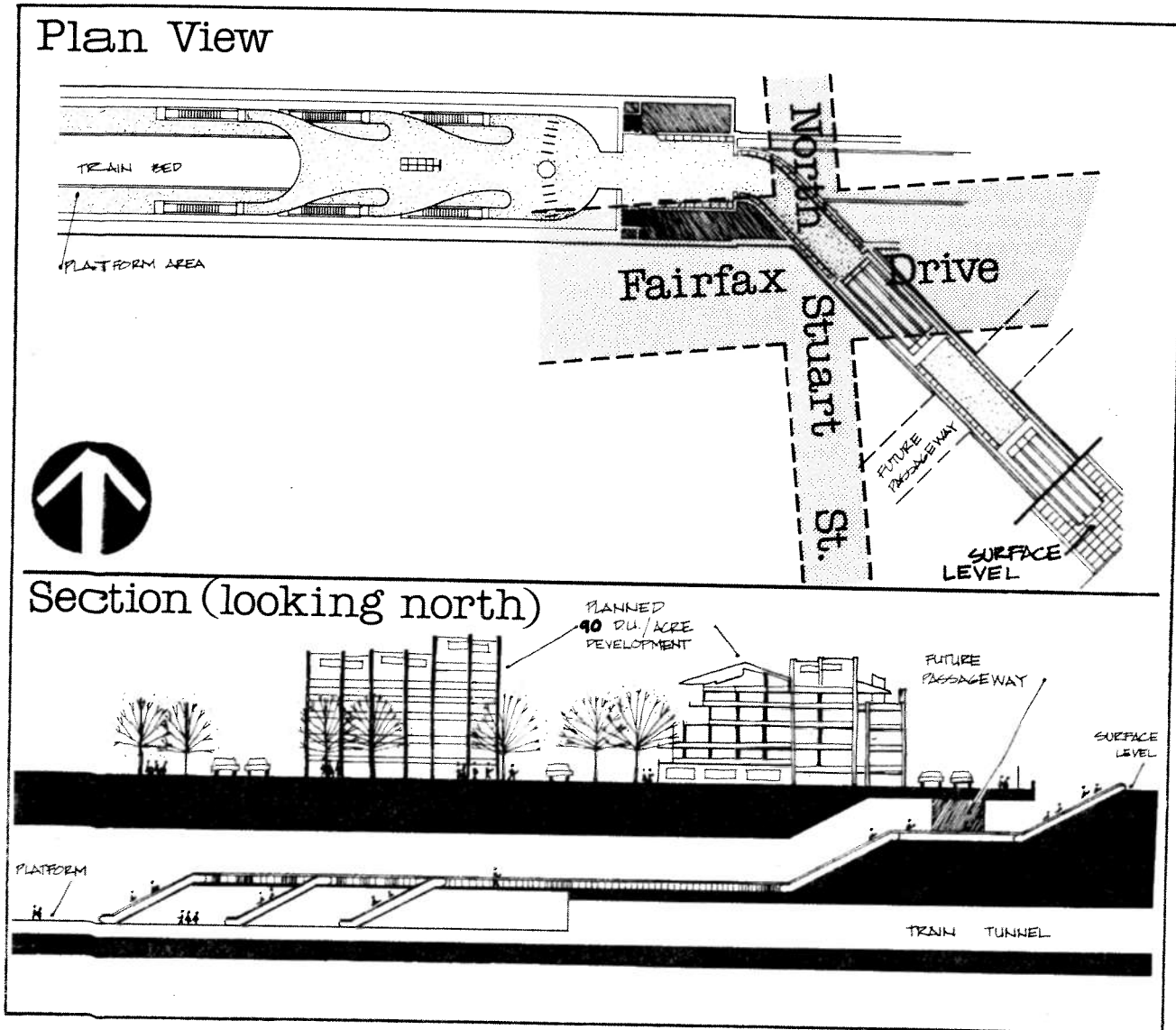
In order to improve access to the Ballston Metro Station, the County Board has allocated \$160,000 for street improvements and \$95,000 for sidewalk

improvements. Of this total amount, \$80,000 has been appropriated to fund a portion of North Stuart Street improvements, including the Stuart Street Walkway. The remaining funds are available for additional Metro access improvements in the station area.

The first sub-surface platform level in the Metro station was constructed with panels which may be connected to future pedestrian tunnels as redevelopment occurs. The tunnels could provide direct access into new projects and access across North Stuart Street and Fairfax Drive. Figure 39 shows the sub-surface design of the station.

Figure 39

Sub-Surface Station Area



THOROUGHFARE SYSTEM

Existing Conditions

Map 18 shows the existing street system in Ballston. Approved plans largely support retention of this network; however, the plans require many improvements to existing streets. In general, these improvements can be secured as developer contributions during the redevelopment process.

Approved Plans

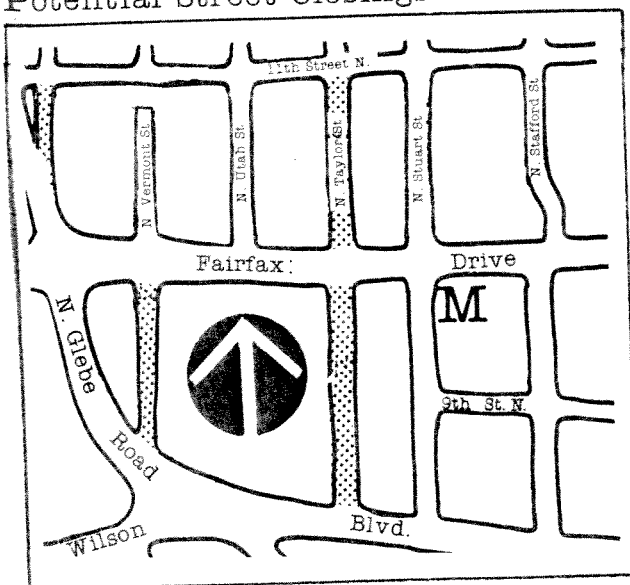
The Master Thoroughfare Plan defines the overall street system planned in Arlington. It designates the major components of the street network, listing primary and secondary arterials, distributors and collectors.

Map 19 shows the Master Thoroughfare Plan for Ballston. Two additional transportation plans have been developed for Ballston. The **Ballston Transportation Plan**, as approved by the Board, articulates the future street pattern and circulation plan. The Passonneau study, **Street Design for Ballston**, as approved by the Board, provides a detailed street design plan for North Ballston. Map 20 incorporates the approved elements from both the **Ballston Transportation Plan** and the **Street Design for Ballston**. It displays the approved number and direction of planned travel lanes and on-street parking areas.

The approved transportation plans for Ballston have identified a number of local streets which may be closed and potentially vacated. These local streets are shown on Map 17. In the area north of

Map 17

Potential Street Closings



Fairfax Drive, the closings can help to reduce traffic intrusion into the areas planned for infill housing. The Passonneau study as approved, supports the closing of North Stuart, Taylor and Utah Streets near Fairfax Drive. In accord with the Passonneau study, the County should move to place barriers at these locations to ensure that Metro related traffic does not adversely impact the neighborhood.

The approved street closings can also provide flexibility for site consolidation and development in that the right-of-way from closed streets may be vacated and conveyed to private ownership. In addition to the streets shown on Map 17, many alleys may be considered for closing and vacation.

Although Map 17 identifies full segments of streets which may be closed and vacated, the actual street closing design and extent of vacation will be based upon the specific access needs of site consolidation proposals. The street closings and vacations require careful review to insure that local access needs and utility easements are maintained. Vacations are approved by the County Board at public hearings in response to specific requests.

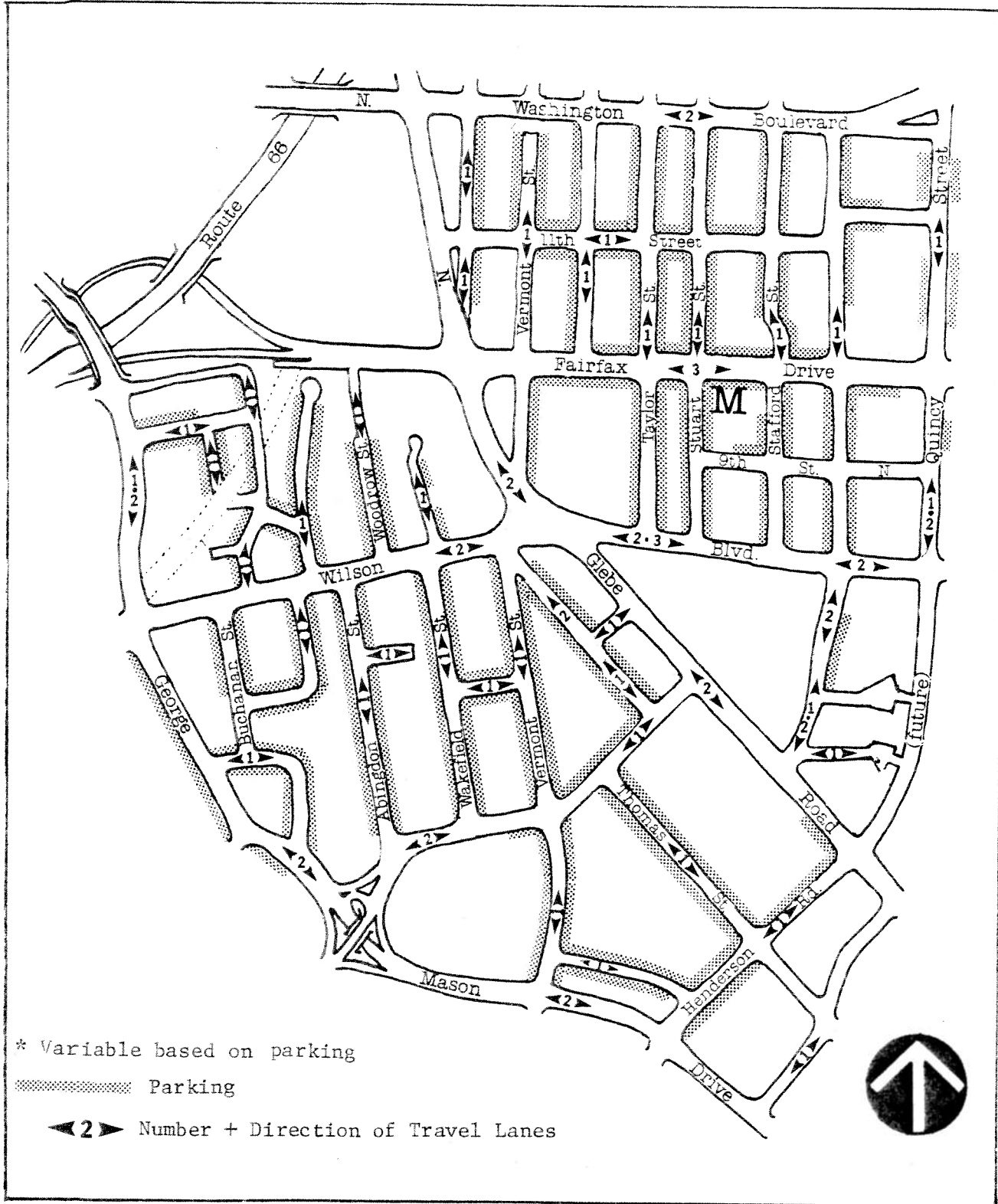
The approved plans for Ballston should be considered for amendment in the future to reflect changed conditions as a result of I-66. With the completion of I-66, the segment of Fairfax Drive between I-66 and Wilson Boulevard should be considered for designation as a primary arterial. At present a portion of this facility is designated as a secondary arterial and a portion is designated as a distributor street.

Implementation

Appendix C provides a street-by-street listing of right-of-way requirements for the planned improvements. Although most of the streets can be improved as part of the redevelopment process, there are several projects which require County implementation. These projects are discussed below.

As part of the Community Development Block Grant Program, the County Board approved the reconstruction of several streets in North Ballston. These improvements include the reconstruction of 11th Street with a special sidewalk treatment on the north side and the reconstruction of three streets between Washington Boulevard and 11th Street, North (Stuart Street, the east side of Taylor Street and the east side of Utah Street). These improvements are programmed for implementation by the end of FY 1981 with funding of \$693,000. Those streets in North Ballston which are not improved as

Existing Street System



part of the Community Development Program should be improved primarily through the redevelopment process.

Fairfax Drive between Clarendon Circle and North Glebe Road has been reconstructed by WMATA and Virginia Department of Highways and Transportation. This facility includes underground utilities, medians with trees, grass utility strips and sidewalks. Although Fairfax Drive is largely constructed to present plans, the utility strips and sidewalks are substandard in width. For the most part, utility strip and sidewalk widenings can be achieved with redevelopment although this may postpone full implementation of the "Boulevard" concept indefinitely. Fairfax Drive should provide an impressive gateway into Ballston and express a commitment to quality design in Arlington. A landscape treatment for Fairfax Drive with median planting, major street trees and improved pedestrian crosswalks has been designed. The proposed design concept is shown in the Urban Design Section. The Virginia Department of Highways and Transportation has agreed to consider partial funding of this project. If this project does not receive additional funding from the state, it is recommended for completion by the County as a capital project.

The extension of Quincy Street from Wilson Boulevard to North Glebe Road has been an approved element of the Master Thoroughfare Plan since 1960. This connection will improve the Glebe Road/Wilson Boulevard intersection and can also improve access to Parkington. The extension of Quincy Street is proposed for funding in FY 1984 at a cost of \$515,000. This project is eligible for federal assistance under the Urban System Program with 70% federal funds and 30% local funds. The extension of Quincy Street will require relocation of the WMATA bus yard and the County Board has endorsed removal of this facility.

WALKWAYS

The development of safe, functional and attractive walkways is viewed as a key element in the redevelopment of Ballston. While the Urban Design Section deals primarily with the treatment of walkways, this section summarizes the approved policies and plans for sidewalk placement.

Existing Conditions

Map 21 identifies the existing walkways in Ballston. Most of the existing sidewalks are functional, but substandard according to approved policy. The existing sidewalks are often too narrow, with planting strips and street trees frequently omitted.

Walkway Policy

In 1977, the County Board adopted the Master Walkways Policy Plan which establishes minimum standards for walkways in Arlington. This county-wide policy provides for sidewalks and street trees along both sides of streets. As shown in Table 7, sidewalk width standards vary according to land use.

Table 7

Sidewalk Width Standards

Land Use	Sidewalk	Planting and Utility Strip
Low Density Residential (Single Family)	4 Feet	4 Feet
Medium Density Residential (Townhouse, Low-Rise Apt. Local Commercial and Service Districts)	6 Feet	4 Feet
High Density (High-Rise Apt. Commercial and Office)	10-20 Feet	4 Feet

Walkway plans for Ballston are derived from two sources. The Passonneau study provides plans for North Ballston and the Walkway Policy Plan provides guidance for Central Ballston. Map 22 displays the planned walkway system in Ballston.

The Passonneau study attempted to apply the countywide walkway policies within existing right-of-way in North Ballston. In general, the Passonneau study calls for four-foot sidewalks and four-foot planting and utility strips with street trees. The widths for sidewalks and planting strips however vary to some degree from street to street. A special design was approved for 11th Street, North. This design provides for a brick sidewalk and a double row of trees along the north side of the street as shown in Figure 40. The Passonneau study recommended no sidewalk along the south side of 11th Street between Glebe Road and North Randolph Street. In staff opinion however the south side of the street should be considered for a treatment similar to the north side of the street. This sidewalk could be acquired as redevelopment occurs.

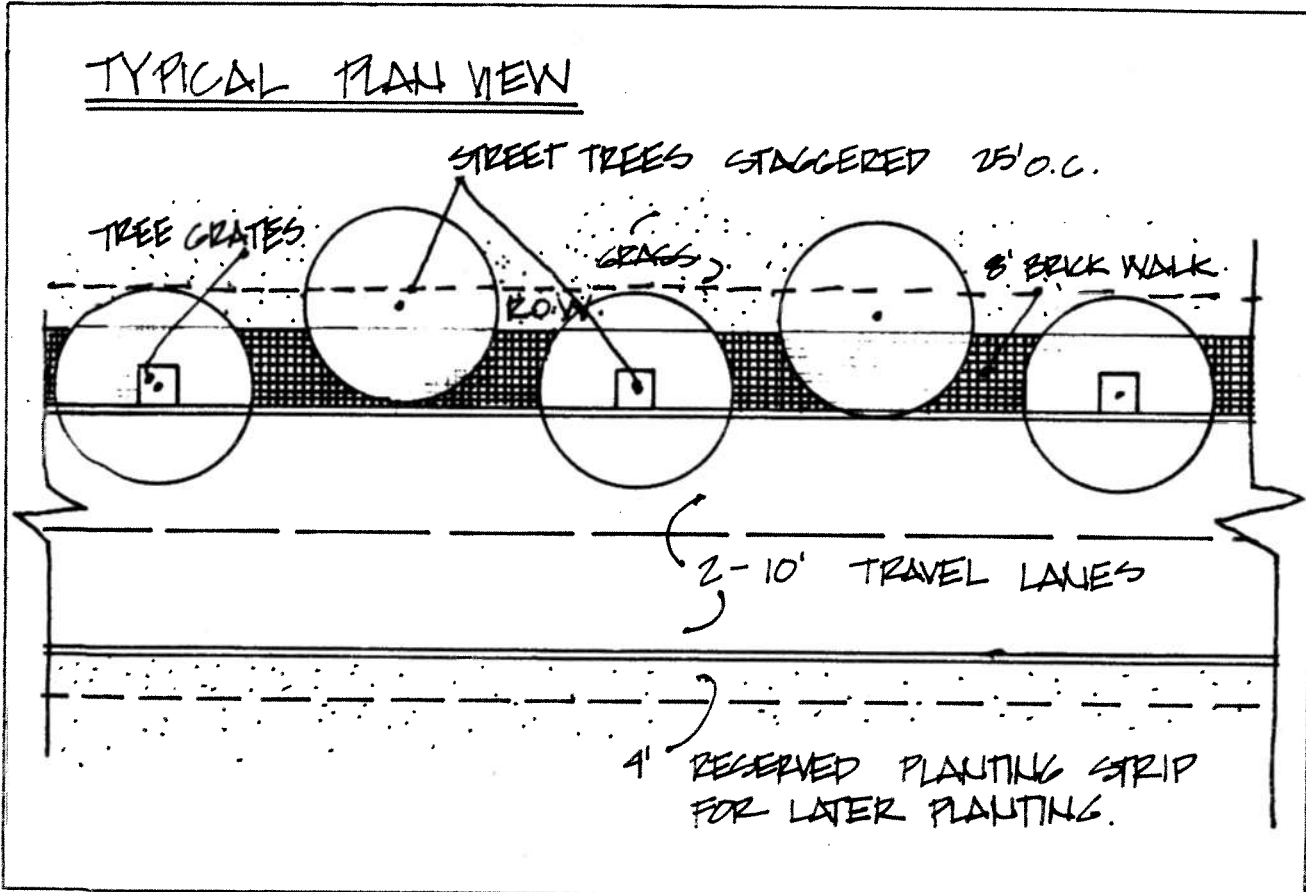
For the blocks between 11th Street North and Fairfax Drive the Passonneau study generally called for four-foot sidewalks and four-foot planter strips along the north/south streets. Planting strips were shown with reduced width on some streets in areas near Fairfax Drive. Along Fairfax Drive, the con-

sultant recommended five-foot sidewalks, planting strips and service drives for new development. The consultant expressed this recommendation as tentative, indicating that final designs along Fairfax Drive would be handled by site plan.

It is recommended that walkways along the north/south streets between 11th Street North and Fairfax Drive be planned generally for four-foot sidewalks and four-foot paved planting and utility strips. This is consistent with the typical treatment in the Passonneau study. The final treatment of walkways along these streets should be tied to the specific characteristics of subsequent development.

Figure 40

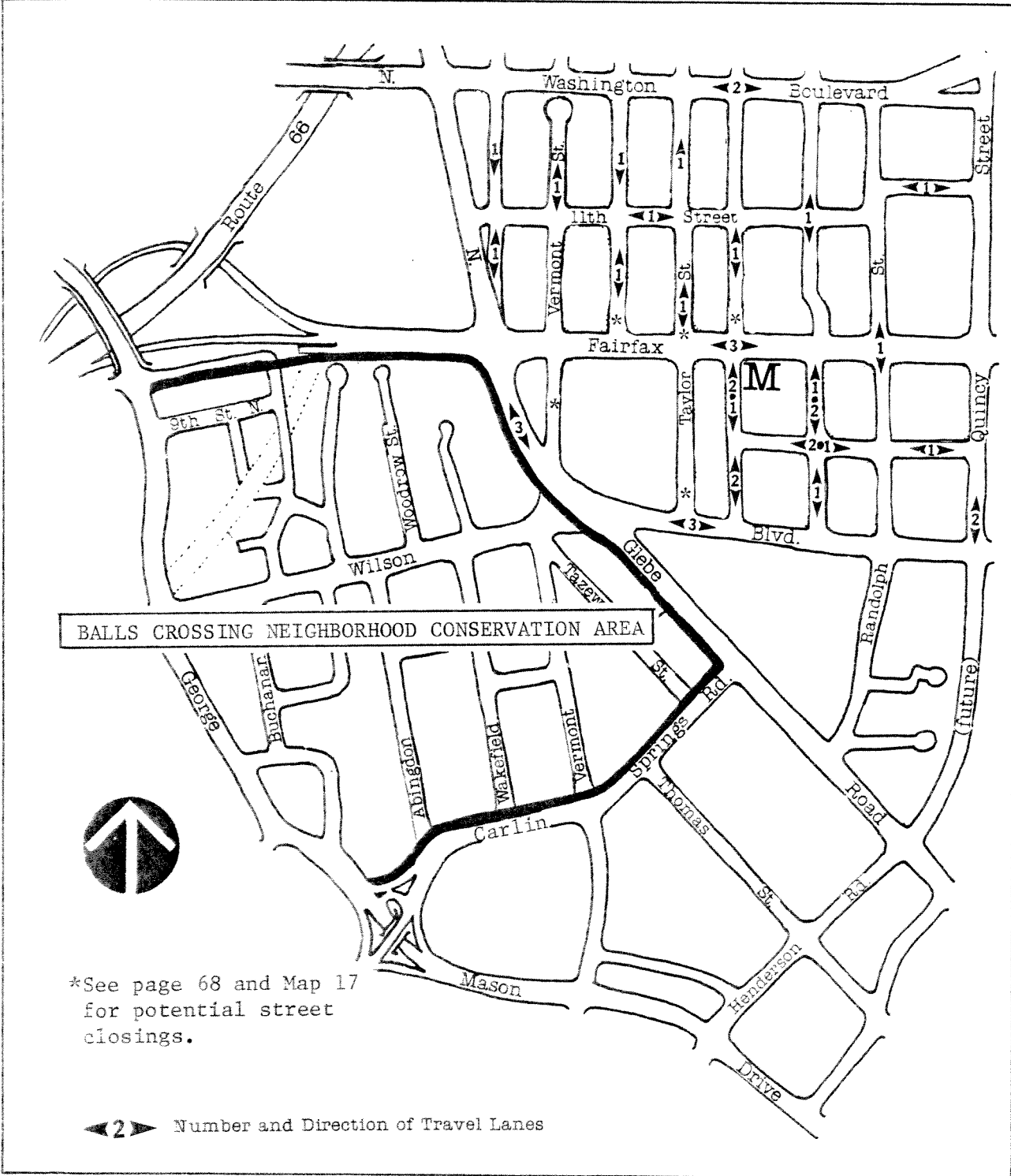
11th Street Design



Along Fairfax Drive, in areas planned for "high medium" residential development, it is recommended that walkways be planned generally for ten-foot sidewalks and four-foot paved planting and utility strips. This treatment is consistent with the Walkways Policy Plan.

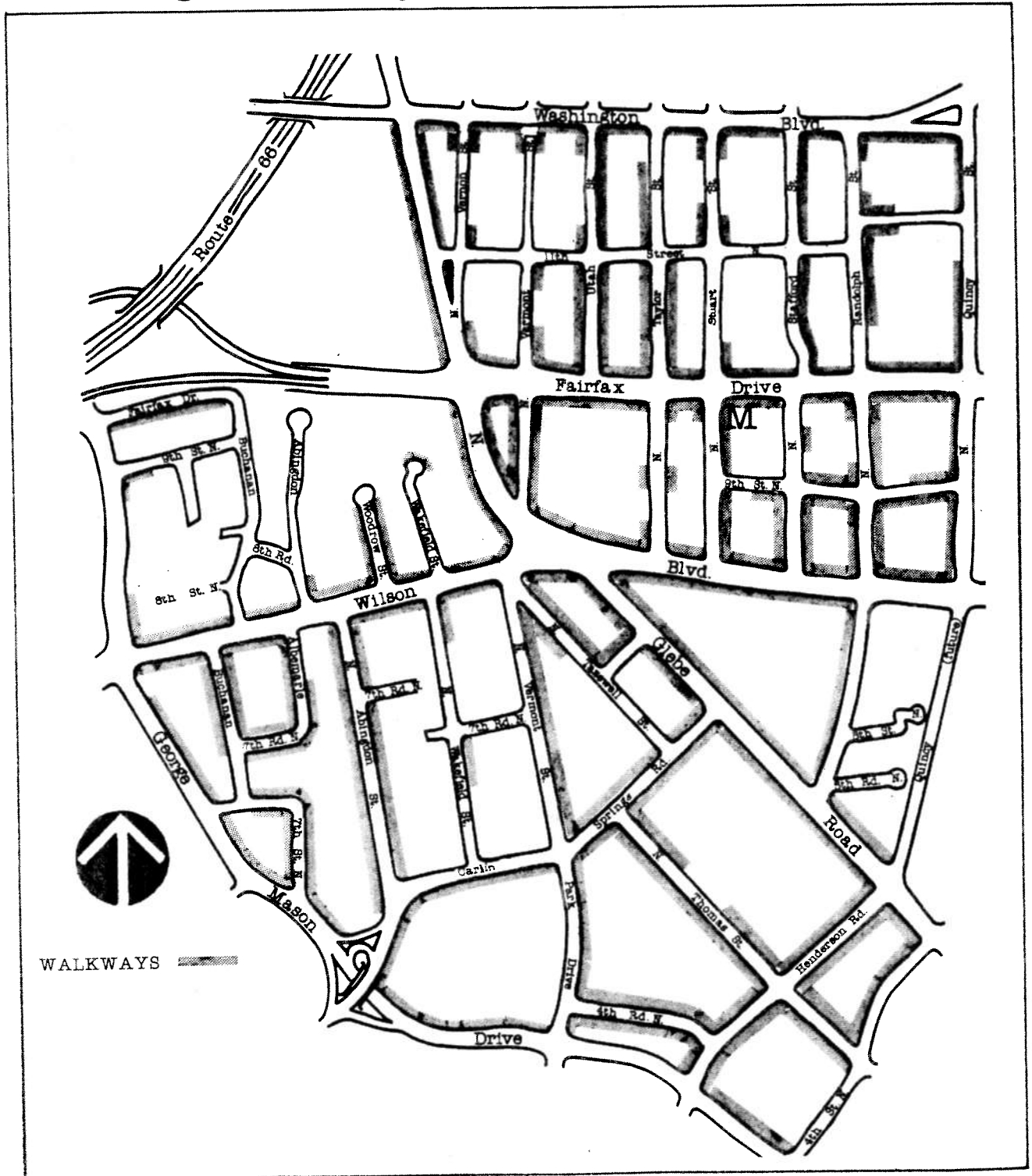
In Central Ballston, application of the Walkways Policy Plan indicates that walkways should at a minimum include ten-foot sidewalks and four-foot planting strips. In general planting and utility strips should be paved with street trees placed in grates.

Approved Street System



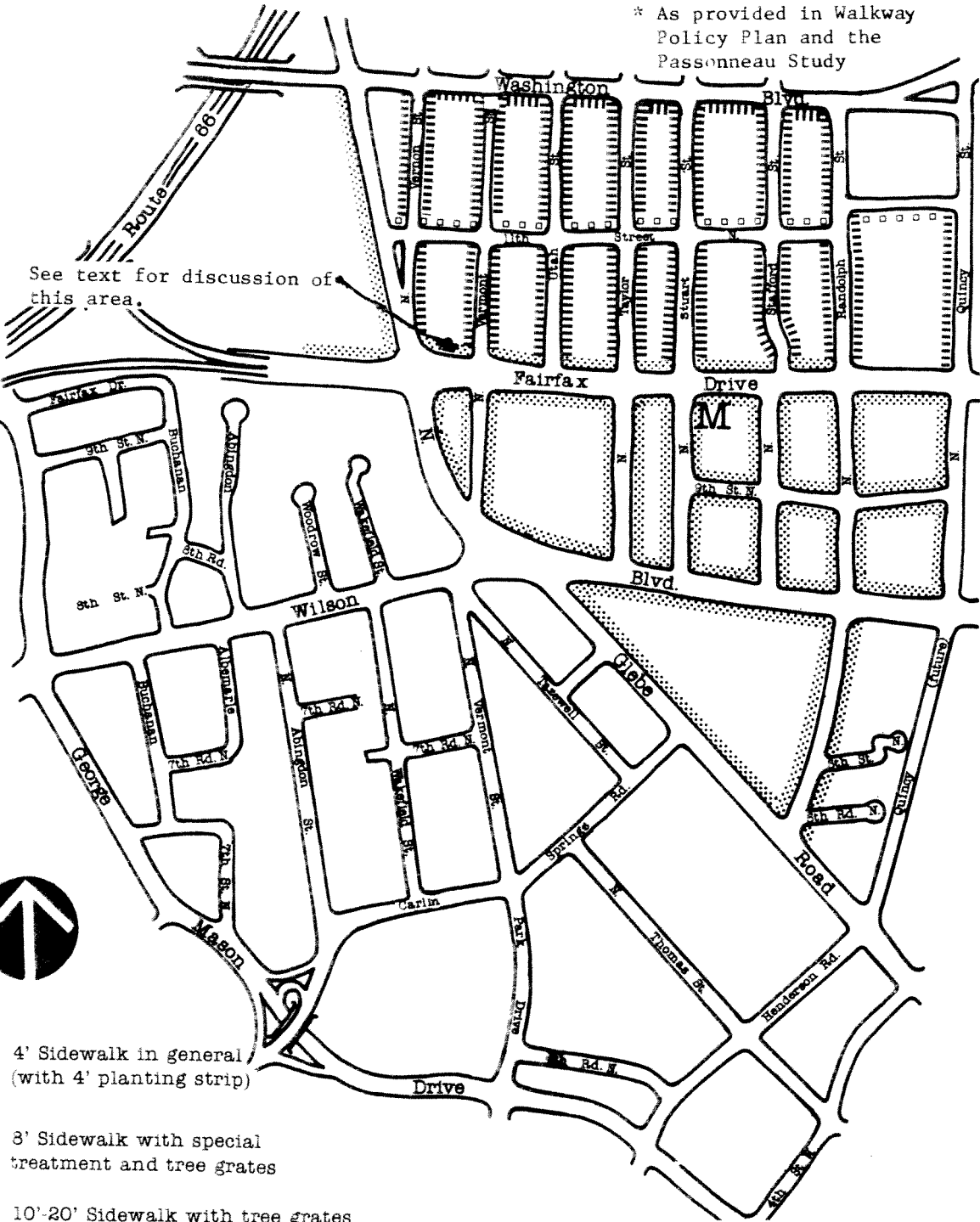
Map 21

Existing Walkways



Approved Walkway System

* As provided in Walkway Policy Plan and the Passonneau Study



Implementation of Walkways

For the most part, the walkways in Ballston can be implemented as developer contributions during the redevelopment process. Several projects however will require County implementation.

The County Board has approved the construction of several walkways north of 11th Street through the Community Development Block Grant Program. These walkways should be completed as described in the thoroughfare discussion.

Several segments of sidewalk have been identified for construction to provide safe pedestrian access to the Metro station. These improvements are funded and should be constructed as soon as feasible. As part of the access improvements in Ballston, one major walkway project is planned. A broad walkway with a pedestrian mall atmosphere has been approved for the east side of Stuart Street between the Metro station and Wilson Boulevard. As shown in the Urban Design Section, the "Stuart Street Walkway" includes an ample sidewalk, street trees placed in grates, coordinated paving, well designed street furniture and pedestrian level lighting. This project represents a commitment by the County to a quality environment. It embodies an attractive and functional design theme which can be extended throughout Ballston. The walkway will also establish a pleasant connection between the Metro station, shops along Wilson Boulevard and the Parkington Shopping Center.

BIKEWAYS

Arlington County has an extensive system of bikeways serving both commuter and recreation purposes. Through the Master Bikeway Plan the Board has approved the extension of the bikeway system to most of the Metro stations. In Ballston, the plan shows the extension of a bikeway from those planned along the Bluemont Drive right-of-way and I-66 to the Metro station. This segment of bikeway is planned along Fairfax Drive.

PARKING

This section describes the existing parking facilities in Ballston and provides a summary of available information on future demand. Central Ballston and areas along Fairfax Drive and North Glebe Road will create the major demand for parking and therefore the discussion is generally restricted to these areas.

Existing Conditions

A significant number of parking spaces are cur-

rently provided in Ballston. Many of these spaces are located in surface lots and represent an inefficient use of land. Table 8 identifies the total number of parking spaces available in Central Ballston and those areas along Fairfax Drive and North Glebe Road.

Table 8
Parking Facilities in
Central Ballston

Type of Facility	Number Of Spaces *
Residential	500
Office	2200
Commercial	3000
On-Street	350

* Rounded to nearest 50

Parkington provides the largest source of commercial parking in Ballston. Approximately 1670 spaces are included on site and most of these spaces are located in the parking structure east of the Hecht Company. The surface parking is heavily used; however, the upper floors of the parking structure are seldom used by patrons. There are a number of smaller parking lots associated with commercial development throughout the area. The total number of spaces related to commercial uses is approximately 3,000. All of these are available at no cost to patrons.

There are approximately 350 on-street parking spaces in Central Ballston and along Fairfax Drive. Typically, these spaces have been considered a convenience for short-term shopping trips and visits. To the extent possible, the County should continue to meter these spaces for short-term purposes.

Office development in Ballston provides approximately 2,200 parking spaces. These spaces have been constructed as part of the private development process and include both structured and surface facilities. Zoning Ordinance provisions for major office development presently require approximately two parking spaces for every 1,000 square feet of gross floor area. This requirement is based on an assumed modal split with 40 percent arrival by mass transit. Apartment complexes in the area provide approximately 500 parking spaces. The Zoning Ordinance requires one and one-eighth parking spaces per unit for the first 200 units and one space per unit for additional units.

Immediate Demand

Immediate increases in parking demand in Ballston

are largely attributable to the opening of the Metro station. This Metro generated demand will be strongest during the time Ballston is the temporary terminal station for the Orange Line. Estimates of demand during this interim period are difficult to project and at present they have not been developed by WMATA.

The 1978 Metro Alternatives Analysis (an evaluation of different options for completion of the Metro rail system) did however identify possible parking demand for 1990, assuming extension of the Orange Line. It was estimated that demand would exist for 1250 spaces at a price of \$2.00 per day. This estimate may provide insight into the order of magnitude of short-run demand at the Ballston station.

During the review of the alternatives analysis in 1978, the County Board indicated that they did not favor the provision of Metro-related parking facilities in the Rosslyn-Ballston Corridor. At this time, WMATA is not planning to provide commuter parking in the corridor.

At present it appears that parking demand will be exceptionally strong in Ballston until further extension of the Orange Line. This demand may be partially met by some of the existing parking facilities now underutilized. In addition, new privately owned commercial parking facilities may be established by-right on underused "C-2" properties. During this short-run period the County should encourage the use of the computer parking ban to avoid parking spillover into residential neighborhoods.

Long Term Demand

Long term demand for parking will be generated largely by increased office and residential development. Estimated new office development of 1.7 million square feet by year 2000 could generate a parking demand for 3400 spaces. Estimated new residential development of 2900 units could generate a demand for 3300 spaces. Commercial development may generate additional parking demand. The owners of the Parkington Shopping Center have indicated they are exploring renovation alternatives which could generate the need for 2000 to 3000 additional parking spaces.

Based on these assumptions of future development and the estimate of 1990 Metro-related needs, Ballston could require from 10,000 to 11,000 additional spaces by year 2000. This is a very rough

estimate based on available projections and present parking regulations.

Conclusion

Under present policy and regulations Arlington relies primarily on the private market for provision of parking. Given the present uncertainty regarding the future demand for parking in Ballston, there is no clear basis for major changes in County policy at this time. The County should continue to monitor parking demand and consider appropriate steps to improve the private market's ability to respond. The Economic Development Commission explored ways this might be achieved and recommended certain approaches to the County Board. As part of the recommended approaches, the County Board recently amended the zoning ordinance in order to relax construction requirements for temporary Metro-related private parking facilities. Throughout the redevelopment process, the County should remain open to other changes in parking policy as they relate to transportation and development goals.

Utilities

The section provides a summary of the water distribution, sanitary sewer and storm drainage facilities which serve Ballston. Improvements needed to support planned growth are recommended for timely funding as part of the County's Capital Improvement Program.

The major utilities which serve Ballston are generally adequate to meet existing demand; however, improvements are needed to serve anticipated redevelopment. Recommended projects and funding estimates are shown on page 6 in the Summary and Recommendations Section. Most of the projects are already included in the current Capital Improvement Program. The projects are listed below by category and shown on Maps 23 through 25.

WATER DISTRIBUTION SYSTEM

The major elements of the existing and planned water system are shown on Map 23. The following projects are recommended for implementation by the County:

1. Construction of a 24-inch main in George Mason Drive from Little Falls Road to I-66.
2. Construction of a 16-inch main in Quincy Street from Lee Highway to Wilson Boulevard.
3. Construction of a 12-inch main in Carlin Springs Road from North Thomas Street to Glebe Road.
4. Construction of a 12-inch main in North Park Drive from North Carlin Springs Road to 4th Road, North.
5. Construction of a 16-inch main in North Thomas Street from North Henderson Road to North Cathedral Lane.

SANITARY SEWER SYSTEM

The sanitary sewer trunk system in the Lubber Run Drainage area, which serves properties west of Stafford Street, is currently at capacity. An inadequate trunk line from George Mason Drive to Four Mile Run is the major problem. Improvement of this trunk line was approved for funding in FY 1980. It is anticipated that construction will begin in the fall of 1980.

Improvement of the sanitary sewer in Wilson Boulevard from North Abingdon Street to Glebe Road has been approved for funding in FY 1985, but is now being recommended for funding in FY 1983.

At present, several sanitary sewers are being upgraded in North Ballston in order to serve poten-

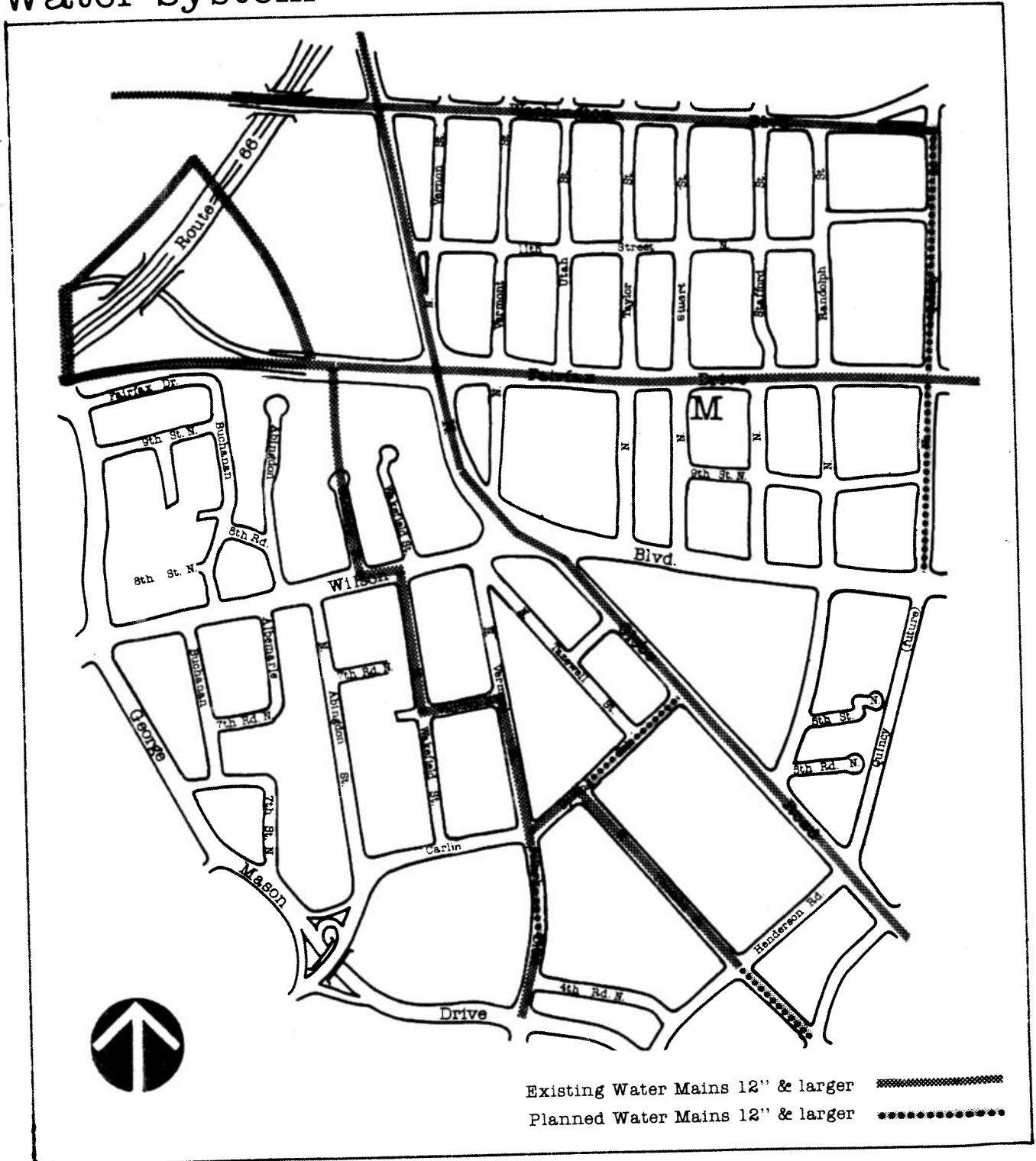
tial development. Sewers are being improved in North Taylor Street from Fairfax Drive to 11th Street and along 11th Street from North Utah Street to North Stuart Street.

Additional minor improvements may be required in local sewers as redevelopment occurs. There is a potential capacity problem in the sewer serving the Parkington site. While not recommended at this time, it may be necessary to upgrade this sewer from Parkington to the trunk line in North Albemarle Street. Adequacy of this sewer will depend on the magnitude of redevelopment in the Parkington block.

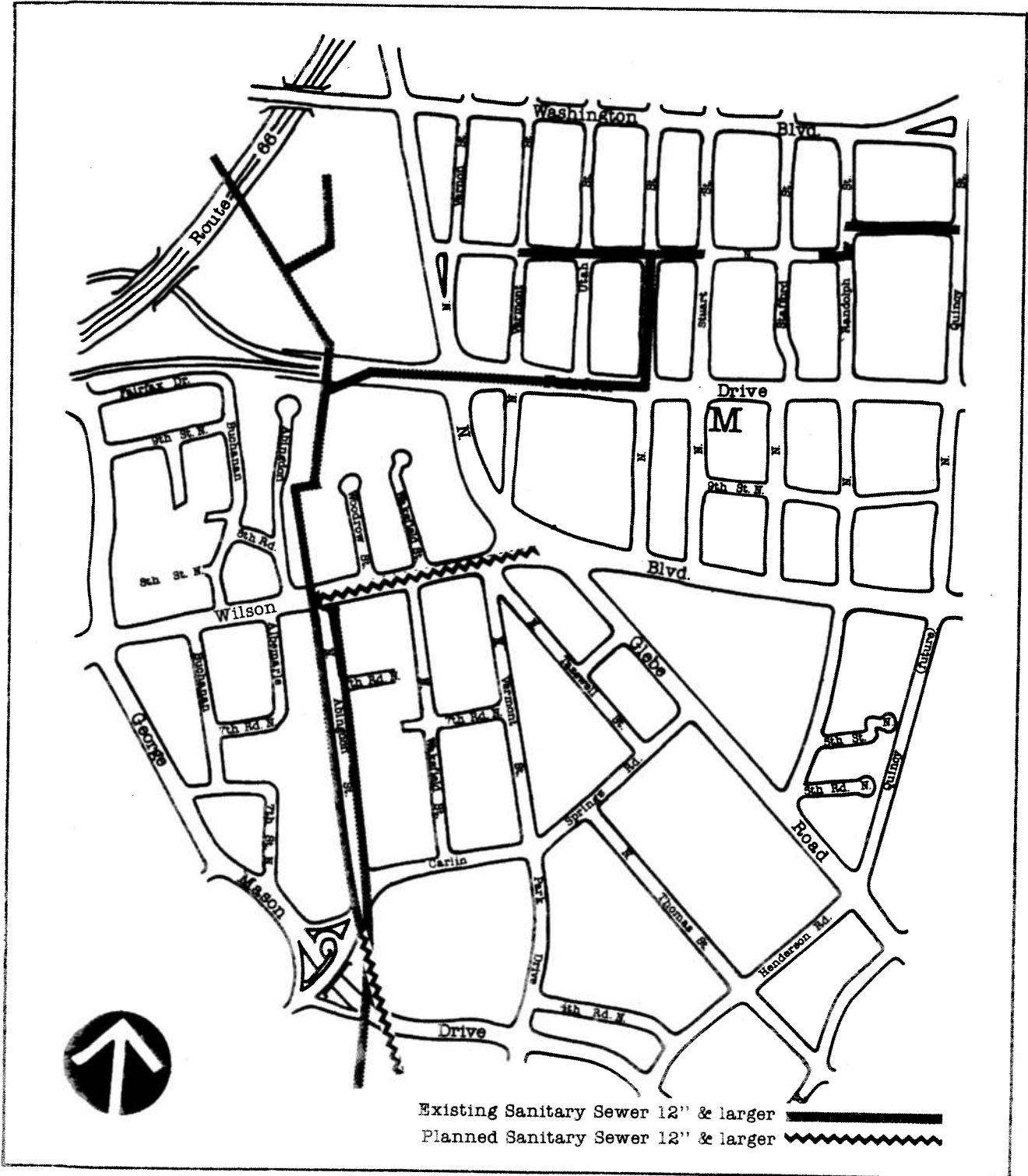
STORM SEWER SYSTEM

The storm drainage trunk system is in place in Ballston with the exception of the line in 11th Street North which is currently under construction. Funding is also available for construction of a needed storm drainage trunk sewer in 9th Street North. With completion of these projects, the overall storm drainage system will be adequate for planned growth. Localized drainage problems in the area will be resolved through street construction and the provision of laterals as redevelopment occurs.

Water System

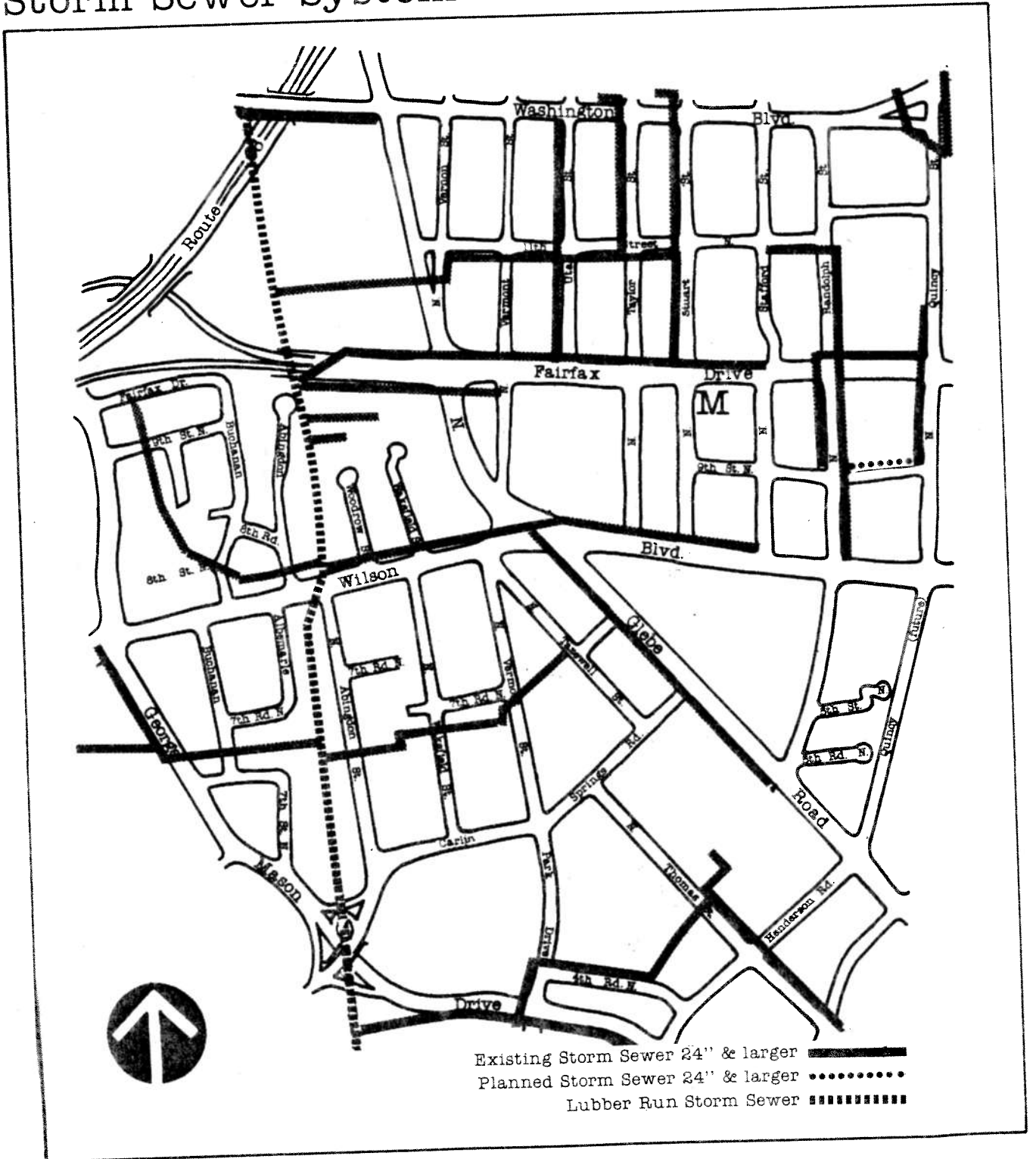


Sanitary Sewer System



Map 28

Storm Sewer System



Community Facilities

This section describes the community facilities which serve Ballston. The facilities and services discussed include police, fire-rescue, libraries, human resources, education and open space.

The term "community facilities" is used in this section to refer primarily to the space and facility needs which are necessary to provide certain County services. The facility categories addressed include police, fire-rescue, libraries, human resources, education and open space. For the most part, the existing facilities are adequate to serve planned development.

POLICE

Police services for Arlington are administered from the Police Department and Detention Center, adjacent to the Court House. This facility was completed in 1974 and designed to accommodate anticipated increases in the police force.

FIRE-RESCUE

Fire Station #2 was constructed in 1977 to replace the old station displaced by Metro construction. In addition to fire protection, the Fire Department is responsible for providing emergency medical rescue service. At present, emergency and rescue services for Ballston are provided out of two stations located in North Arlington; however, space has been provided at Station #2 for a rescue company at a future date.

LIBRARY

The Central Library facility for Arlington County is located just east of Ballston, adjacent to Central Park (formerly Quincy Street Playfield). The library offers more than 242,000 volumes and an extensive record and film collection. The library provides a variety of services including research assistance, children's programs, homebound services, audiovisual materials, teletype equipment for the deaf and other services for the physically handicapped.

HUMAN RESOURCES

The Department of Human Resources (DHR) provides a variety of physical and mental health related services, the majority of which are delivered on a countywide basis from central locations. Many of the facilities are conveniently located close to Ballston. In addition to DHR services, there are three private hospitals and three nursing homes in Arlington.

EDUCATION

Ballston is adequately served by elementary and secondary school facilities. There are three elementary schools serving the area (Jackson, Barrett and Page), with two of the three presently under-utilized. One junior and one senior high school

serve Ballston (Kenmore and Washington-Lee, respectively) and they are also under-utilized. Future development in Ballston is expected to provide predominantly high-rise, multi-family units which characteristically provide few school-age children. Future need for expansion of the school facilities is not anticipated.

Adult education programs are offered on a countywide basis. These include 1) the adult basic education program for those who terminated formal education at an early age, 2) the high school credit program, and 3) vocational programs where the course offerings respond to community interest. The adult education courses are held at public schools throughout the County.

OPEN SPACE

Arlington offers a broad array of recreation facilities ranging from nature centers to active sports facilities. In addition to County parkland and joint-use School Board properties, Arlington has two regional parks and several federally owned open space sites. Ballston is centrally located and has convenient access to the many facilities within the County.

Table 9

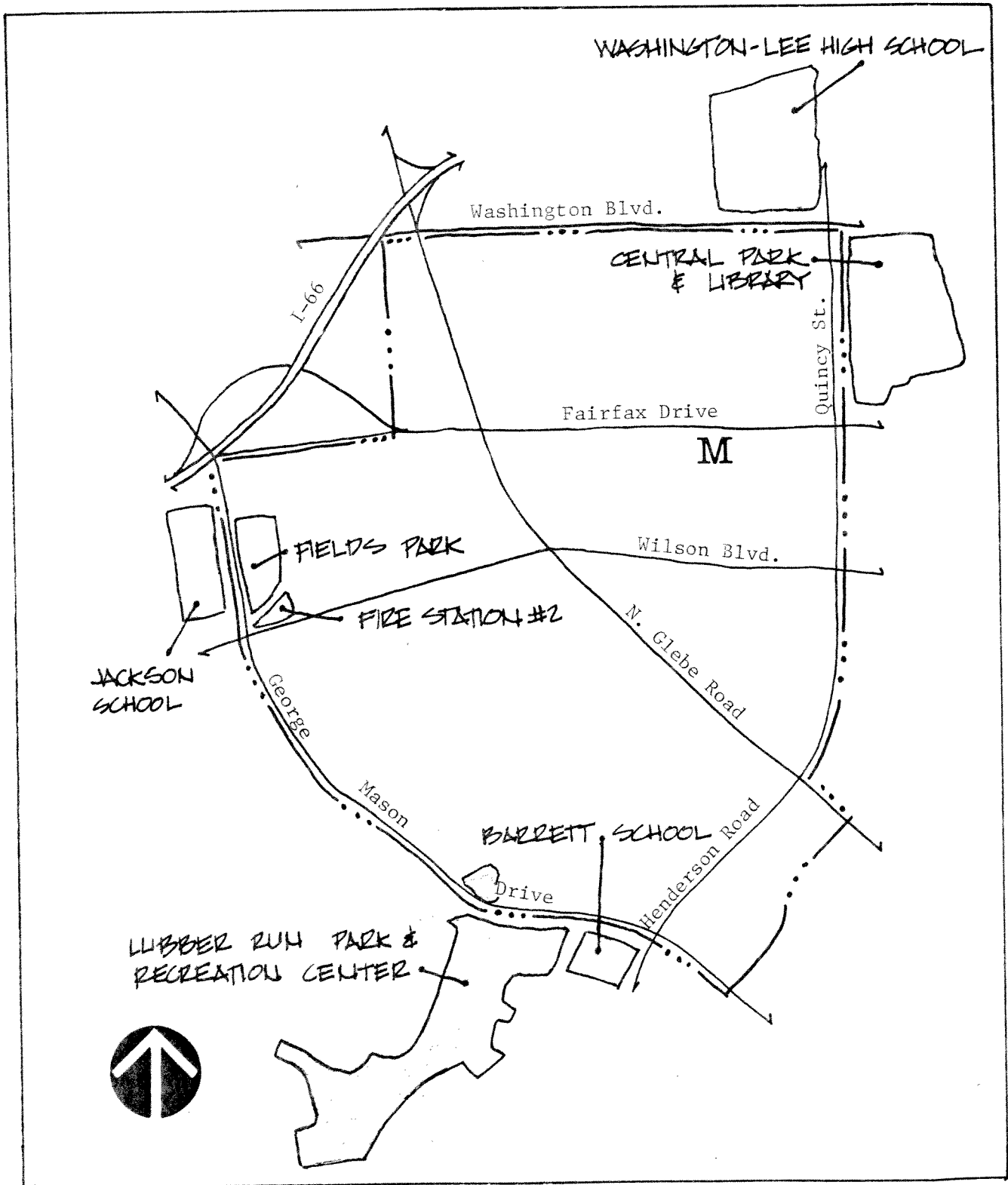
Open Space Facilities

	AMPHITHEATRE	BASEBALL	BASKETBALL	BICYCLE TRAILS	FOOTBALL	FIELD GAMES	HANDICAPPED	PICNIC AREA	PLAYGROUND EQUIPMENT	RESTROOMS	SHELTER (OPEN AIR)	SHEDDING	SOCCER	SOFTBALL	SWIMMING	TENNIS	TRACK (RUNNING)	TRAILS - NATURE
Quincy Street Park & Playfield																		
Washington-Lee High School																		
Lubber Run Park & Recreation Center																		
Barrett Elementary School																		
Jackson Elementary School																		

Existing Open Space In and Near Ballston

Map 26 identifies the open space sites within and on the immediate fringe of Ballston. At present there are two open space sites in the station area. Fields Park, with a total of 3.21 acres, is the major open space site in the station area. A small portion of Lubber Run Park at Carlin Springs Road and George Mason Drive is the second open space site. Because of its location and steep topography the site is not appropriate for development. There are five open space facilities on the immediate periphery of the station area. Three of these are

Ballston Area Community Facilities



school sites and two are County parks. Central Park is the major sports facility. This approximately 20 acre site contains a broad spectrum of recreation facilities as shown in Table 9. Lubber Run Park, a 22+ acre tract, is largely developed as a wooded recreation site. The tract does however contain an amphitheater, play equipment and the Lubber Run Recreation Center. Although each of the three school sites on the periphery of the station area contain recreation facilities, Washington-Lee High School is the most significant in terms of organized recreation. The Washington-Lee site includes a public swimming pool, stadium, running track and planetarium.

Planned Renovation and Development of Existing Sites

At present, renovation designs have been approved for Fields Park and Central Park. Funding for planned improvement of the two sites has been identified from the park development bonds approved in 1977. The Fields Park is proposed as an active

field game area shown in Figure 39. The proposed expansion and reconstruction of Central Park is shown in Figure 42.

Open Space in the Coordinated Mixed Use Development District

As part of the 1977 revision of the General Land Use Plan in the RB Corridor, the County Board designated approximately one and one-half acres of land near the Ballston Metro Station as "public". This "public" designation lies mid-block between North Taylor and North Stuart Streets across from the Metro station. The designation expresses the Board's intent to acquire a 1.5 acre site for public open space at that location. It is recommended that the Board begin purchasing property for the park as funds become available. Purchase of the entire 1.5 acres (assuming land cost of \$25 per square foot) could require expenditure in excess of \$1.6 million. If outright purchase of the site is not feasible, the County should seek development of the park through the site plan process.

Figure 41

Approved Plan For Fields Park

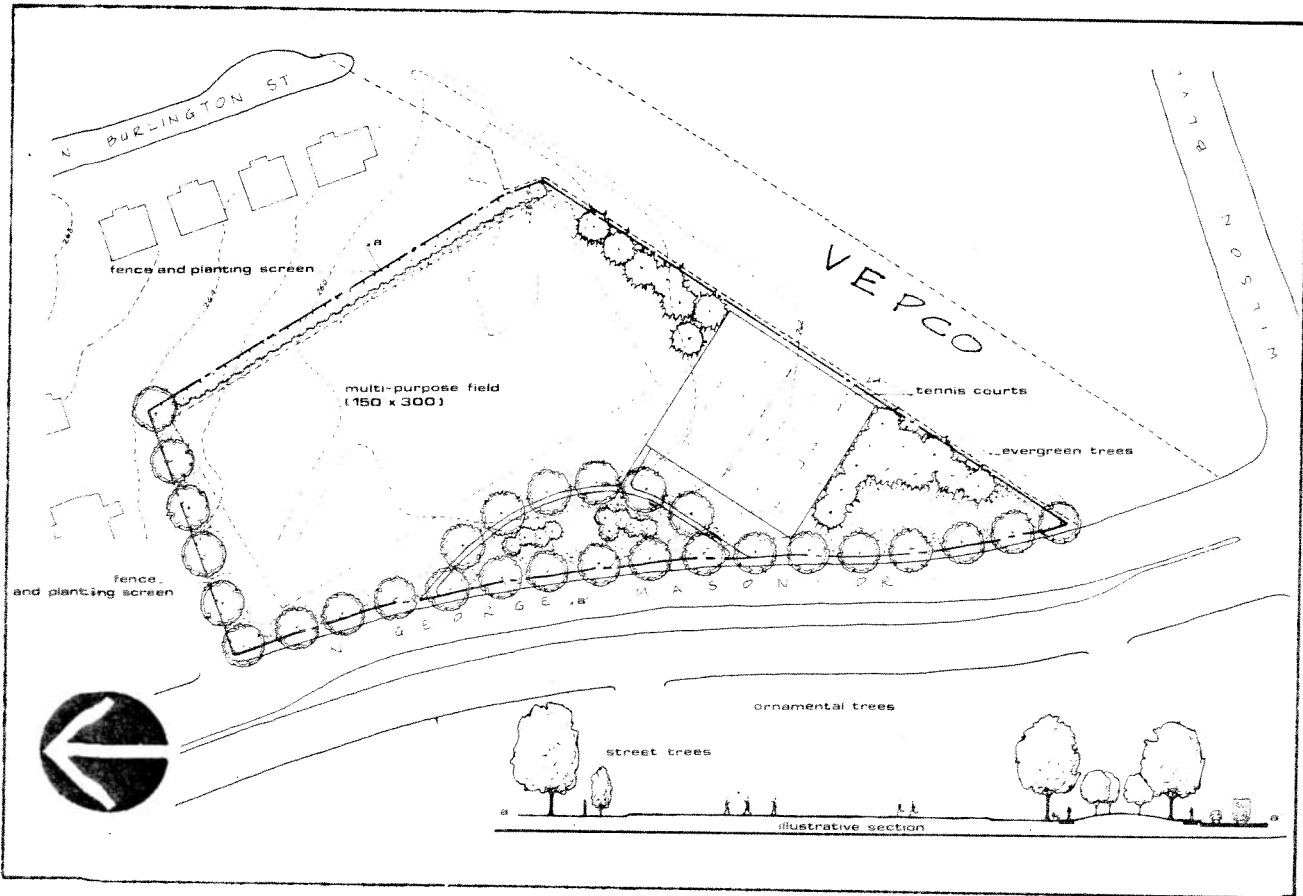
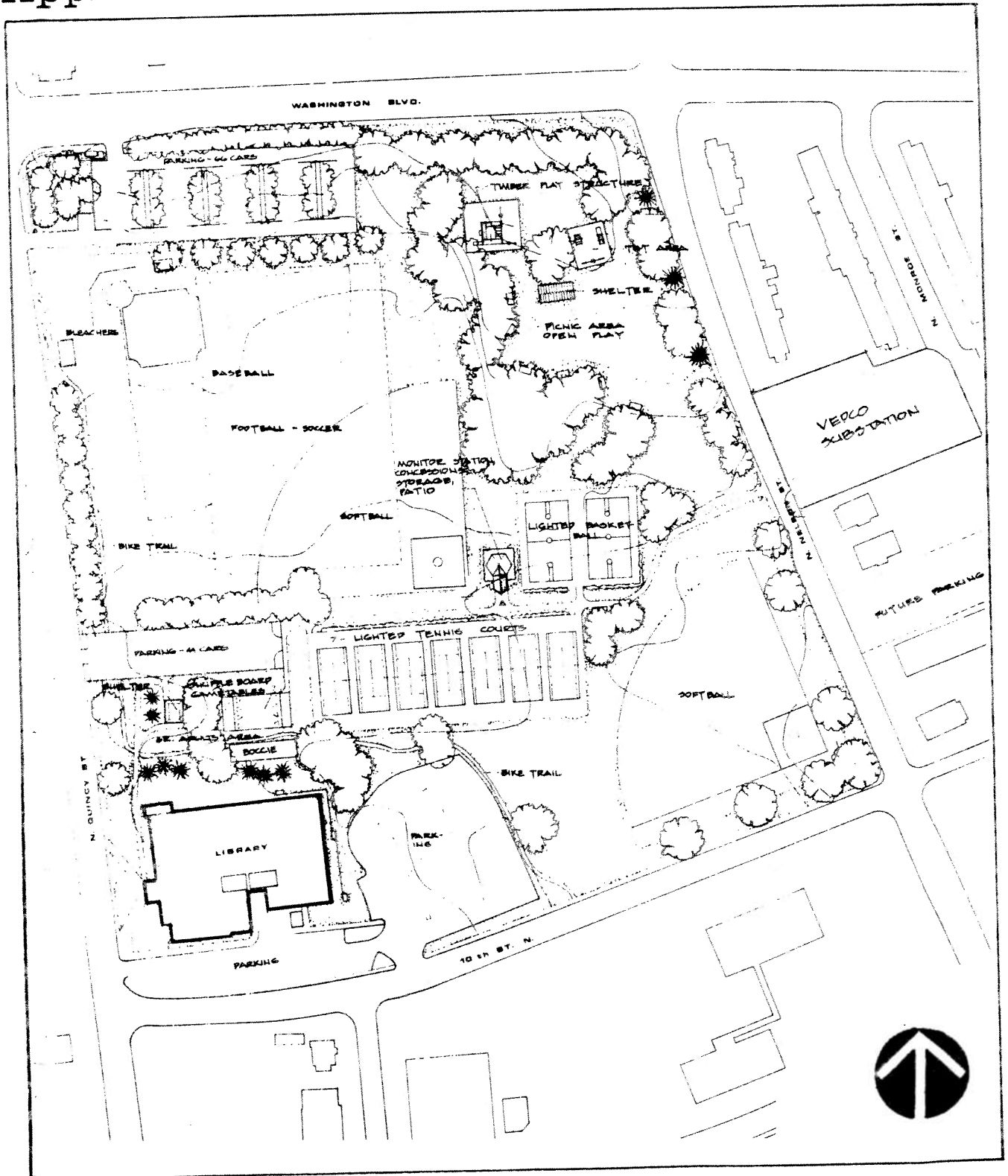


Figure 42

Approved Plan For Central Park



As Ballston begins to redevelop the County Board should also encourage development of small parks through the site plan process. This method for obtaining parks offers several advantages. First, there is little or no public cost associated with park space obtained through site plan. In addition, the private developer typically retains the development rights from such open space; and these development rights continue to generate tax revenue. Most importantly, the site plan process encourages a convenient and effective relationship between open space and new development through consolidated design.

In the past, a variety of open space facilities have been provided through the site plan process. Unfortunately, open space has often been designed in secluded areas with too few facilities. As a result, many open space sites receive limited use and contribute little to improve the character of the surrounding community. While the site plan process can be seen as an effective means for achieving open space, it is clear that more emphasis must be placed on the quality of design.

Urban park space should be designed to serve differing, yet specific needs. In some cases, private and secure recreational space may be desirable for exclusive use by certain groups, such as residents of a high-rise apartment complex. In other cases, recreational space should be designed to serve a broader spectrum of users. An open plaza with easy access from public sidewalks might well serve as an amenity for lunch time gathering and relaxation by employees. In another example, a small urban park might provide a focus for a shopping arcade.

Architecturally, park space should be designed in coordination with surrounding buildings. Similarity in paving material, furniture and landscaping can blend open space into the architecture and treatment of nearby buildings. From a design standpoint, public open space should be visible and easily accessible. Plazas should be designed at sunny, pleasant locations.

Appendices & Bibliography

APPENDIX A

TELEPHONE NUMBERS FOR SELECTED COUNTY OFFICES

County Board	558-2261
County Manager	558-2401
Department of Public Works	558-2551
Department of Community Affairs	
Comprehensive Planning	558-2291
Current Planning	558-2291
Economic Development	558-2536
Real Estate Assessments	558-2111
Zoning	558-2414

APPENDIX B

SUMMARY OF THE ARLINGTON COUNTY ZONING ORDINANCE

This summary is to be used only as a guide and is in no way intended to be a complete statement of the official text of the Arlington County Zoning Ordinance. Full explanation and interpretation of specific sections of the Zoning Ordinance as they apply to individual properties should be obtained from the Office of the Zoning Administrator, phone 558-2414.

SECTION 3 "S-3A" SPECIAL DISTRICT

Primarily for institutional and recreational uses such as schools, parks and government buildings. Also single-family homes on lots containing three (3) acres or more.

SECTION 4 "S-D" SPECIAL DEVELOPMENT DISTRICT

Primarily for development of public institutions or facilities serving the public welfare.

SECTION 5 "R-20" ONE-FAMILY DWELLING DISTRICT

Single-family homes on lots of 20,000 square feet, or larger, with a minimum average width of 100 feet. Also several semi-public uses by Use Permit, which also apply to all other residential districts. Clustering of single-family units is permitted on sites of 1½ acres or larger by Use Permit and Site Plan approval (Section 31).

SECTION 6 "R-10" ONE-FAMILY DWELLING DISTRICT

Single-family homes on lots of 10,000 square feet, or larger, with a minimum average width of 80 feet. Clustering as permitted in Section 31.

SECTION 7 "R-10T" ONE-FAMILY RESIDENTIAL-TOWNHOUSE DWELLING DISTRICT

Single-family homes on 10,000 square foot lots; also townhouses, semi-detached and existing single-family detached units where a site plan is submitted to, and approved by the County Board. Such a project must contain a minimum of 12 townhouses.

SECTION 8 "R-8" ONE-FAMILY DWELLING DISTRICT

Single-family homes on lots of 8,000 square feet or larger with a minimum average width of 70 feet. Clustering as permitted in Section 31.

SECTION 9 "R-6" ONE-FAMILY DWELLING DISTRICT

Single-family homes on lots of 6,000 square feet or larger and a minimum average width of 60 feet. Also, two-family dwellings, by Use Permit, on transitional sites adjacent to other than "C-1" or "C-1-O" Districts, with a lot area of 7,000 square feet and a minimum average of 70 feet; also 56-foot lots with site plan approval and Use Permit. Also, with Site Plan approval, medical offices where the structures retain the appearance of and meet the bulk, placement and coverage requirements of a single-family residence.

SECTION 10 "R-5" ONE-FAMILY RESTRICTED TWO-FAMILY DWELLING DISTRICT

Single-family homes on lots of 5,000 square feet or larger with a minimum average width of 50 feet. Also, by Use Permit, two-family homes on lots of 7,000 square feet with a minimum average width of 70 feet (by site plan minimum average width may be reduced to 56 feet).

SECTION 10A "R15-30T" RESIDENTIAL-TOWNHOUSE DWELLING DISTRICT.

Single-family homes on lots of 5,000 square feet; also townhouse, semi-detached and single-family dwellings at 15 units per acre on sites of at least 8,712 square feet; and up to 30 units per acre with site plan approval on sites of 17,424 square feet or larger. Site Plans may include a variety of dwelling styles including stacked units. Other uses permitted in "R-5".

SECTION 11 "R2-7" TWO-FAMILY DWELLING DISTRICT

Two-family dwellings on lots of 7,000 square feet or larger with a minimum average width of 70 feet (without a Use Permit) and 56-foot lots with site plan approval.

SECTION 12 "RA14-26" APARTMENT DWELLING DISTRICT

Primarily garden apartments at a density up to 24 units per acre. Height limit: Between 3½ and 6 stories depending on size of the site. The minimum lot size is 7,500 square feet. Apartments can be of a townhouse design. The principal offices of physicians, surgeons or dentists. Mortuary or funeral homes are also permitted by Use Permit.

SECTION 13 "RA8-18" APARTMENT DWELLING DISTRICT

Apartment buildings at a density of up to 36 units per acre. Height limit is 4 stories with a minimum lot area of 7,500 square feet. By Site Plan approval, 8 stories; on sites of 20 acres or more, 10 stories. Other uses as permitted in "RA14-26". Apartments can be of a townhouse design.

SECTION 14 "RA7-16" APARTMENT DWELLING DISTRICT

The basic use permitted in this district is the same as that permitted in the "RA14-26" district; however, on sites with 100,000 square feet or more, apartment buildings up to a density of 43 units per acre may be approved by Site Plan. Other uses as permitted in "RA14-26".

SECTION 15 "RA6-15" APARTMENT DWELLING DISTRICT

The basic use permitted in this district is apartment buildings, 6 stories in height. Apartments with up to 12 stories may be built with Site Plan approval. The density in this district is up to 48 units per acre. Other uses as permitted in "RA14-26". Apartments can be of a townhouse design.

SECTION 16 "RA4.8" APARTMENT DWELLING DISTRICT

Apartments are permitted without Site Plan approval as regulated in "RA14-26". With Site Plan approval, apartments may be built to a height of 12 stories with a density of 90 units per acre; hotels may be built with a density of 135 units per acre. The minimum lot area required is 30,000 square feet. Other uses as permitted in "RA14-26".

SECTION 16A "R-C" APARTMENT DWELLING AND COMMERCIAL DISTRICT

Most uses as permitted and regulated in the "RA14-26" and "C-2" districts. Designed for sites located within a ¼ mile radius of Metro-rail station entrances. By site plan approval apartment buildings at a maximum density of 90 units per acre plus retail and service commercial uses (restricted to the first floor) at 1.24 FAR*. Minimum 20,000 square foot lot and height limit of 65 feet.

SECTION 17 "RA-H" HOTEL DISTRICT

Apartments are permitted in this district as regulated in "RA7-16" districts. Twelve-story hotels and apartments are permitted with Site Plan approval on sites of 100,000 square feet at a density of 72 units per acre.

SECTION 18 "RAH-3.2" HOTEL AND APARTMENT DISTRICT

Apartments are permitted as regulated in the "RA7-16" District. By Site Plan approval 16-story apartments at 135 units per acre, and hotels at 210 units per acre are permitted.

SECTION 19 "C-1" LOCAL COMMERCIAL DISTRICT

Local commercial district, restricted to low intensity commercial uses intended to serve a surrounding residential neighborhood. A list of the permitted uses is included in the Ordinance. Ten (10) percent of the site must be landscaped. The FAR* is 1.0 to 1.

* FAR - Ratio of gross floor area to lot area.

SECTION 20 "C-S-C" CONVENIENCE SERVICE COMMERCIAL DISTRICT

Repealed

SECTION 21 "C-H" COMMERCIAL HIGHWAY DISTRICT

Repealed

SECTION 22 "C-1-O" LIMITED COMMERCIAL - PROFESSIONAL OFFICE BUILDING DISTRICT

The uses permitted in this district are business and professional offices. Height limit, 35 feet; minimum lot area, 20,000 square feet. The building type must be of residential appearance. Twenty percent of the site must be landscaped. The FAR* is 1.0 to 1.

SECTION 23 "C-O-1.0" COMMERCIAL OFFICE BUILDING, HOTEL AND APARTMENT DISTRICT

Uses are permitted as regulated in the "C-1-O" District. By Site Plan approval five-story office buildings, at 1.0 FAR*, and six-story apartment buildings at 40 units per acre, and hotels at 60 units per acre are permitted.

SECTION 23A "C-O-1.5" COMMERCIAL OFFICE BUILDING, HOTEL AND APARTMENT DISTRICT

Uses are permitted as regulated in the "C-1-O" District. By Site Plan approval on sites of less than 20 acres, eight-story office buildings at 1.5 FAR* and ten-story apartment buildings at 72 units per acre, and hotels at 110 units per acre. On more than 20 acres, heights may vary.

SECTION 24 "C-O-2.5" OFFICE BUILDING, HOTEL AND APARTMENT DISTRICT

Uses are permitted as regulated in the "C-1-O" District. By Site Plan approval 12-story office buildings at 2.5 FAR*, 16-story apartment buildings at 115 units per acre, and hotels at 180 units per acre are permitted.

SECTION 25 "C-O" OFFICE BUILDING DISTRICT

Uses are permitted as regulated in the "C-1-O" District. By Site Plan approval 12-story office buildings at 3.5 FAR*, 16-story apartment buildings at 135 units per acre, and hotels at 210 units per acre are permitted.

SECTION 25A "C-O-A" COMMERCIAL, OFFICE AND APARTMENT DISTRICT.

Most uses as permitted and regulated in the "C-2" District. Designed for a coordinated mixed-use development of office, apartment and hotel use. Height and density varies according to use and site area. By site plan approval density ranges from 1.0 F.A.R. to 6.0 F.A.R.; only half of the total density may be developed as office, hotel and commercial with the remainder developed as residential. Residential height limit: 151 feet to 216 feet. Office and hotel height limit: 100 feet to 170 feet.

SECTION 26 "C-2" GENERAL COMMERCIAL DISTRICT

Primarily retail sales with many specifically enumerated permitted uses. Height limit: forty-five feet. Ten (10) percent of the site must be landscaped. The FAR* is 1.5 to 1.

SECTION 27 "C-3" GENERAL COMMERCIAL DISTRICT

Same uses as "C-2" but height limit is seventy-five feet. Ten (10) percent of the site must be landscaped. No FAR* limit.

SECTION 28 "C-M" LIMITED INDUSTRIAL DISTRICT

General commercial uses plus specifically enumerated light manufacturing. Height limit: forty-five feet. Dwelling units are not permitted. Ten (10) percent of the site must be landscaped. The FAR* is 1.5 to 1.

* FAR - Ratio of gross floor area to lot area.

SECTION 29 "M-1" LIGHT INDUSTRIAL DISTRICT

Same uses as "C-M", but height limit of seventy-five feet. The F.A.R. is 1.5 to 1. Dwelling units are not permitted.

SECTION 30 HEAVY INDUSTRIAL DISTRICT

Uses in "M-1" and specifically enumerated heavy industrial uses. Building height limit: seventy-five feet. The FAR* is 1.5 to 1. Dwelling units and hotel units are not permitted.

SECTION 31 SPECIAL PROVISIONS

This section contains miscellaneous provisions not covered elsewhere in the Ordinance.

SECTION 32 BULK, COVERAGE & PLACEMENT REQUIREMENTS

This section provides requirements regarding percentage of the lot a building and parking may cover, setback from center lines of streets and side and rear yard requirements for all district classifications.

SECTION 33 AUTOMOBILE PARKING, STANDING AND LOADING SPACE

This section dictates general parking regulations and specific parking requirements for uses in all districts.

SECTION 34 NAME PLATES, SIGNS, BILLBOARDS, AND OTHER DISPLAYS OR DEVICES TO DIRECT, IDENTIFY, INFORM, PERSUADE, ADVERTISE OR ATTRACT ATTENTION.

General and specific requirements for signs in all districts.

SECTION 35 NONCONFORMING BUILDINGS AND USES

This section provides the definition of rights and liabilities regarding nonconforming buildings and uses.

SECTION 36 ADMINISTRATION AND PROCEDURES

Describes all Zoning Ordinance procedures, including requests for Variances, Use Permits, Rezoning, and Site Plan approval.

SECTION 37 VIOLATIONS AND PENALTIES

SECTION 38 CONSTITUTIONALITY: REPEAL OF CONFLICTING PROVISIONS

APPENDIX C

PLANNED CIRCULATION SYSTEM DESIGN ELEMENTS (IMPROVEMENTS TO BE IMPLEMENTED BY ARLINGTON COUNTY)

STREET	SEGMENT		ELEMENTS IN APPROVED STREET SYSTEM	REMARKS
	FROM	TO		
N. Quincy St.	Glebe Rd.	Wilson Blvd.	4 travel lanes, curb, gutter, sidewalk, planting strip	Project shown in approved CIP for funding of \$615,000 in FY 1984. County owns a portion of right-of-way, but additional land will be required. Final design not available.
N. Stuart St.	Fairfax Dr.	Wilson Blvd.	3 lanes, curb, gutter, sidewalk (includes Stuart Street Walkway on east side)	Estimated project cost \$280,000. \$80,000 appropriated for Metro Access Improvements, \$95,000 appropriated from general contingent and \$105,000 appropriated from Business and Apartment Conservation Fund. Estimated completion in the fall of 1980.
Fairfax Dr.	Glebe Rd.	Quincy St.	Landscaping	The Street has been reconstructed by VDH&T and WMATA. Landscaping is recommended as a County or State project in FY 1981. Cost estimate not available.
N. Stuart St.	Washington	11th St., N.	2 travel lanes, 1 parking lane, curb, gutter, sidewalk, planting strip.	Project included in CD program for implementation in FY 1981.
N. Taylor St.	Washington	11th St., N.	1 travel lane, 2 parking lanes, curb, gutter, sidewalk, planting strip.	Reconstruction along east side included in CD program for implementation in FY 1981.
N. Utah St.	Washington	11th St., N.	1 travel lane, 1 parking lane, curb, gutter sidewalk, planting strip	Reconstruction along east side included in CD program for implementation by FY 1981.
11th St., N.	Glebe Rd.	N. Quincy St.	2 travel lanes, curb, gutter, sidewalk, planting strip.	Project included in CD program for implementation in FY 1981. Segment between N. Randolph and N. Quincy Streets has 2 travel lanes with a parking lane.

NOTE:

- (1) This table has been compiled from available information. Final design may require revision.
- (2) If funding does not become available for all of the CD projects, the remaining streets should be improved through the redevelopment process.

NOTE: This table has been compiled from available information. Final design may require revision.

**PLANNED CIRCULATION SYSTEM DESIGN ELEMENTS
(IMPROVEMENTS TO BE OBTAINED WITH REDEVELOPMENT)**

STREET	SEGMENT		ELEMENTS IN APPROVED STREET SYSTEM		REMARKS
	FROM	TO			
N. Randolph	Washington	11th St.	2 travel lanes, 1 parking lane, curb, gutter, sidewalk, planting strip		
N. Randolph	11th St.	Fairfax	2 travel lanes, 2 parking lanes, curb, gutter, sidewalk, planting strip		
N. Randolph	Fairfax	Wilson	2 travel lanes, 2 parking lanes, curb, gutter, sidewalk, planting strip		
N. Randolph	Wilson	N. Glebe	4 travel lanes, curb, gutter, sidewalk, planting strip		
N. Quincy	Washington	Fairfax	4 travel lanes, curb, gutter, sidewalk, planting strip		
N. Quincy	Fairfax	Wilson	4 travel lanes, curb, gutter, sidewalk, planting strip	14 ft. walkway on west side and 10 ft. walkway on east side.	
Washington	N. Glebe	N. Quincy	4 travel lanes, curb, gutter, sidewalk, planting strip		Street widening on south side with redevelopment.
11th Street	N. Glebe	N. Randolph	Sidewalk and planting strip on south side		Street to be largely reconstructed through CD program; however, walkway on south side should be acquired as redevelopment occurs.
11th Street	N. Randolph	N. Quincy	Sidewalk and planting strip on the north side.		Street to be largely reconstructed through CD program; however, walkway on north side should be acquired as redevelopment occurs.
Fairfax	N. Glebe	N. Quincy	Sidewalk widening		Additional sidewalk to be acquired as redevelopment occurs.
9th Street	N. Stuart	N. Stafford	3 travel lanes, curb, gutter, sidewalk, planting strip		Portions of improvements may be done by County as part of Metro access improvements.
9th Street	N. Stafford	N. Randolph	3 travel lanes, 1 parking lane, curb, gutter, sidewalk		Portions of improvements may be done by County as part of Metro access improvements.
9th Street	N. Randolph	N. Quincy	2 travel lanes, 1 parking lane, curb, gutter, sidewalk, planting strip		Portions of improvements may be done by County as part of Metro access improvements.
Wilson	N. Glebe	N. Quincy	6 travel lanes, curb, gutter, sidewalk, planting strip		Additional land to be obtained on north side from Glebe Rd. to Randolph Street.

NOTE: This table has been compiled from available information. Final design may require revision.

**PLANNED CIRCULATION SYSTEM DESIGN ELEMENTS
(IMPROVEMENTS TO BE OBTAINED WITH REDEVELOPMENT)
(Continued)**

STREET	SEGMENT FROM	TO	ELEMENTS IN APPROVED STREET SYSTEM	REMARKS
N. Glebe	Washington	4th St.	6 travel lanes, curb, gutter, sidewalk, planting strip	State highway project-no plans available; six lanes and no parking.
N. Vernon	Washington	11th St.	1 travel lane, 1 parking lane, curb, gutter, sidewalk, planting strip	
N. Vernon	11th St.	N. Glebe	2 travel lanes, 2 parking lanes, curb, gutter, sidewalk, planting strip	Street can be closed and vacated with redevelopment.
N. Vermont	Washington	11th St.	2 travel lanes, 1 parking lane, curb, gutter, sidewalk, planting strip	Street has been vacated at Washington Boulevard.
N. Vermont	11th St.	Fairfax	2 travel lanes, 1 parking lane, curb, gutter, sidewalk, planting strip	
N. Vermont	Fairfax	N. Glebe	2 travel lanes, 1 parking lane curb, gutter, sidewalk, planting strip	Street can be closed and vacated with redevelopment.
N. Utah	11th St.	Fairfax	2 travel lanes, 1 parking lane north of potential closing; 2 travel lanes, 2 parking lanes south of closing; curb, gutter, sidewalk, planting strip for both segments.	Street can be closed and/or vacated with redevelopment, or if thru traffic becomes a problem.
N. Taylor	11th St.	Fairfax	2 travel lanes, 1 parking lane north of potential closing; 2 travel lanes, 2 parking lanes south of closing; curb, gutter, sidewalk, planting strip for both segments	Street can be closed and/or vacated with redevelopment, or if thru traffic becomes a problem.
N. Taylor	Fairfax	Wilson	2 travel lanes, 2 parking lanes, curb, gutter, sidewalk, planting strip	Street can be closed and/or vacated with redevelopment.
N. Stuart	11th St.	Fairfax	2 travel lanes, 1 parking lane north of potential closing; 2 travel lanes, 2 parking lanes south of closing; curb, gutter, sidewalk, planting strip for both segments	Street can be closed and/or vacated with redevelopment or if thru traffic becomes a problem; a walkway easement should be maintained.
N. Stuart	Fairfax	9th St.	Sidewalk expansion on west side	Stuart Street will be largely reconstructed by the County as part of the Stuart Street Walkway and Metro access improvement.
N. Stuart	9th St.	Wilson	Sidewalk expansion on west side	Stuart Street will be largely reconstructed by the County as part of the Stuart Street walkway and Metro access improvements..
N. Stafford	Washington	11th St.	2 travel lanes, 1 parking lane, curb, gutter, sidewalk, planting strip	
N. Stafford	11th	Fairfax	2 travel lanes, 1 parking lane, curb, gutter, sidewalk, planting strip	
N. Stafford	Fairfax	9th St.	3 travel lanes, 1 parking lane, curb, gutter, sidewalk, planting strip	
N. Stafford	9th St.	Wilson	2 travel lanes, 2 parking lanes, curb, gutter, sidewalk, planting strip	

NOTE: This table has been compiled from available information. Final design may require revision

APPENDIX D
COST/REVENUE ANALYSIS: BALLSTON SECTOR PLAN*
Prepared by Planning Division
Department of Community Affairs

BACKGROUND

This cost/revenue analysis of development plans for the Ballston area was prepared in response to the consultant study prepared by Banner Associates which recommended: 7

- "a) Order of magnitude estimates of net new jobs, payrolls, and retail sales, which might be created by the development concept (Ballston Plan), with major differences in impact among various site development alternatives, if major differences exist.
- "b) Order of magnitude estimates of net fiscal impacts."

Interest in these recommendations by both the County Board and Economic Development Commission prompted this analysis. It is important to note that the Banner Associates report also recommended that: "action (not) be deferred pending revisions to address these matters".

This analysis makes estimates of new resident population, employment, retail sales based upon net new development forecasts which are assumed to occur under the **Ballston Sector Plan**. Payroll information is not included in this study.

SUMMARY

It is important to keep in mind that all forecasts necessarily make broad assumptions about the future. Forecasts are often criticized as merely projecting the status quo; and always, forecasts are seen to have omitted a critical factor. Therefore, the assumptions used in the forecasts are often more revealing than the forecasts themselves. These assumptions are detailed under the appropriate headings in the attachments to this report.

Setting these concerns about the validity of any forecasts aside, the cost/revenue analysis contained herein shows substantial fiscal benefits to the County from the planned development of Ballston. Almost 10,800 new jobs, over 4,000 new residents and over \$230 million in additional retail sales receipts will result. As with any new development enterprise, costs for the first few years will outweigh revenues. But as the cost of building "infrastructural" improvements is amortized, or remains constant, increasing positive fiscal benefits will result.

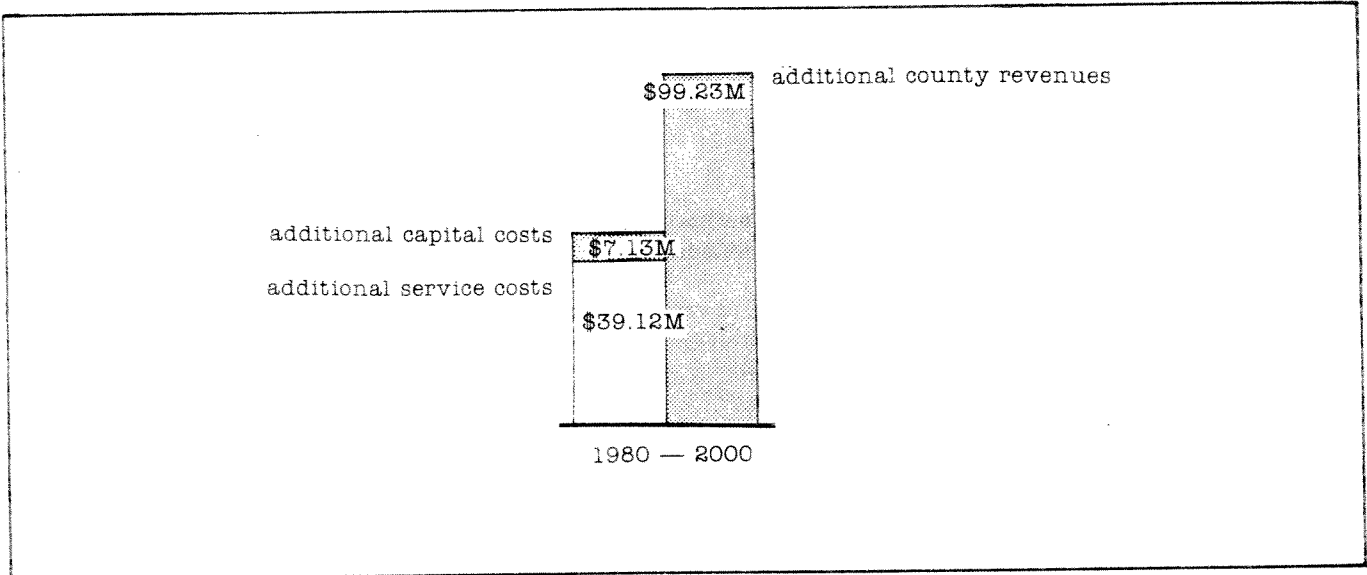
The assumptions utilized in the analysis tend to be conservative. The revenue assumptions, by using constant 1980 dollars, indirectly assume big reductions in tax rates. For example, in order for real estate tax returns from new development to remain constant, the tax rate would have to decrease at least as fast as the increase in the value of real estate.

All cost and revenue figures assume the development forecasts (attachment A). Changes in the development timing assumptions would therefore have direct impacts on fiscal benefits. If development occurs more rapidly than anticipated, fiscal benefits would also occur more rapidly.

* This analysis is included as an information item. It is not an adopted element of the sector plan.

7 "Action Strategy: Rosslyn-Ballston Corridor" Banner Associates, Ltd., Washington, D.C., April, 1980. p. 37

BALLSTON SECTOR PLAN — NET FISCAL IMPACT — 1980-2000

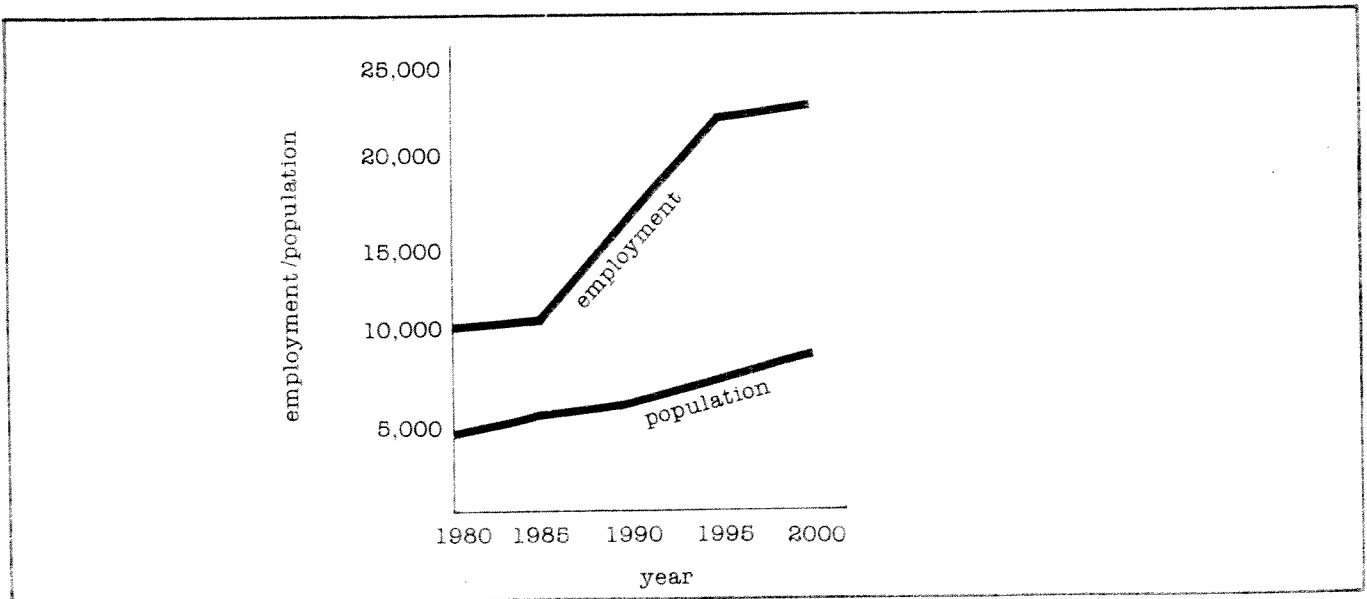


DEVELOPMENT FORECASTS

Assumptions: The development forecasts are based on the amount of new development likely to occur under adopted plans and policies as contained in the **Ballston Sector Plan**. Timing of growth was allocated according to data developed in the Council of Governments Cooperative Forecasting process, which forecasts jurisdictional and regional population and employment growth to the year 2000.

New Retail Development: "New Retail Space" represents new growth of retail space. It was assumed that public policy and funding will support the redevelopment of Parkington. Because of the construction time frame of three years, this development was assumed to be complete in 1986. Additional retail development was allocated in the remaining years 1990-2000. Retail employment forecasts were based on 260 square feet/employee.

BALLSTON — DEVELOPMENT FORECASTS



New Office Space: Net new office space for the first five years of the forecast period is represented by "pipeline" development. Because of the time period involved in planning, design and approval of new office space, it was assumed that other new office space will not be "on line" until after 1985. Office employment forecasts were based on 227 square feet/employee.

New Residential Units: Forecasted new residential growth assumes that interest rates and other economic factors will support this growth. A factor of 1.45 persons per unit was used to determine "new residents". This assumes continued growth of smaller households, similar in occupancy characteristics to existing high-rise units.

RETAIL SALES FORECASTS

As described above, it was assumed Parkington redevelopment will proceed during the 1981-85 time period. During this period, total retail sales in Ballston will decline as a result of the redevelopment process. However, beginning in 1986, the redeveloped shopping center was assumed to begin at \$150 per square foot sales (1980 dollars). Sales were assumed to rise to \$200 per square foot by 1990, as the center establishes itself in the marketplace. It was assumed that an additional 440,000 square feet of regional-type retail development would occur adjacent to Parkington in the years 1990-2000, and this new retail would also generate up to \$200 per square foot, because of its association with the regional retail center.

Additional space aimed at community and neighborhood-oriented markets, was also assumed to develop, but this space was assumed to generate \$125 per square foot.

SITE DEVELOPMENT ALTERNATIVES

Aside from development mix alternatives in the "C-O-A" area, site development alternatives exist chiefly on the "Western-Pocahontas" tract and the Parkington site. In the "C-O-A" district, hotel development could occur in place of a portion of projected residential or office development. In place of residential development, the alternative hotel development would have the effect of increasing tax revenues through the transient and business license taxes, while decreasing costs associated with providing school and DHR services. The tables contained herein do not quantify this alternative although it is identified as a possibility.

On the "Western-Pocahontas" tract, development was assumed at 1.5 F.A.R. office, permissible under existing zoning. Increasing the permitted density has been discussed by a potential developer of the tract; a mixed use approach, including office, hotel and residential has been mentioned, although no quantification of these uses has been described. Clearly, increasing density to allow additional hotel and residential development, as well as the basic permitted office use, would increase fiscal benefits.

As described by the current owners of Parkington, development alternatives on this site relate more to timing than to ultimate use. The study herein assumes the County or other funding sources (including Federal), will be forthcoming and the redevelopment will proceed quickly within the next five years. However, if public funding is not available, this redevelopment could be postponed indefinitely. No alternative to retail use of the site has been identified.

**APPENDIX D: ATTACHMENT A
BALLSTON DEVELOPMENT ASSUMPTIONS**

	NEW RETAIL EMPLOYEES	NEW RETAIL SPACE	NEW OFFICE EMPLOYEES	NEW OFFICE SPACE	NEW RESIDENTIAL UNITS	NEW RESIDENTS
1980-1985	---	---	700	155,000	520	750
1985-1990	1,550	404,000	4,100	933,750	520	750
1990-1995	770	200,000	4,900	1,104,100	930	1,250
1995-2000	440	116,000	300	70,650	930	1,250
TOTAL	2,760	720,000	10,000	2,263,500	2,900	4,000

	1976/80	1985	1990	1995	2000
POPULATION	4,500	5,250	6,000	7,250	8,500
HOUSING UNITS	2,300	2,820	3,340	4,270	5,200
EMPLOYMENT	10,000	10,700	16,350	22,020	22,760

	EXISTING	NET NEW	YEAR 2000
RESIDENTIAL	2,300 units	2,900 units	5,200 units
COMMERCIAL SPACE			
PARKINGTON	356,000 s.f.	404,000 s.f.	760,000 s.f.
OTHER REGIONAL		440,000 s.f.	440,000 s.f.
OTHER (NON-REG)	424,000 s.f.	- 124,000 s.f.	300,000 s.f.
OFFICE SPACE	1,160,000 s.f.	2,263,500 s.f.	3,423,500 s.f.

**APPENDIX D: ATTACHMENT B
BALLSTON RETAIL SALES**

	SALES	AREA
1980 PARKINGTON	\$24,000,000	356,000 sq. ft.
OTHER	21,200,000	424,000 sq. ft.
	\$45,200,000	780,000 sq. ft.
1985 PARKINGTON	\$17,500,000	250,000 sq. ft.
OTHER	21,200,000	424,000 sq. ft.
	\$38,700,000	674,000 sq. ft.
1990 PARKINGTON	\$114,000,000	760,000 sq. ft.
OTHER	21,200,000	424,000 sq. ft.
	\$135,200,000	1,184,000 sq. ft.
1995 PARKINGTON	\$152,000,000	760,000 sq. ft.
OTHER REGIONAL	44,000,000	220,000 sq. ft.
OTHER	31,450,000	404,000 sq. ft.
	\$227,450,000	1,384,000 sq. ft.
2000 PARKINGTON	152,000,000	760,000 sq. ft.
OTHER REGIONAL	88,000,000	440,000 sq. ft.
OTHER	37,500,000	300,000 sq. ft.
	\$277,500,000	1,500,000 sq. ft.

PARKINGTON IS ASSUMED TO BE UNDER RENOVATION AND EXPANSION IN 1985. WITH 106,000 SQUARE FEET OF EXISTING SPACE TEMPORARILY OUT OF SERVICE. PARKINGTON REOPENS IN 1986 WITH A TOTAL OF 760,000 SQUARE FEET OF REGIONAL TYPE COMMERCIAL SPACE. IN ADDITION TO THE RENOVATION OF PARKINGTON OTHER REGIONAL TYPE DEVELOPMENT IS EXPECTED TO BEGIN AFTER 1990. REHABILITATION OF EXISTING SPACE OTHER THAN PARKINGTON IS ASSUMED TO OCCUR AFTER 1990. ALSO APPROXIMATELY 124,000 SQUARE FEET OF EXISTING OTHER SPACE IS LOST BETWEEN 1990 AND 2000.

APPENDIX D: ATTACHMENT C
BALLSTON REVENUE ASSUMPTIONS

I. ONE-TIME REVENUES

- a. Hook-up fees
 - High-rise apartment — \$810/unit
 - Hotel — \$900/unit
 - Office & Retail — \$.36/sq. ft.

- b. Site Plan Fees
 - High-rise apartment — \$400 plus \$2/unit
 - Office & Retail — \$400 + \$1/1000 sq. ft.
 - Hotel — \$400 + \$1/unit

- c. Permits
 - Construction Permits
 - Office — Building Permit @ \$.06/sq. ft.
Elec., Mech., & Plumbing @ .02/sq. ft.
 - Retail — Same as for office
 - Hotel — Building permit @ \$.06/sq. ft.; for 800 sq. ft.
average unit = \$48/unit
Elec., Mech., & Plumbing @ .02/sq. ft. + \$16/unit
 - Residential — Building Permit @ \$60/unit;
Elec., Mech., & Plumbing @ \$20/unit

- d. Occupancy Permits
 - Office — \$500/bldg. + \$45/10,000 sq. ft.
 - Retail — Same as above
 - Hotel — \$45 plus \$2/unit
 - Residential — \$45 plus \$2/unit

II. REVENUES

All revenues are expressed in 1980 dollars. The following assumptions were used in computing revenues:

a. Personal Property Taxes

Retail — Revenues in this category are attributable to "business tangibles". Based on previous data collected for the Parkington cost/revenue analysis, \$4.88/sq. ft. of assessed value was assumed. To this was added \$.10 sq. ft. for commercial vehicle tax. A rate of \$5.45/\$100 of assessed value was used.

Office — Business tangible assessments of \$4.22/sq. ft. was assumed plus \$.08/sq. ft. for commercial vehicles, multiplied by the \$5.45/\$100 of assessed.

Residential — Revenues from this source are mostly from auto taxes. A factor of 1.14 autos per unit and average value of \$1,732 was used to arrive at the \$112.54/unit assumption.

Hotel — Based on previous analysis, a factor of \$671/unit for business tangibles and \$14/unit for commercial vehicle registration was assumed. The \$5.70/\$100 of assessed value was used.

b . Vehicle License Tax

Residential — As in the "personal property" category a factor of 1.14 autos per unit was assumed multiplied by \$15/vehicle.

c . Real Property Tax

The following average values were assumed:

High-rise residential rental = \$22,000/unit

High-rise residential condo. = \$95,000/unit

Retail = \$75/sq. ft.

Hotel = \$25,300/unit

Office = \$60/sq. ft.

Town-house residential = \$120,000/unit

A rate of \$1.12/\$100 was assumed for the forecast period.

d . Business & Professional License Tax ^{1/}

Retail — A rate of \$.29/\$100 of gross receipts was assumed. Applying this to the average sales of \$150 per sq. ft. yielded the \$.38/sq. ft. of BPL tax returns for retail.

Office — Office returns were calculated using an assumed average of \$62 per sq. ft. of gross receipts, multiplied by 60% occupancy of new office space by "professional" categories, paying taxes at a rate of 1% of gross receipts.

Hotel — returns from hotel were based on an annual gross receipt per room of \$6998/room. A tax rate of 1% was used.

e . Transient Tax — Transient tax is levied at a rate of 5% of sales. Applied to the average receipt of \$6998/room, yields \$349.90/room in transient taxes.

f . Sales Tax — Sales tax increments were computed at 1% of sales, based on "Ballston Retail Sales" sheet attached.

¹ Assumes constant rates for all Business & Professional License tax categories. However, State-mandated reductions in Arlington's Business & Professional License tax rates will significantly reduce revenues from certain categories of taxes, mostly in the "Office" category.

APPENDIX D: ATTACHMENT D
BALLSTON COST ASSUMPTIONS

All costs are expressed in 1980 dollars.

Service Costs: All service costs were allocated using a methodology similar to that developed in the "Transit Station Impact Analysis" (Growth Patterns Study). This method assumes that all new development shares in the costs of providing County Services. Specific budget items such as fire and police are allocated using the following formula:

$\frac{\text{Total Budgeted Service Cost}}{\text{Total Population} + \text{Total Employment}} (\times) = \text{Additional Cost of Providing Service}$

Where: \times = the amount of new development expressed in terms of population or employment, being evaluated.

As the table indicates, this method was used in determining police, fire, public works, and overhead costs. In the case of libraries, parks and recreation, and schools, only residential (population) was factored in the formula.

This method results in a conservative estimate of costs: that is, it is likely that the new development will not require all of the incremental cost indicated, since some services may be provided equally as well to an additional population with no additional cost.

Capital Costs: All projects listed in the proposed Capital Improvements Program (FY 1981-1986) which were associated with Ballston, were allocated to Ballston in the 1981-85 time period. In some cases, these costs may in fact be shared by neighboring areas, such as Virginia Square. R-B Park acquisition costs were allocated among the four R-B station areas. Projects listed in the C.I.P. as occurring beyond FY 86, were assumed to be completed in the 1986-90 time period. Additional county costs of \$1.5 million for the redevelopment of Parkington were assumed in the 1981-85 time period. It is likely additional county costs will be incurred if the shopping center is to proceed.

APPENDIX D: ATTACHMENT E
CAPITAL IMPROVEMENTS PROJECTS CHARGED TO BALLSTON
DEVELOPMENT
C.I.P. PROJECTS FY 1981-1985

	(1980 CONSTANT \$)	BUDGET
PARKS & RECREATION	43,000	50,000
	1,037,500	1,037,500
	<u>45,000</u>	<u>45,000</u>
	1,125,500	1,132,500
TRANSPORTATION	385,200	515,000
	36,300	39,000
	17,700	19,000
	2,800	3,000
	5,600	6,000
	5,200	6,000
	6,000	7,000
	6,500	7,000
	<u>12,000</u>	<u>16,000</u>
	477,300	618,000
UTILITIES*	59,700	69,000
	972,100	1,208,000
	197,100	245,000
	2,205,500	2,742,000
	90,800	105,000
	<u>312,100</u>	<u>388,000</u>
	3,837,300	4,757,000
	5,440,100	TOTAL 6,507,500
C.I.P. PROJECTS FY 86 & BEYOND		
PARKS & RECREATION	970,500	1,500,000
TRANSPORTATION	67,300	104,000
UTILITIES	<u>647,000</u>	<u>1,000,000</u>
	1,684,800	2,604,000

*Does not subtract out hook-up fees.

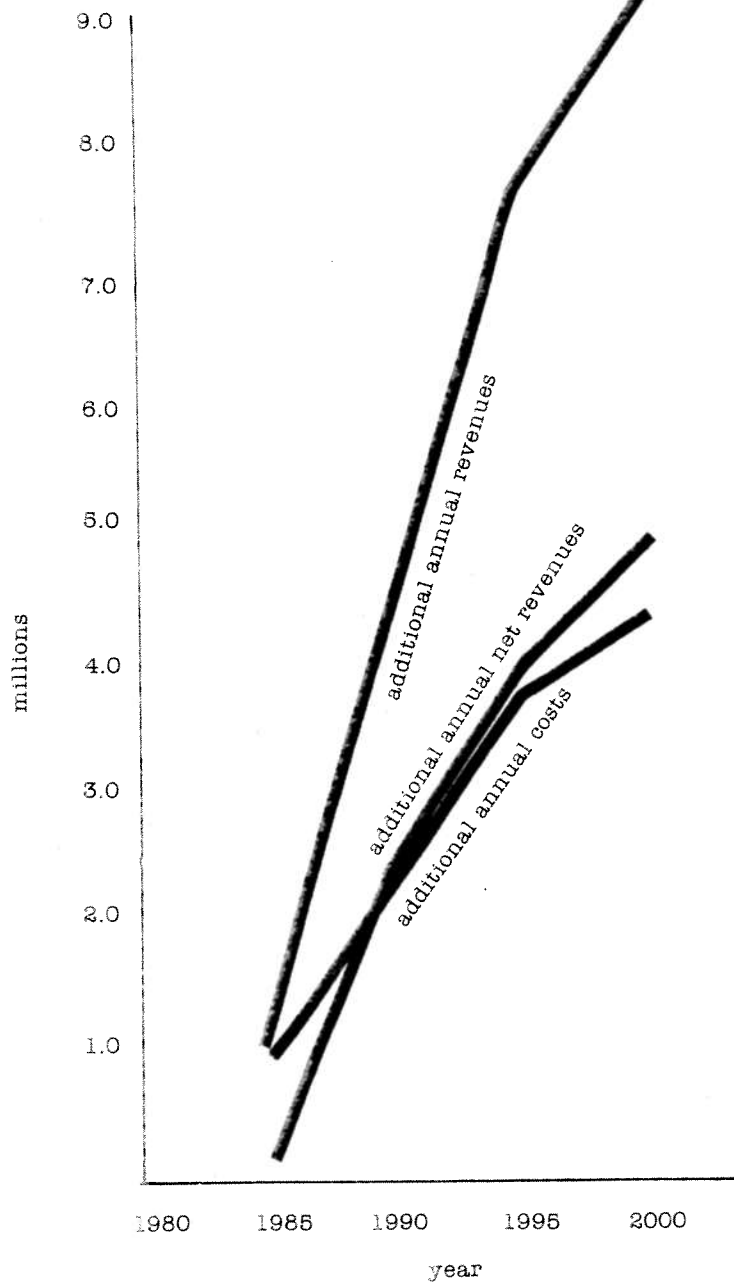
APPENDIX D: ATTACHMENT F
BALLSTON COST/REVENUE SUMMARY
(all figures in millions)

	TIME PERIOD				Total
	1981—1985 ^{1/}	1986-1990	1991-1995	1996-2000	
Incremental Revenue for five-year period ^{1/}	3.05	15.95	34.85	48.35	102.20
Total Permit Fees	.07	.16	.20	.10	.53
Sub-total 1	3.12	16.11	35.05	48.45	102.73
Total Hook-up Fees	.66	.90	1.12	.82	3.50
Sub-Total 2	3.78	17.01	36.17	49.27	106.23
Incremental Costs for five-year period ^{1/}	1.30	6.10	13.40	18.50	39.30
Total Capital Improvements Other than water and sewer	1.60	1.04	—	—	2.64
Sub-total 3	2.90	7.14	13.40	18.50	41.94
Total Water and Sewer Improvements	3.84	.65	—	—	4.49
Sub-total 4	6.74	7.79	13.40	18.50	46.43
BALANCE: Sub-total 4 — Sub-total 2	(2.96)	9.22	22.77	30.77	59.80

^{1/} Calculated by using average annual increase

^{2/} Calendar Years

BALLSTON — INCREMENTAL ANNUAL FISCAL IMPACTS*



* all figures in constant 1980 dollars

ATTACHMENT F (Continued)

INCREMENTAL ANNUAL REVENUES BALLSTON *

Item	Unit Revenue	Difference Between 1980 and 1988 Annual Revenues		Difference Between 1988 and 1990 Annual Revenues		Difference Between 1990 and 1998 Annual Revenues		Difference Between 1998 and 2000 Annual Revenues	
		Units	Total	Units	Total	Units	Total	Units	Total
a. Personal Property									
Retail	.24/s.f.	—	—	510,000	\$122,400	200,000	\$ 48,000	116,000	\$ 27,840
Residential	112.54/unit	520	58,520	520	58,520	930	104,662	930	104,662
Hotel	39.04/unit	220	8,588	—	—	—	—	—	—
Office	.28/s.f.	107,000	29,960	933,750	261,450	1,104,100	309,148	70,650	19,782
b. Vehicle License Tax									
Res.	17.10/unit	520	8,892	520	8,892	930	15,903	930	15,903
c. Real Property Tax									
High-rise rental res.	\$246/unit	—	—	—	—	—	—	—	—
High-rise condo. res.	1,064/unit	300	319,200	520	553,280	930	989,520	930	989,520
Town-house res.	1,344/unit	220	295,680	—	—	—	—	—	—
Retail	.75/s.f.	—	—	510,000	382,500	200,000	150,000	116,000	87,000
Hotel	283/unit	220	62,260	—	—	—	—	—	—
Office	.67/s.f.	107,000	71,690	933,750	625,612	1,104,100	739,747	70,650	47,335
d. Business & Prof. Tax									
Retail	.38/s.f.	—	—	510,000	193,800	200,000	76,000	116,000	44,080
Office	.50/s.f.	107,000	77,500	933,750	466,875	1,104,100	552,050	70,650	35,325
Hotel	\$70/unit	220	15,400	—	—	—	—	—	—
e. Transient Tax-Hotel	189.53/unit	220	41,696	—	—	—	—	—	—
f. Sales Tax-Retail	From Attachment C	(106,000)	(65,000)	510,000	965,000	200,000	922,500	116,000	500,500
	Total Column		\$ 989,386		\$3,638,329		\$3,907,530		\$1,871,947
	Cumulative Total				\$4,627,715		\$8,535,245		\$10,407,192
	Difference Between Revenue & Cost		\$(571,107)		\$2,884,185		\$5,238,651		\$6,448,052

* All figures in constant 1980 dollars

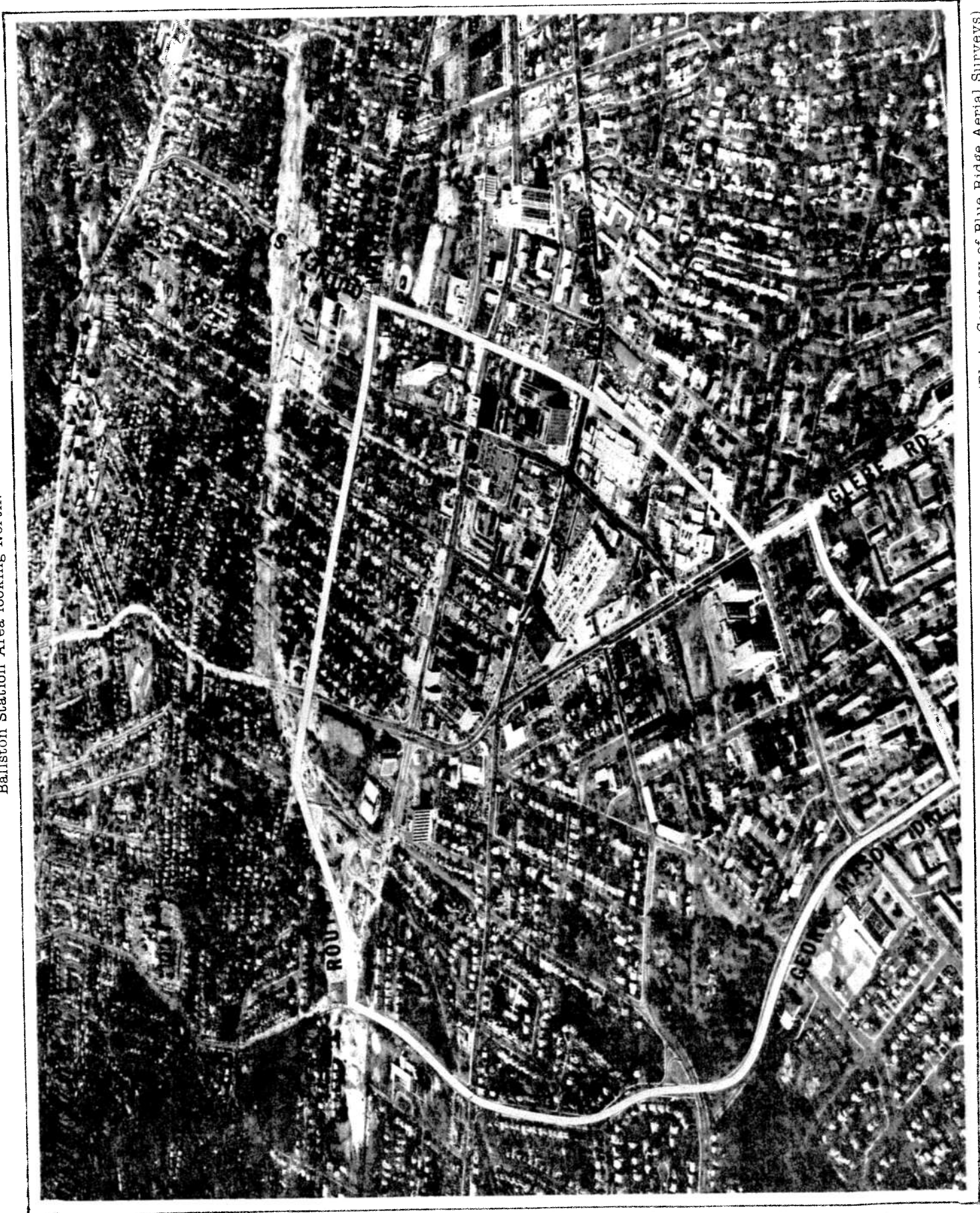
ATTACHMENT F (Continued)

**INCREMENTAL ANNUAL SERVICE COSTS
BALLSTON**

Item	Unit Cost	Difference Between 1980 and 1985 Annual Revenues		Difference Between 1985 and 1990 Annual Revenues		Difference Between 1990 and 1995 Annual Revenues		Difference Between 1995 and 2000 Annual Revenues	
		Units	Total	Units	Total	Units	Total	Units	Total
a. Police									
Res.	68.33/unit	520	\$ 35,532	520	\$ 35,532	930	\$ 63,547	930	\$ 63,547
Comm'l	31.13/emp.	689	21,449	5,700	177,441	5,677	176,725	760	23,659
b. Fire									
Res.	46.29/unit	520	24,071	520	24,071	930	43,050	930	43,050
Comm'l	21.09/emp.	689	14,531	5,700	120,213	5,677	119,728	760	16,028
c. Public Works									
Res.	33.40/unit	520	17,368	520	17,368	930	31,062	930	31,062
Comm'l	15.20/emp.	689	10,473	5,700	86,640	5,677	86,290	760	11,552
d. Library									
Res.	29.01/unit	520	15,085	520	15,085	930	26,979	930	26,979
e. DHR									
Res.	24.65/unit	520	12,818	520	12,818	930	22,925	930	22,925
f. Parks & Rec.									
Res.	55.09/unit	520	28,647	520	28,647	930	51,234	930	51,234
g. Overhead									
Res.	253.05/unit	520	131,586	930	131,586	930	235,337	930	235,337
Comm'l	113.69/emp.	689	78,332	5,700	647,463	5,677	645,418	760	86,404
h. Schools									
High rise res.	54.59/unit	520	28,387	520	28,387	930	50,769	930	50,769
	Total Column		\$418,279		\$1,325,251		\$1,553,064		\$ 662,546
	Cumulative Total				\$1,743,530		\$3,296,594		\$3,959,140

APPENDIX E

Ballston Station Area looking North.



(Photo Courtesy of Blue Ridge Aerial Surveys)

BIBLIOGRAPHY

- Arlington County Department of Environmental Affairs. Planning Division. **Ashton Heights Neighborhood Conservation Plan**. Arlington, Virginia: 1976.
- Arlington County Department of Environmental Affairs. Planning Division. **Glebe Station Area General Land Use Plan Alternatives**. Arlington, Virginia: 1976.
- Arlington County Department of Environmental Affairs. Planning Division. **Rosslyn-Ballston Corridor Community Facilities**. Arlington, Virginia: 1974.
- Arlington County Department of Environmental Affairs. Planning Division. **Rosslyn-Ballston Corridor Recommended General Land Use Plan**. Arlington, Virginia: 1976.
- Arlington County Department of Environmental Affairs. Planning Division. **Rosslyn Transit Station Area Study**. Arlington, Virginia: 1977.
- Arlington County Department of Public Works. Planning and Engineering Division. **Ballston Transportation Plan**. Arlington, Virginia: 1978.
- Baiter, Richard. **Lower Manhattan Waterfront**. New York: Office of Lower Manhattan Development, 1975.
- Brambilla, Roberto and Gianni Longo. **For Pedestrians Only — Planning, Design and Management of Traffic Free Zones**. New York: Watson Guptill, 1977.
- City of Alexandria, Department of Planning and Community Development. **King Street Station Area: A Guide for Future Action**. Alexandria, Virginia: 1978.
- The Committee on the Long Range County Improvement Program. **Planning for Arlington's Future — A Long Range County Improvement Program**. Arlington, Virginia, 1975.
- Edward R. Bachtie & Associates, Inc. **Pedestrian Malls and Plazas — Analysis and Criteria for Development**. A Planning Study for Wilmington, Delaware: Edward R. Bachtie & Associates, Inc., 1978.
- Freshley, Katherine and Donald Alexander Hawkins. **Ballston: A Community Plan**. Arlington, Virginia: 1976.
- Heckscher, August. **Open Spaces: The Life of American Cities**. New York: Harper & Row, 1977.
- Johnson, Johnson & Roy, Inc. **Urban Street Furniture Manual**. Detroit, Michigan: City of Detroit Community and Economic Development Department, 1977.
- Kent, T. J., Jr. **The Urban General Plan**. San Francisco: Chandler Publishing Company, 1964.
- The Maryland - National Capital Park and Planning Commission. **Sector Plan for the Silver Spring Central Business District and Vicinity**. Montgomery County, Maryland: 1974.
- Okamoto, Rai, and Frank Williams. **Urban Design Manhattan**. New York: The Viking Press, 1969.
- Rose, C.B., Jr. **Arlington County, Virginia — A History**. Virginia: Arlington Historical Society, 1976.
- Templeman, Eleanor Lee. **Arlington Heritage — Vignettes of a Virginia County**. Virginia: 1969.
- Passonneau, Joseph and Partners. **Street Design for Ballston**. Prepared for the Department of Public Works. Arlington, Virginia: 1978.

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