Adopted

1974

Consolidated Master Plan of the City of Alexandria, Virginia

AMENDMENTS

to the

ADOPTED CONSOLIDATED MASTER PLAN OF THE CITY OF ALEXANDRIA, VIRGINIA, 1974

STAFF: Sheldon Lynn, Director, Department of Planning and Community Development; Larry K. Grossman, Chief, Comprehensive Planning Division; Melinda M. Artman, Senior Planner; Carla C. Van Hoy, Planning Assistant III.

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ADOPTED

CONSOLIDATED MASTER PLAN

OF THE CITY OF

ALEXANDRIA, VIRGINIA

1974

RESOLUTION NO. 353

A RESOLUTION to repeal those elements of the Master Plan for the City of Alexandria, Virginia, heretofore adopted or amended by resolution, namely: the GENERALIZED LAND USE PLAN and map adopted by resolution on April 3, 1963, the LAND USE PLAN and map for the CAMERON STATION STUDY AREA adopted July 23, 1963, the DUKE STREET, EDSALL ROAD STUDY AREA map and report adopted February 25, 1964, the WATERFRONT STUDY COMMITTEE REPORT adopted June 14, 1967, the MIXED USE DEVELOPMENT PLAN LEGEND adopted February 23, 1971, and the MIXED USE DEVELOPMENT PLAN CRITERIA adopted March 9, 1971.

WHEREAS, the Master Plan for the City of Alexandria, Virginia has heretofore consisted of various elements which have been adopted, extended and amended from time to time by ordinance or by resolution of city council, and

WHEREAS, it is the intent of city council to approve and adopt a new and consolidated Master Plan for the city which shall supersede all elements of the Master Plan previously adopted as well as all extensions and amendments thereto, therefore

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ALEXANDRIA, VIRGINIA:

1. That the resolution of city council, adopted April 3, 1962, adopting a Generalized Land Use Plan and Map as part of the Master Plan of the City of Alexandria, Virginia, be and it hereby is repealed.

2. That the resolution of city council, adopted July 23, 1963, amending the Generalized Land Use Plan by adding and adopting a map entitled "Land Use Plan for the Cameron Station Study Area" together with a report entitled "Consideration for a Generalized Land Use Plan for the Cameron Street Study Area" be and it hereby is repealed.

3. That the resolution of city council, adopted February 25, 1964, amending the Generalized Land Use Plan by adding a map and report entitled "Duke Street, Edsall Road Study Area", be and it hereby is repealed.

4. That the resolution of city council adopted June 14, 1967, amending the Generalized Land Use Plan by adding a map and report entitled "Waterfront Study Committee Report", be and it hereby is repealed.

5. That city council Resolution No. 11, adopted February 23, 1971, amending the Generalized Land Use Plan by adding a legend relating to Mixed Use Development Plans to the Generalized Land Use Plan map, be and it hereby is repealed.

6. That city council Resolution No. 17, adopted March 9, 1971, amending the Generalized Land Use Plan by adding criteria for Mixed Use Development Plans, be and it hereby is repealed.

7. That this resolution shall be signed by the mayor, attested by the clerk of the council and the seal of the City of Alexandria affixed thereto.

8. That the clerk of the council shall transmit a duly certified copy of this resolution, to the clerk of the circuit court for the City of Alexandria, Virginia, and shall request the clerk to file the same among the court records.

Adopted: November 26, 1974

Charles E. Beatley, Jr.
Charles E. Beatley, Jr. Mayor

Beverly Snedeker
Mrs. Beverly Snedeker Acting City Clerk

I, Helen Vickers, Clerk of the City of Alexandria, Virginia, do hereby certify that the foregoing is a true copy of a Resolution adopted by the City Council of Alexandria at the Regular Meeting of City Council held on the 26th day of November, 1974.

Dated this 3rd day of December, 1974.

Helen Vickers
Helen Vickers, Clerk of the City of Alexandria, Virginia

ORDINANCE NO. 1989

AN ORDINANCE to approve and adopt a new CONSOLIDATED MASTER PLAN for the City of Alexandria, Virginia.

WHEREAS, a plan called "Proposed Comprehensive Plan for Alexandria, 1970-1980", with the maps, plats, charts and tables therein, and with additions and amendments dated September 24, 1973, entitled "Proposed Comprehensive Plan: Action and Transmittal Report by Planning Commission", was duly adopted as the Master Plan for the City of Alexandria, Virginia, by a resolution of the City Planning Commission on September 24, 1973, which resolution with the said plan and additions and amendments was duly certified to the City Council in accordance with the provisions of Section 9.05 of the Charter of the City of Alexandria; and

WHEREAS, the "Proposed Comprehensive Plan for Alexandria, Virginia, 1970-1980" with the said additions and amendments consists of several elements, which together are intended to be a total new consolidated master plan for the City of Alexandria; and

WHEREAS, the City Council has conducted public hearings on the said new master plan and the various elements thereof and is of the opinion that its approval and adoption as amended and revised by City Council on February 12, 1974 will promote the proper and orderly development of the City and the health, safety, morals, comfort, prosperity and general welfare of its citizens; and

WHEREAS, the amendments and revisions adopted by City Council on February 12, 1974, and the additions and amendments dated September 24, 1973, entitled "Proposed Comprehensive Plan: Action and Transmittal Report by Planning Commission" have been incorporated into a document entitled "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974"; therefore

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That the document entitled "Adopted Consolidated Master Plan of the City of Alexandria Virginia, 1974" be and the same hereby is approved and adopted as the new Consolidated Master Plan of the City of Alexandria, Virginia.

Section 2. That the principal elements of the said new Consolidated Master Plan herein approved and adopted are as follows:

a. Land Use (including a long-range land use plan), as set forth in the document entitled "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974".

b. Community Facilities, as set forth in the document entitled "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974".

c. Transportation (including a major thoroughfare plan), as set forth in the document entitled "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974".

d. Housing, as set forth in the document entitled "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974".

e. Urban Design, as set forth in the document entitled "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974".

Section 3. That the hereinabove approved and adopted Land Use and any future amendments thereto may be used as guide for planning, zoning and land use in the City of Alexandria, but shall not be construed to rezone any property within the city.

Section 4. That the hereinabove approved and adopted Transportation section shall not be deemed to open or establish any street, or to take any land for street purposes, nor for the public use, nor as a public improvement, but solely as a reservation of the street location shown thereon, for future taking or acquisition for public use.

Section 5. That the document entitled "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974", be and it hereby is incorporated by reference into this ordinance and shall hereafter be entitled "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974".

Section 6. That the new Consolidated Master Plan approved and adopted by this ordinance shall, with the plats, maps, charts and tables in it, supersede and replace all elements of any master plan or amendments thereto which have been heretofore validated and confirmed by the City Charter or adopted either by ordinance or resolution of the City Council.

Section 7. That the new Adopted Consolidated Master Plan for the City of Alexandria, Virginia, 1974, herein approved and adopted shall be signed by the Mayor, attested by the Clerk of the Council and the seal of the City of Alexandria affixed thereto.

Section 8. That the Clerk of the Council shall transmit the said new Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, along with a duly certified copy of this ordinance to the Clerk of the Circuit Court for the City of Alexandria, Virginia, and shall request the clerk to file the same among the Court records.

Section 9. Copies of any matter incorporated in this ordinance by reference may be examined in the City Hall of the City of Alexandria, Virginia, at the Community Services Office, Room 104, the office of the City Clerk, Room 302, and the entrance hall on Market Square.

Section 10. That the title of and an informal memorandum explaining this ordinance shall be published in a newspaper of general circulation published in the city not later than five days following its introduction together with a notice containing the time and place for a public hearing. The city clerk shall have the full text of this ordinance printed in sufficient numbers to supply copies to meet request. The city clerk shall note the date of introduction and first reading, the date of publication, the date of the public hearing, and the date of the second reading and final passage in the minutes of the meeting. This ordinance shall become effective the date of its final passage.

Charles E. Beatley Jr.
CHARLES E. BEATLEY, JR.
Mayor

FINAL PASSAGE: November 26, 1974

I, Helen Vickers, Clerk of the City of Alexandria, Virginia, do hereby certify that the foregoing is a true copy of a Resolution adopted by the City Council of Alexandria at the Regular Meeting of City Council held on the 26th day of November, 1974.

Dated this 3rd day of December, 1974.

Helen Vickers
Helen Vickers, Clerk of the City of
Alexandria, Virginia

ORDINANCE NO. 1990

AN ORDINANCE to repeal those elements of the MASTER PLAN of the City of Alexandria, Virginia, heretofore adopted or amended by ordinance, namely Ordinance No. 674, finally passed March 1, 1951, Ordinance No. 768, finally passed February 13, 1953, Ordinance No. 1173, finally passed June 26, 1967, Ordinance No. 1231, finally passed July 23, 1963, Ordinance No. 1255, finally passed February 25, 1964, Ordinance No. 1490, finally passed June 3, 1968, all of which relate to the MAJOR THOROUGHFARE PLAN, and Ordinance No. 1341, finally passed on June 22, 1965, relating to a LONG RANGE PLAN FOR LIBRARIES.

WHEREAS, the Master Plan for the City of Alexandria, Virginia, has heretofore consisted of various elements which have been adopted, extended and amended from time to time by ordinance or by resolution of city council; and

WHEREAS, it is the intent of city council to approve and adopt a new and consolidated Master Plan for the city which shall supersede all elements of the Master Plan previously adopted as well as all extensions and amendments thereto; therefore

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That the following ordinances relating to the Major Thoroughfare Plan be and they hereby are repealed:

a. Ordinance No. 674, finally passed March 1, 1951.

b. Ordinance No. 768, finally passed February 13, 1953.

c. Ordinance No. 1173, finally passed June 26, 1962.

d. Ordinance No. 1231, finally passed July 23, 1963.

e. Ordinance No. 1255, finally passed February 25, 1964.

f. Ordinance No. 1490, finally passed July 3, 1968.

Section 2. That the Ordinance No. 1341, finally passed on June 22, 1965, relating to the adoption of a Long Range Plan for Libraries, be and it hereby is repealed.

Section 3. That the clerk of the council shall transmit a duly certified copy of this ordinance to the clerk of the circuit court for the City of Alexandria, Virginia, with a request that he file the same among the court records.

Section 4. That the title of and an informal memorandum explaining this ordinance shall be pubished in a newspaper of general circulation published in the city not later than five days following its introduction together with a notice containing the time and place for a public hearing. The city clerk shall have the

full text of this ordinance printed in sufficient numbers to supply copies to meet request. The city clerk shall note the date of introduction and first reading, the date of publication, the date of the public hearing, and the date of the second reading and final passage in the minutes of the meeting. This ordinance shall become effective the date of its final passage.

Charles E. Beatley Jr.

CHARLES E. BEATLEY, JR.
Mayor

FINAL PASSAGE: November 26, 1974

I, Helen Vickers, Clerk of the City of Alexandria, Virginia, do hereby certify that the foregoing is a true copy of an Ordinance passed by the City Council of the City of Alexandria at the Regular Meeting of City Council held on the 26th day of November, 1974.

Dated this 3rd day of December, 1974.

Helen Vickers

Helen Vickers, Clerk of the City of
Alexandria, Virginia

ORDINANCE NO. 2339

AN ORDINANCE to amend the LAND USE ELEMENT OF THE "ADOPTED CONSOLIDATED MASTER PLAN OF THE CITY OF ALEXANDRIA, VIRGINA, 1974."

WHEREAS, the city planning commission adopted a resolution on June 6, 1978, recommending the following amendments lettered "A" through "C" to the Land Use Element of the "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974"; and

WHEREAS, the city council is of the opinion that said Plan should be amended "A" through "C" as follows; and

WHEREAS, the city council is of the opinion that said Plan should be further amended by the following amendment lettered "D"; therefore

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That the Land Use Element of the "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974" which was adopted by Ordinance No. 1989, be and the same hereby is amended as follows:

A. Delete all textual material appearing as section 4, King Street Station, under the Land Use Element, page 30, of the "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974."

B. The language and graphics contained in Attachment A, entitled "King Street Station Area Plan Amended Text," attached hereto and made a part hereof, is adopted and made a part of the "Adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974," provided, however, that the text on page 18 of Attachment A beginning with "Illustrative Development Plan" and the text and graphics on pages 19, 20, 21, and 22 of Attachment A should be considered as illustrative only.

C. The Long Range Land Use Plan Map shall be revised to reflect the Land Use Element of the King Street Station Area Plan.

D. The Long Range Land Use Plan Map shall be revised to reflect that the area between Harvard Street, West Street, Cameron Street and King Street, exclusive of the commercial frontage on the north side of King Street, is designated for medium density residential development.

Section 2. That the title and an informal memorandum explaining this ordinance shall be published in a newspaper of general circulation published in the city not later than five days following its introduction together with a notice containing the time and place for a public hearing. The city clerk shall

have the full text of this ordinance printed in sufficient numbers to supply copies to meet request. The city clerk shall note the date of introduction and first reading, the date of publication, the date of the public hearing, and the date of the second reading and final passage in the minutes of the meeting. This ordinance shall become effective the date of its final passage.

FRANK E. MANN
Mayor

FINAL PASSAGE: February 24, 1979

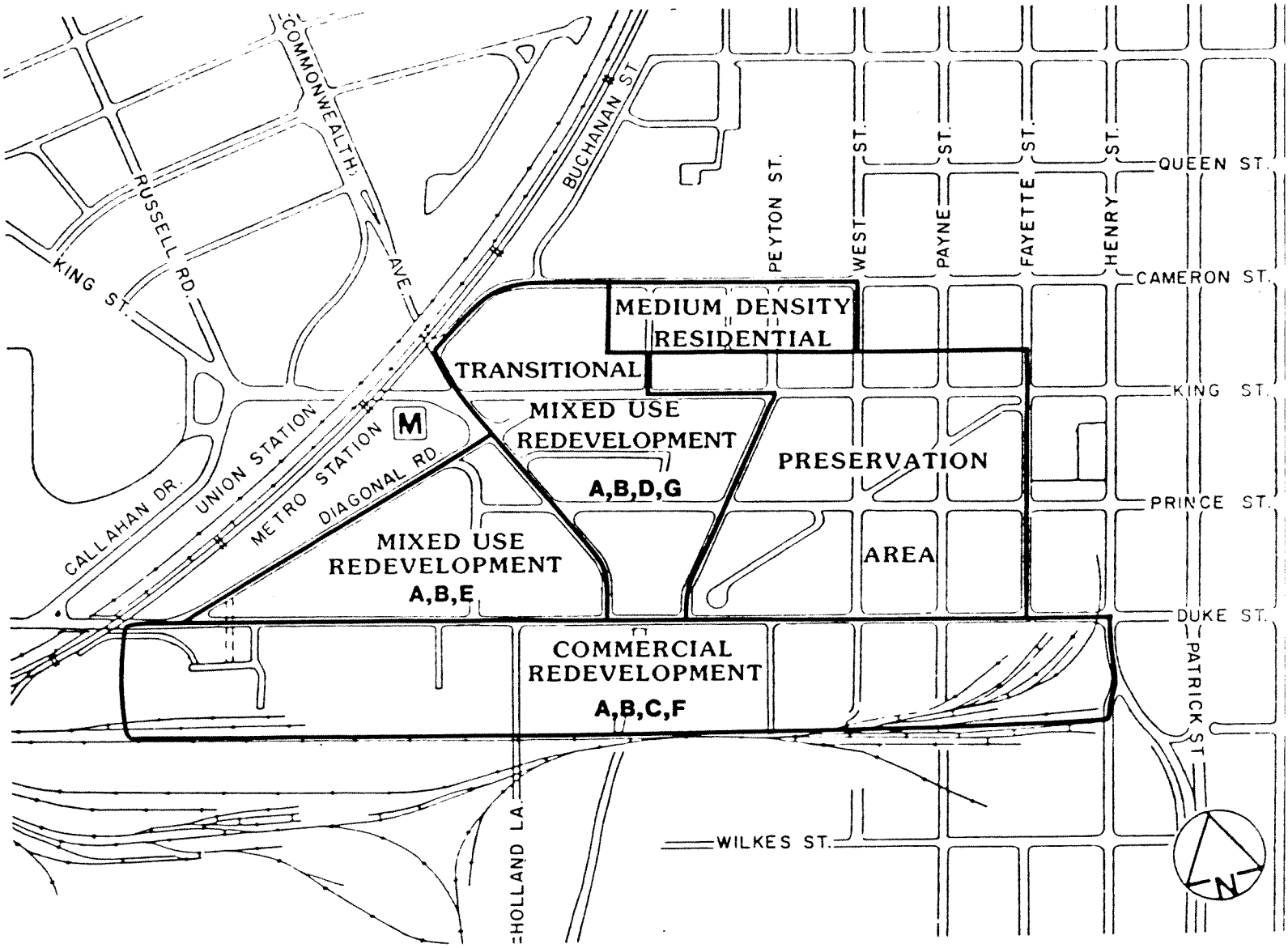
Summary of Attachment A

Attachment A contains the following sections and pages from the King Street Station Area Plan: a guide for future action:

"Description of Planning Area"	pp 9 - 12 figure 11, p 13
"Goals and Objectives"	pp 17 - 19
"Land Use Recommendations"	pp 22 - 29

Page 18 of Attachment A refers to page 24 of the King Street Area Plan.

The page citations listed above are the entire contents of Attachment A referenced in Ordinance No 2339.



KING STREET STATION AREA PLAN

A. OFFICE
B. RETAIL
C. COMMUNITY RETAIL CENTER
D. MEDIUM DENSITY RESIDENTIAL (20 TO 55 DU/ACRE)
E. HIGH DENSITY RESIDENTIAL (56 DU/ACRE AND HIGHER)
F. DIP COMMERCIAL (WAREHOUSING AND OFFICE)
G. PUBLIC OPEN SPACE

ORDINANCE NO 2728

AN ORDINANCE to amend the land use and transportation elements of the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974.

WHEREAS, the Planning Commission of the City of Alexandria, Virginia, adopted a resolution on March 2, 1982, recommending that the **Potomac West Area Plan** dated April, 1981, be adopted as an appendix to the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, and that the said Master Plan be further amended as hereinafter set forth to effectuate the adoption of the said Potomac West Area Plan; and

WHEREAS, the Planning Commission of the City of Alexandria, adopted a resolution on March 24, 1982, recommending that the **Braddock Road Station Area Plan** dated March, 1982, be adopted as an appendix to the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, and that the said Master Plan be further amended as hereinafter set forth to effectuate the adoption of the said Braddock Road Station ARea Plan; and

WHEREAS, the Planning Commission of the City of Alexandria, Virginia, adopted a resolution on September 16, 1982, recommending that the **Alexandria Waterfront Plan** dated September, 1982, be adopted as an appendix to the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, and that the said Master Plan be further amended as hereinafter set forth to effectuate the adoption of the Alexandria Waterfront Plan; and

WHEREAS, the City Council of the City of Alexandria, Virginia, is of the opinion that the said Master Plan should be amended as recommended by the planning commission; therefore,

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That the land use and transportation elements of the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974 be and the same hereby are amended as follows:

(a) Add the **Potomac West Area Plan** dated April, 1981, in its entirety as an appendix to the said Master Plan.

(b) Delete the section entitled "The Del Ray Area" on page 50 and insert "See the Potomac West Area Plan."

(c) Delete the recommendations for the Del Ray Area on page 52 and insert "See the Potomac West Area Plan."

(d) Add a notation on page 63 stating "For housing policies for the Potomac West Area, see the Potomac West Area Plan."

(e) Insert after the second paragraph under the heading "Community Facilities" on page 64, "In addition to the recommendations contained in this chapter, see the Potomac West Area Plan for further commentary and recommendations concerning the Del Ray and/or Potomac West Area."

(f) Insert after the seventh paragraph on page 102, "For discussion of the Potomac West Area, see the Potomac West Area Plan."

(g) Insert after the paragraph entitled "Other Residential Communities" on page 126, "For discussion of the Potomac West Area, see the Potomac West Area Plan."

(h) The land use recommendations shown on the Long Range Land Use Plan Map, map 7, page 40 are amended by the recommendation shown on figure 6, page 31 of the Potomac West Area Plan.

(i) The Major Thoroughfare Plan, map 20, page 115 is amended by figure 17, page 80 of the Potomac West Area Plan.

Section 2. That the **Potomac West Area Plan**, hereby adopted as a part of the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, be and the same hereby is amended as follows:

(a) On figure 6, page 31 change the area designated "Mixed Use - Low Density" to "Mixed Use - Medium Density."

(b) On figure 6, page 31 modify the definitions of residential designations as follows:

(1) Residential - Low (5 to 17 du/ac)

(2) Residential - Medium (18 to 27 du/ac)

(3) Residential - High (28 to 55 du/ac)

(c) On page 59, under the heading "MT. VERNON REVITALIZATION," insert the following paragraph:

> Revitalization as used in this plan includes reuse of existing structures and development or or redevelopment at selected nodes along Mt. Vernon Avenue. Revitalization must be accompanied by increased market attraction to the area. There are two ways to achieve this, one of which is to have a major retail anchor such as a department store, but this is unlikely to occur in this area. The second is to permit new office construction to build in daytime vitality by having office workers on the avenue. These workers become customers during the lunch break and after work. The proposed MUMD

zone provides for this type of use at a scale and density that is in keeping with the nearby residential neighborhood. This approach is similar to that used successfully in the Gadsby Urban Renewal Project.

(d) On figure 15, page 62 correct the node map to coincide with MUMD.

(e) In the second paragraph on page 65, delete that portion of the paragraph from the sentence starting with "The development of the growth area..." through the end of the paragraph, including the chart.

(f) Delete the first paragraph on page 79 and insert the following: "The City should study the need to widen Route 1 north of Reed Avenue in advance of anticipated major development and to encourage this development to use Route 1 and not Reed Avenue for access."

(g) Delete the last paragraph on page 79 and insert the following: "The feasibility of a bus loop to connect Mt. Vernon Avenue and Braddock Road to the Braddock Road Station should be studied."

(i) Delete figure 18 on page 84.

BRADDOCK ROAD

Section 3. That the land use and transportation elements of the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, be and the same hereby are futher amended as follows:

(a) Add the **Braddock Road Station Area Plan** dated March, 1982, in its entirety as an appendix to the said Master Plan.

(b) The Existing Land Use Plan Map, map 6, page 39 is amended by figure 2, page 5 of the Braddock Road Station Area Plan.

(c) The Long Range Land Use Plan Map, map 7, page 40 is amended by figure 7, page 11 of the Braddock Road Station Area Plan.

(d) The Major Thoroughfare Plan, map 20, page 115 is amended by figure 7, page 11 of the Braddock Road Station Area Plan.

(e) On page 26 following "2. Braddock Road Station Area (See Page 38)" add "See the Braddock Road Station Area Plan."

(f) On page 28 following "2. Madison Street Station (See Page 38)" add "See the Braddock Road Station Area Plan."

(g) On page 44 following "West of Washington Street" add "See the Braddock Road Station Area Plan."

(h) On page 47 under the heading "Carry out the following programs to upgrade and improve the area west of Washington Street (Census Tract 16)" add "See the Braddock Road Station Area Plan for recommendations for the Braddock Road Station Area and/or for the census tract 16 area."

(i) On pages 64, 65 and 67, delete all references to the Parker-Gray School.

(j) On the Existing Public Recreation Facilities map, map 14, page 73, delete the Parker-Gray School.

(k) On page 81 under the heading "Tennis Courts" delete the Parker-Gray School.

(l) On the Proposed Public Recreation Facilities Map, map 15, page 82, delete the Parker-Gray School.

Section 4. That the **Braddock Road Station Area Plan**, hereby adopted as a part of the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, be and the same hereby is amended as follows:

(a) Delete the area west of the Richmond, Fredericksburg and Potomac Railroad property from the Braddock Road Station Area.

(b) Add the area located on the south side of the 1500 block of Cameron Street to the Braddock Road Station Area.

(c) Amend the last sentence of the sixth paragraph on page 10 to read as follows: "Also an area between King Street and Cameron Street west of Fayette Street is proposed to be predominantly residential rather than mixed use."

(d) The Proposed Land Use Plan, figure 7, page 11 is amended to show the area added by subsection (b) above as "Residential Medium."

(e) The Building Height Plan, figure 8, page 12 is amended to show 45 feet as the recommended building height for structures in the area added by subsection (b) above.

WATERFRONT

Section 5. That the land use and transportation elements of the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, be and the same hereby are further amended as follows:

(a) Add **Alexandria Waterfront Plan** dated September, 1982, in its entirety as an appendix to the said Master Plan.

(b) The Long Range Land Use Plan Map, map 7, page 40 is amended by figure 2, page 3 of the Alexandria Waterfront Plan.

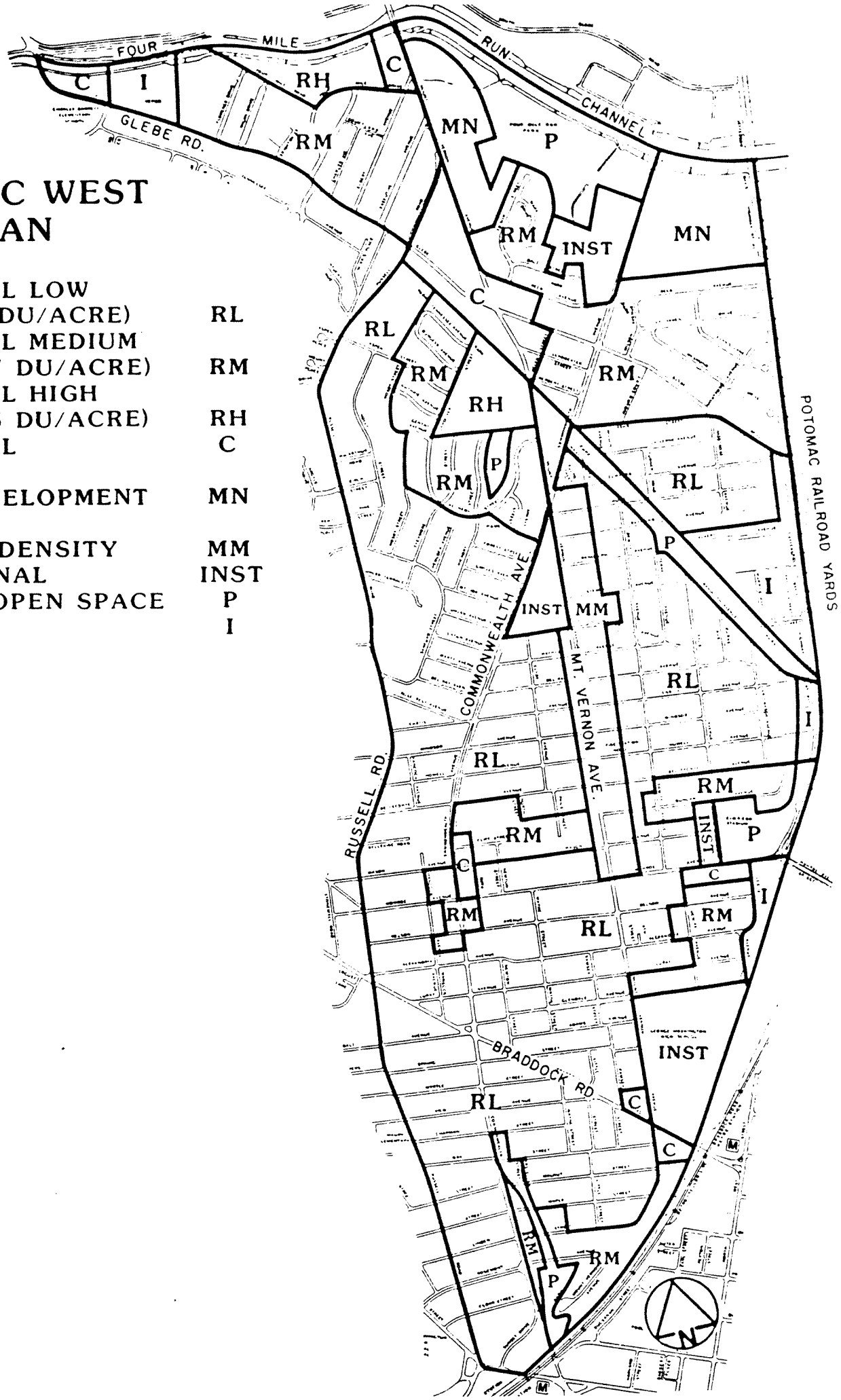
Section 6. That the title of and an informal memorandum explaining this ordinance shall be published in a newspaper of general circulation published in the city not later than five days following its introduction together with a notice containing the time and place for a public hearing. The city clerk shall have the full text of this ordinance printed in sufficient numbers to supply copies to meet request. The city clerk shall note the date of introduction and first reading, the date of publication, the date of the public hearing, and the date of the second reading and final passage in the minutes of the meeting. This ordinance shall become effective the date of its final passage.

CHARLES E. BEATLEY, JR.
Mayor

Final Passage: November 13, 1982.

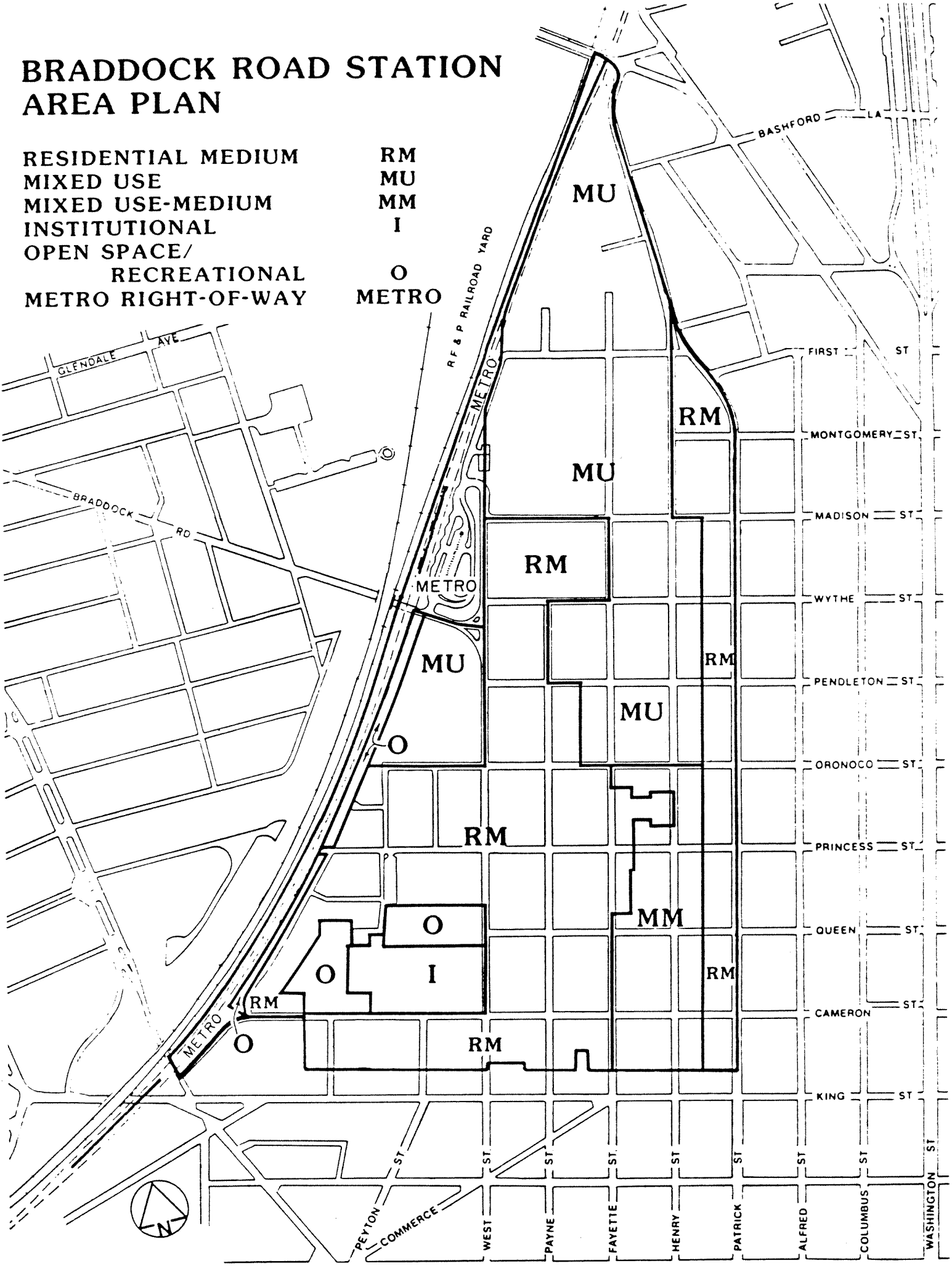
POTOMAC WEST AREA PLAN

RESIDENTIAL LOW (5 TO 17 DU/ACRE)	RL
RESIDENTIAL MEDIUM (18 TO 27 DU/ACRE)	RM
RESIDENTIAL HIGH (28 TO 55 DU/ACRE)	RH
COMMERCIAL	C
MIXED USE- NEW DEVELOPMENT	MN
MIXED USE- MEDIUM DENSITY	MM
INSTITUTIONAL	INST
PARK AND OPEN SPACE	P
INDUSTRIAL	I



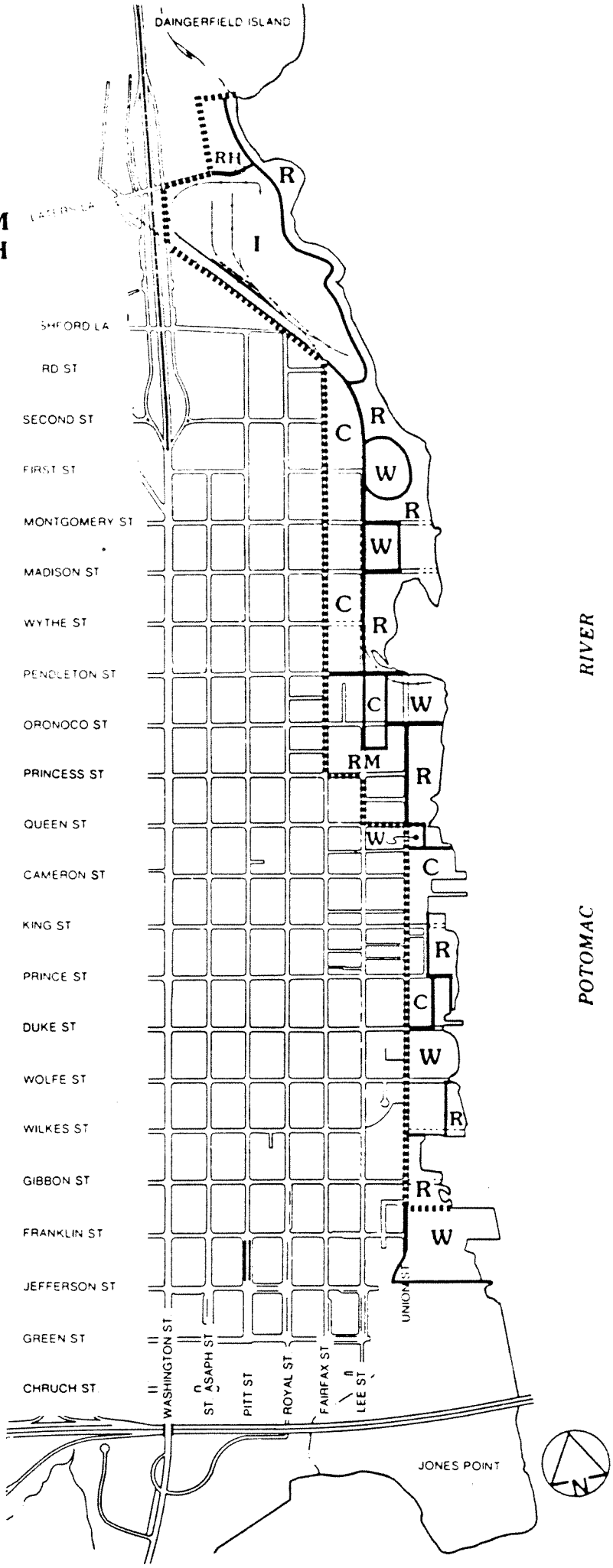
BRADDOCK ROAD STATION AREA PLAN

RESIDENTIAL MEDIUM	RM
MIXED USE	MU
MIXED USE-MEDIUM	MM
INSTITUTIONAL	I
OPEN SPACE/ RECREATIONAL	O
METRO RIGHT-OF-WAY	METRO



WATERFRONT PLAN

RESIDENTIAL MEDIUM	RM
RESIDENTIAL HIGH	RH
COMMERCIAL	C
WATERFRONT MIXED USE	W
RECREATIONAL AND OPEN SPACE	R
INDUSTRIAL	I



ORDINANCE NO. 2969

AN ORDINANCE to amend the land use and transportation elements of the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974.

WHEREAS, the Planning Commission of the City of Alexandria, Virginia, adopted a resolution on June 5, 1984, recommending that the Duke Street Study dated December 1983, be adopted as an appendix to the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, and that the said Master Plan be further amended as hereinafter set forth to effectuate the adoption of the said Duke Street Study; and

WHEREAS, the City Council of the City of Alexandria, Virginia, is of the opinion that the said Master Plan should be amended as recommended by the planning commission; therefore,

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That the land use element of the adopted Consolidated Master PLan of the City of Alexandria, Virginia, 1974, be and the same hereby is amended as follows:

(a) Add the Duke Street Study dated December, 1983, as amended by the planning commission on June 5, 1984, in its entirety as an appendix to the said Master Plan, revising the text on page 20 and Figure I-9, Development Policy Area.

(b) On page 27, revise Figure I-11, "Proposed Generalized Land Use Plan" to show the northwest corner of Duke Street and Quaker Lane as residential medium (townhouses) and to include the proposal for a land exchange for a road connection to the proposed cul-de-sac north of Wheeler Avenue.

Section 2. That the Long Range Land Use Plan Map 7, page 40, hereby adopted as a part of the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, be and the same hereby is amended as follows:

(a) On page 40, amend in accord with the Proposed Generalized Land Use Plan contained on Figure I-11, page 27, to show the northwest corner of Duke Street and Quaker Lane as a residential medium (townhouses) to include the proposal for a land exchange for a road connection to the proposed cul-de-sac north of Wheeler Avenue.

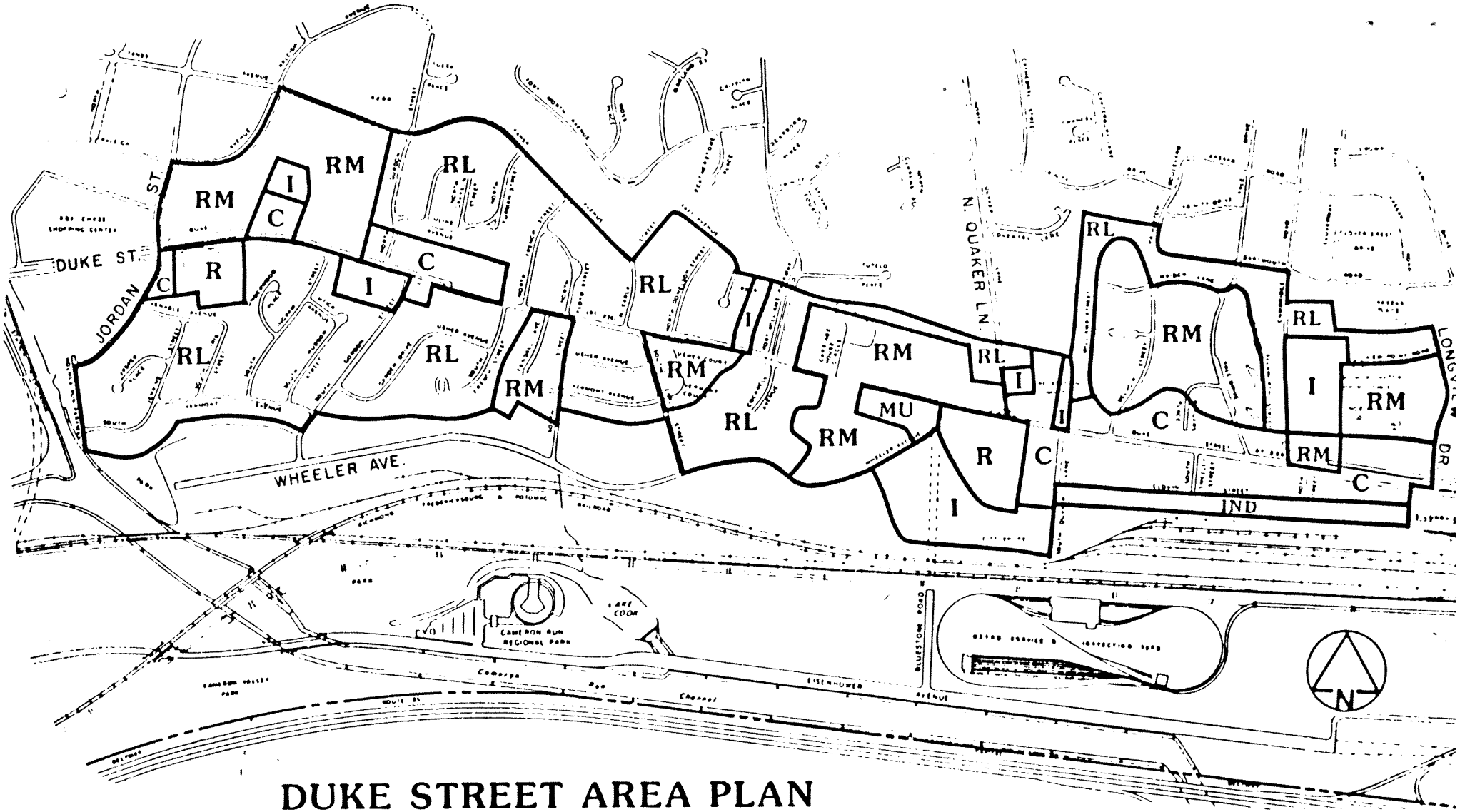
Section 3. That the title of and an informal memorandum explaining this ordinance shall be published in a newspaper of general circulation published in the city not later than five days following its introduction together with a notice containing the time and place for a public hearing. The city clerk shall have the full text of this ordinance printed in sufficient numbers to supply copies to meet request. The city clerk shall note the date of introduction and first reading, the

date of publication, the date of the public hearing, and the date of the second reading and final passage in the minutes of the meeting. This ordinance shall become effective the date of its final passage.

CHARLES E. BEATLEY, JR.
Mayor

Final Passage: September 15, 1984

The overall development potential issues can be summarized by viewing this corridor as two areas, each having different opportunities and requiring different treatment (Figure I-9). The first area, west of Wheeler Avenue, is suitable for the retention of existing residential uses and residential infill. Existing commercial activities within the western area should be encouraged to make improvements that would minimize any incompatibilities with adjacent uses. The second area, east of Wheeler Avenue, is suitable for revitalization with commercial infill and redevelopment. Residential development would be appropriate as a transition between the preservation area and the redevelopment and revitalization area.



DUKE STREET AREA PLAN

RESIDENTIAL LOW	RL
RESIDENTIAL MEDIUM	RM
COMMERCIAL	C
MIXED USE	MU
INSTITUTIONAL, MUNICIPAL FACILITIES	I
RECREATION OR OPEN SPACE	R
INDUSTRIAL	IND

ORDINANCE NO. 3175

AN ORDINANCE to amend the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974.

WHEREAS, the Planning Commission of the City of Alexandria, Virginia, adopted a resolution on March 4, 1986, recommending that portions of the Landmark/Van Dorn Area Plan, dated January 1986, be adopted as an appendix to the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974, and that the said Master Plan be further amended as hereinafter set forth to effectuate the adoption of portions of the Landmark/Van Dorn Area Plan; and

WHEREAS, the Planning Commission at its March 4, 1986, meeting also formerly adopted certain staff recommendations for changes to the Landmark/Van Dorn Area Plan, dated January 1986, which are set forth below and included those recommendations in the previously mentioned resolution; and

WHEREAS, the City Council of the City of Alexandria, Virginia, is of the opinion that the Master Plan should be amended as so recommended by the Planning Commission, with certain exceptions, as set forth below; therefore,

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That the adopted Consolidated Master Plan of the City of Alexandria, Virginia, 1974 ("Master Plan") be and the same hereby is amended by incorporating the following portions of the Landmark/Van Dorn Area Plan, dated January 1986, as amended by the Planning Commission on March 4, 1986, and by city council on April 8, 1986:

(a) the Transportation Recommendations, as summarized in paragraph I, page 1, and shown on map 1, page 19, and the provision added by the Planning Commission on March 4, 1986, that South Walker Street be widened one lane to provide a right-turn from South Walker Street to Duke Street eastbound;

(b) the Proposed Changes to the Land Use Plan, as summarized in paragraph II, pages 2, 3 and 4, and as shown on Map 4, page 10, with three amendments: first, as shown on a revised version of Map 4, labeled "Revised Proposed Land Use Plan" and dated December 1986, area "d" on Map 3, page 9, labeled "Land Use Plan Changes," is changed from medium-density residential to mixed use along the area's Duke Street frontage, and high-density residential in the balance of the area; second, as shown on this same revised version of Map 4, a portion of area "f" on Map 3, page 9, is changed from high-density mixed use to industrial; and, third, the text in subparagraph (g) of paragraph II, page 2, is deleted and replaced with the following:

The Juvenile Detention Center should remain at the current location indefinitely and the site should be used as a public institutional site with a significant amount of open space.

(c) the Open Space Recommendations, as summarized in paragraph IV, pages 4 and 5.

Section 2. That, to the degree any portion of the Landmark/Van Dorn Area Plan referenced above in, and added to the Master Plan by, section 1 is inconsistent with any provision of the Master Plan in effect prior to the effective date of this ordinance, any such provision of the Master Plan shall be and hereby is amended to relect and to be in full accord with the portions of the Landmark/Van Dorn Area plan referenced in, and added to the Master Plan by, section 1.

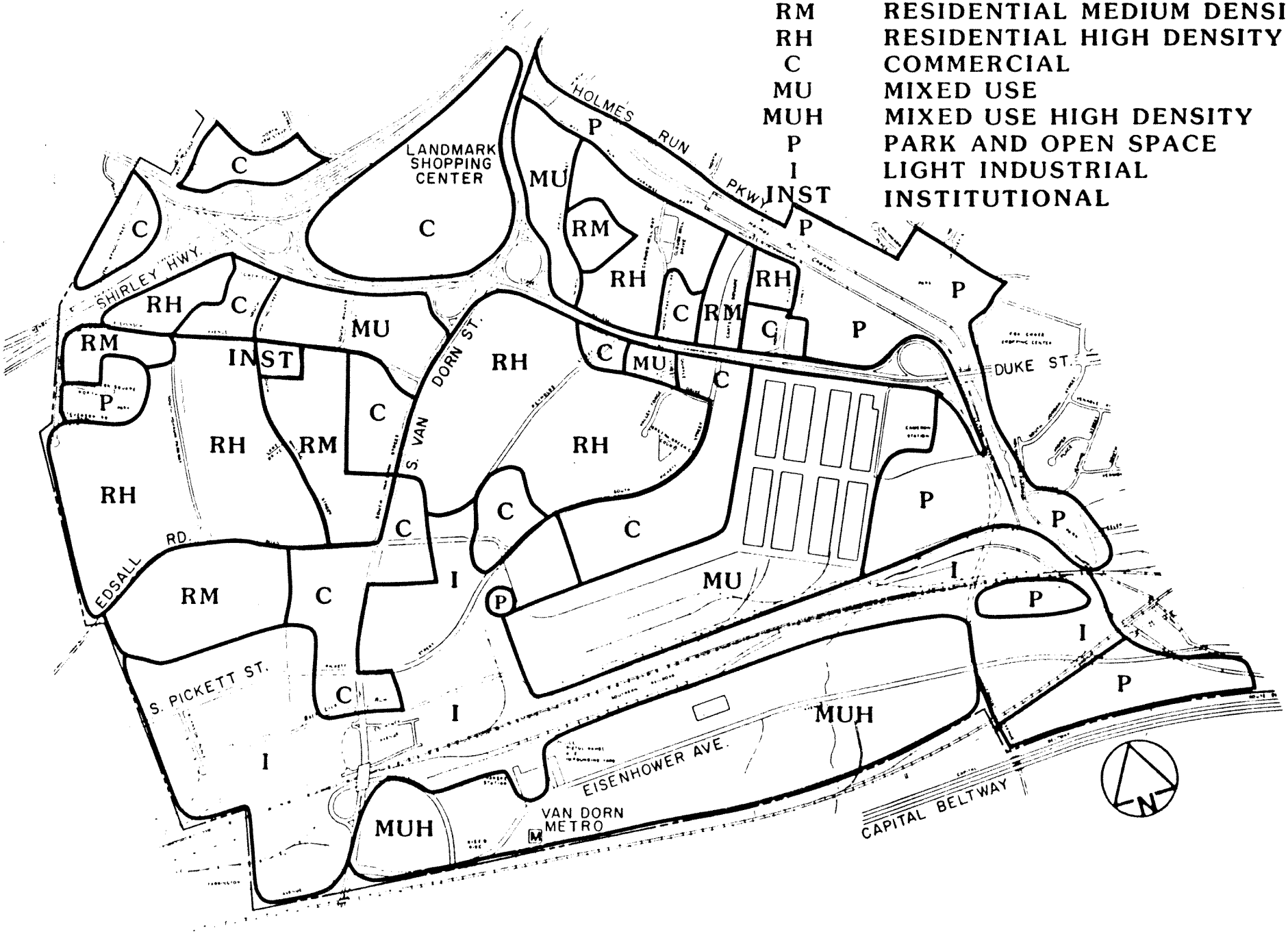
Section 3. That the title of and an informal memorandum explaining this ordinance shall be published in a newpaper of general circulation published in the city not later than five days following its introduction together with a notice containing the time and place for a public hearing. The city clerk shall have the full text of this ordinance printed in sufficient numbers to supply copies to meet request. The city clerk shall note the date of introduction and first reading, the date of publication, the date of the public hearing, and the date of the second reading and final passage in the minutes of the meeting. This ordinance shall become effective the date of its final passage.

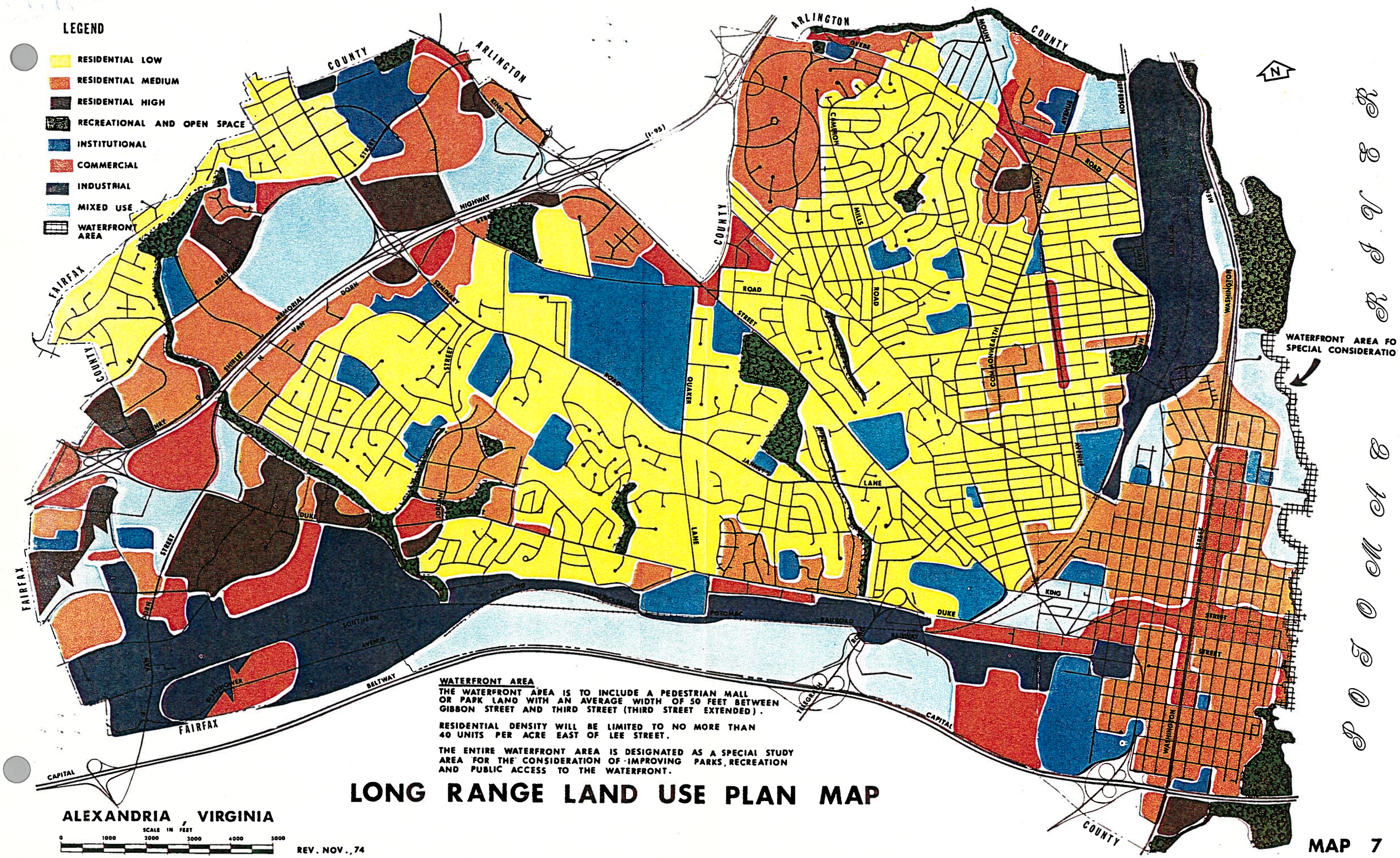
JAMES P. MORAN, JR.
Mayor

Final Passage: January 24, 1987

LANDMARK-VAN DORN AREA PLAN

RM	RESIDENTIAL MEDIUM DENSITY
RH	RESIDENTIAL HIGH DENSITY
C	COMMERCIAL
MU	MIXED USE
MUH	MIXED USE HIGH DENSITY
P	PARK AND OPEN SPACE
I	LIGHT INDUSTRIAL
INST	INSTITUTIONAL





WATERFRONT AREA

THE WATERFRONT AREA IS TO INCLUDE A PEDESTRIAN MALL OR PARK LAND WITH AN AVERAGE WIDTH OF 50 FEET BETWEEN GIBBON STREET AND THIRD STREET (THIRD STREET EXTENDED).

RESIDENTIAL DENSITY WILL BE LIMITED TO NO MORE THAN 40 UNITS PER ACRE EAST OF LEE STREET.

THE ENTIRE WATERFRONT AREA IS DESIGNATED AS A SPECIAL STUDY AREA FOR THE CONSIDERATION OF IMPROVING PARKS, RECREATION AND PUBLIC ACCESS TO THE WATERFRONT.

LONG RANGE LAND USE PLAN MAP

ALEXANDRIA, VIRGINIA

SCALE IN FEET
0 1000 2000 3000 4000 5000

REV. NOV., 74

MAP 7

CITY OF ALEXANDRIA, VIRGINIA

CONSOLIDATED MASTER PLAN

Prepared by the
Planning Advisory Committee
January, 1972

Revised and Adopted by
the City Council
November 26, 1974

DATE: November 26, 1974

TO: The Honorable Mayor and Members of the City Council

THROUGH: Keith F. Mulrooney, City Manager

FROM: David R. Cooper, Director
Planning and Community Development

SUBJECT: Final Passage of the "Consolidated Master Plan"

This document, the "Consolidated Master Plan of the City of Alexandria, Virginia", is submitted for your consideration and final passage.

The "Proposed Comprehensive Plan" was presented by the Planning Advisory Committee at a joint meeting of the City Council and the Planning Commission on February 23, 1972. The Plan as prepared by the Planning Advisory Committee, consisted of a Land Use Plan, a Community Facilities Plan, a Transportation Plan, and recommendations pertaining to Housing and Urban Design.

The "Proposed Comprehensive Plan" as prepared by the Planning Advisory Committee was further considered at public meetings on May 16, 1972, July 10, 1972, December 18, 1972, February 6, 1973, and June 27, 1973. On September 24, 1973, in a report entitled the "Proposed Comprehensive Plan: Actions and Transmittal Report", Planning Commission adopted additions and amendments to the "Proposed Comprehensive Plan".

The "Action and Transmittal Report" included a seven page report consisting of additions and amendments to the "Proposed Comprehensive Plan", recommended by the Planning Commission, a minority report of two members of the Planning Commission, and the resolution which was adopted by the Planning Commission on September 24, 1973.

City Council held public meetings on the "Proposed Comprehensive Plan" on December 26, 1973, January 19, 1974, January 22, 1974, February 12, 1974, October 8, 1974, October 19, 1974, and October 22, 1974. On February 12, 1974, Council adopted amendments and revisions to the "Proposed Comprehensive Plan" as presented by the Planning Advisory Committee and supplemented by the Planning Commission. These revisions and amendments by City Council include revisions to

the "Proposed Comprehensive Plan" with regard to the Land Use Plan, the nineteen Development Potential Areas, the Transportation Plan and the Waterfront Policy recommendations.

The "Proposed Comprehensive Plan for Alexandria, 1970-80", together with the maps, plats, charts, and tables therein and with the Planning Commission Action and Transmittal report and the City Council amendments and revisions are entitled "Consolidated Master Plan of the City of Alexandria, Virginia".

On October 8, 1974, City Council deferred action on the "Consolidated Mater Plan of the City of Alexandria, Virginia", subject to a public hearing on the integration of the previously adopted Council amendments into the Consolidated Master Plan. On October 19, 1974, City Council adopted additional revisions and amendments to the "Consolidated Master Plan". On October 22, 1974, City Council deferred action to consider the Plan for final passage subject to the adoption of additional amendments and complete integration of all of Council's amendments.

The adoption of the "Consolidated Master Plan of the City of Alexandria, Virginia" as the Master Plan for the City supersedes and replaces all elements of the Master Plan for the City of Alexandria, Virginia, which have been previously adopted either by the Planning Commission or by the City Council.

David R. Cooper

David R. Cooper, Director
Planning and Community Development

DRC:RTJ:ses

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January 1, 1972

TO: The Honorable Mayor and Members of the Alexandria City Council

FROM: Mr. Morton W. Belcher, Jr.
Chairman, Planning Advisory Committee

SUBJECT: Proposed Comprehensive Plan

There is submitted for your consideration a Proposed Comprehensive Plan for the City of Alexandria which has been prepared by the Planning Advisory Committee established for this purpose by action taken by the Council at its meeting of April 8, 1969.

This document reflects the composite thinking of the Committee. It should be noted, however, that this submission of the proposed plan does not necessarily mean that each Committee member is in accord with all of the conclusions and recommendations set forth therein.

On behalf of the members of this Committee, I wish to express our appreciation to Mr. Richard C. Massell, Director of Planning and Regional Affairs, the personnel of his office, and other city staff workers, who by their untiring efforts and unfailing courtesy have contributed so much to bringing this Proposed Comprehensive Plan into being.

Morton W. Belcher, Jr.
Morton W. Belcher, Jr.
Chairman, Planning Advisory Committee

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Duane H. Brown
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Alan J. Coiro, Traffic Board Representative
Dr. James Gilbert
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Marlin G. Lord
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James A. Yancey* - Traffic Board Representative
Roswell M. Yingling, Redevelopment and Housing Authority Representative

*Former Members of the PAC

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Future Growth and Development Policies Task Force
Paul W. Rasmussen - Chairman

Community Facilities Task Force
Col. Paul H. Krauss - Chairman

Land Use and Housing Task Force
Paul W. Rasmussen - Chairman

Transportation Task Force
Donald F. Mela - Chairman

Urban Design Study Task Force
Marlin G. Lord - Chairman

GUEST SPEAKERS AT PLANNING ADVISORY COMMITTEE MEETINGS

Dr. John C. Albohm	Alexandria Superintendent of Schools
Mrs. Zoe Carrigan	Regional Director Alexandria Community Welfare Council
Mr. R. W. Carroll	District Manager, VEPCO
Mr. Charles Carter	Director of Regional Planning Metropolitan Washington Council of Governments
Mr. George Chapman	Assistant Director of Regional Planning (COG)
Mr. James J. Corbalis, Jr.	Engineer-Director Fairfax County Water Authority
Mr. Lee Fones	Director, Alexandria Dept. of Recreation
Mr. Robert Gray	Formerly Chief of Research and Analysis (COG)
Mr. Albert M. Hair, Jr.	Former City Manager, City of Alexandria
Mr. Philip Hall	Director, Alexandria Dept. of Public Works
Dep. Chief Elliott W. Jayne	Alexandria Fire Department
Mr. Carl T. Kallina	Assistant Director of Corporate Planning Washington Gas Light Company
Mr. W. L. Manor, Jr.	Area Manager, VEPCO
Mr. Albert Melvin Miller	Director, D. C. Insuring Office FHA, Housing & Urban Development (HUD)
Dr. James D. Mills	Chief of Emergency Room, Alexandria Hospital
Mr. John O'Boyle	Manager, The Alexandria Water Company
Mr. Clifford Rusch	Assistant City Manager, City of Alexandria
Mr. J. Lindsay Schwarzman	Manager of Virginia Office, Washington Gas Light Company
Mr. Samuel W. Shafer	Engineer-Director Alexandria Sanitation Authority
Mr. D. H. Winchester	District Engineer, VEPCO

CITY OF ALEXANDRIA DEPARTMENT OF PLANNING AND REGIONAL AFFAIRS

Richard C. Massell, Director
Richard E. Pelkey, Assistant Director
Charles B. Moore, Jr., Chief of Current Planning

Draft text for each Task Force was prepared by the Department of Planning and Regional Affairs. The editing, rewriting and preparation of graphics was done by a team within the Department consisting of Robert L. Crabill, Chairman, Lee Wolf, Gail Bolcar and Raymond Johnson. The final draft of the Proposed Plan was edited by a Planning Advisory Committee Work Group consisting of Paul W. Rasmussen, Col. Paul H. Krauss, and Marlin G. Lord.

The chapter on urban design is based upon a study prepared for the Planning Advisory Committee by Paul A. Spreiregen, AIA.

INTRODUCTION

This proposed Comprehensive Plan for Alexandria, Virginia has identified overall goals and objectives for the physical growth of the City and has recommended policies to help guide this growth during the next decade. These goals and policy recommendations are intended to provide a firm base upon which the Alexandria City Council, following the Planning Commission's review, can adopt a formal Comprehensive Plan.

The proposed Plan is directed primarily to the 1970-80 decade - the longest time span permitting the most realistic projection. It must be borne in mind however that planning is a continuing and on-going process which, to be most effective, requires citizen involvement and participation.

This document provides a compilation of information and data about the historical development of Alexandria, deals with the City as an inner suburb of a large metropolitan area in 1971, and outlines what the immediate and long-range growth means to its citizens. Policy recommendations are made regarding the City's land use, housing, community facilities, transportation, and urban design. The Plan further suggests what future problems will require special study. It also provides a framework for the examination of non-physical planning factors such as those affecting economic, environmental, and sociological problems.

Efforts should begin now to implement the policies that are suggested in the next ten years. In less than five years, our country will celebrate the 200th anniversary of its founding. What better way for Alexandria to help celebrate the nation's bicentennial than to make a firm commitment to a planned and comprehensive building and rebuilding of its future growth. There are great opportunities that can be realized within the next five years and even greater opportunities that can be realized by the end of this decade. Alexandria can and should be a wonderful place to live, an interesting place to work and a fascinating place to visit. The opportunities and the responsibilities that this proposed Comprehensive Plan has outlined can help make the City's future as great as its rich historical heritage.

PLAN SUMMARY

Alexandria is essentially a "built up" city -- that is most of its land area has been developed. Although there are still some areas of vacant land, particularly in the western portion of the City, much of the future growth of Alexandria will occur through redevelopment. This Comprehensive Plan was prepared in order to help guide the City's new growth and redevelopment during this decade.

In order to establish overall guidelines for the preparation of the Comprehensive Plan, general planning assumptions regarding the future of the metropolitan area and the growth of the City were identified.

ASSUMPTIONS

Alexandria will increasingly become an inner-suburb within a growing Washington Metropolitan Area. Population and economic growth within the region will place the City in a responsive decision making role in regard to transportation, housing, capital improvements and other planning issues.

The Comprehensive Plan will be prepared for the present 15.6 square miles of the City.

Property taxes will continue to be the major source of local revenue.

Alexandria, in order to help meet the rising costs of city services, will assume a competitive position in stimulating economic growth and attracting employment centers.

Industrial firms should be encouraged to remain in Alexandria through the development of well-planned areas adequately served by transportation facilities.

The City will continue to try and help meet the housing needs of all its citizens.

The rapid transit system will be built through Alexandria thus affecting current and future transportation planning as well as the location, scale, and timing of future city development.

Pressure from vehicular traffic will continue to increase as a result of continued growth of suburban areas.

Alexandria will continue to seek additional ways to attract tourism.

Recreational activity needs for the City will continue to increase.

There will be an increasing demand for an expanded role by the City government to guide the aesthetics of new development and redevelopment and to help improve the environment.

Future Growth and Land Use

In 1970, there were approximately 110,000 residents and some 32,500 employees within the City. By the end of this decade, these totals are expected to grow to about 145,000 residents and 50,000 employees. It is further estimated that the total residential population will ultimately grow to 200,000 and the employment population will reach 80,000.

In order to accommodate this anticipated growth, the plan recommends that 19 areas within the City be designated as Development Potential Areas in which most of the future growth of the City will occur. Most of these areas should be developed as living-working activity centers which could help lower the dependency on the automobile. All other areas of the City will generally be held constant in both land use and density.

The Western Beltway area should be utilized for industrial relocation and development.

Housing

Alexandria should be active in the development of a regional approach to meet the public responsibility in housing.

The City should help maximize the housing opportunities for all its residents. Federal income supplement programs should be utilized to assist low income families.

Priority for publicly assisted housing should be given to citizens already living or working in Alexandria.

Alexandria should assume responsibility to help provide housing for the elderly.

The City should encourage the development of a variety of housing types, unit sizes, and unit prices to serve a broad range of income levels.

The City should encourage the development of condominium and cooperative housing, increase the means of home ownership, and preserve existing ownership and rental housing resources.

Community Facilities

The major areas of concern that will require major decisions and outlay of funds are improved sanitary sewer and storm sewer facilities and improved water facilities. The City should rebuild the inadequate sanitary sewer system in the Del Ray area and give high priority to the separation of the storm and sanitary sewer system in Planning District I; otherwise, development will be inhibited. Inasmuch as Alexandria does not now have an assured continuous source of water, priority should be given to making arrangements to secure satisfactory sources.

The presently planned expansion in school capacity will be sufficient for the next decade. School facilities should be utilized by the community to the fullest extent possible.

A new branch library should be constructed in the southwest section of the City and the Burke Branch should be enlarged.

In order to correct a deficit in city-wide park and recreational facilities, development should be undertaken at Chinquapin, the Waterfront, and Holmes Run and existing recreational facilities should be supplemented with additional tot lots, ballfields, pools and tennis courts at several locations. A new recreation center is recommended for Chinquapin.

The development of hiking and bike trails should be undertaken.

A new fire station in the Landmark Shopping Center area is recommended.

Transportation

Efforts should be made to obtain maximum utilization of the rapid transit system. This should include feeder bus lines, pedestrian access, and improved automobile access to the proposed stations.

The City should not approve any additional north-south expressway or throughway projects in Alexandria. Improvements to the existing highway system should be undertaken in order to route traffic away from established residential areas.

The transportation section of this report contains a number of recommended changes to the City's Major Thoroughfare Plan.

The City should undertake special studies of eleven critical intersections in order to develop alternative methods for relieving serious congestion for both intra-city and through traffic during peak hours. First priority should be given to a solution of the traffic flow problems in the vicinity of the proposed King Street Metro Station.

Five pedestrian overpasses will be required during the next ten years.

Detailed traffic improvement studies should be undertaken for the Capital Beltway area, the proposed Potomac Center, the DIP project area, and the north end of the Waterfront.

Urban Design

Alexandria should recognize the need for three dimensional planning and urban design in order to guide aesthetics and enhance the visual aspects of the City.

An analysis of the major design elements of the City has identified numerous opportunities to improve the visual image of Alexandria. These opportunities include: strengthening of residential districts, improving the design and ties of commercial centers to nearby communities, encouraging good design within industrial areas and enhancing institutional areas; maximizing use of natural features; visually improving the major circulation routes and the entrance points into the City; establishing, preserving and lighting of significant landmarks; and improving outward and inward vistas.

A closer examination of both residential and nonresidential site planning standards and design is recommended.

Improved pedestrian access separated from vehicular traffic is recommended for various commercial districts.

General design guidelines have been recommended for Alexandria's waterfront to establish a visual scale compatible with the surrounding environs. Variety within intense development with adequate transitions is necessary in order to blend old with new. A continuous pedestrian pathway system should be built along and through the waterfront development. The development along the waterfront should be related to a series of intervals scaled to pedestrian activity. A visual awareness of the River must be carefully preserved.

The existing Federal Records Center - Carlyle House structures and surrounding area are recommended for temporary use as a composite exhibition - tourist activity center for the Bicentennial celebration in 1976. Unification of all parts of the waterfront development, the King Street redevelopment and access from north-south tourist traffic is recommended to establish the potential tourist market sought by the City. A public-private development instrumentality is recommended for the Bicentennial project as well as for other waterfront endeavors.

General design guidelines have been identified for the development potential areas, however, definitive urban design studies are recommended for each as they near the development design stage.

Special urban design consideration has been given to left over spaces, street furniture, and underground utility lines.

Additional urban design recommendations include: development of a comprehensive transportation concept which addresses all traffic problems; selective street closings; creation of a stream-park system; creation of a city-wide tree planting program; and creation of a pedestrian circulation system.

PLANNING GOALS

In order to recommend the most desirable development pattern for the future, the Comprehensive Plan has attempted to consider the total range of community values and goals. It is necessary to understand and acknowledge various regional developmental pressures and opportunities, and to work within these in guiding future development in Alexandria. While responding to one set of goals, the City will not want to lose sight of others, whether regional or local. To provide a framework for studying Alexandria's current and projected developmental problems, a series of overall goals for the City were prepared. These goals include:

General Goals

Coordinate local and regional planning
Retain City identity
Guide new development
Cooperate in control of pollution
Encourage tourist trade
Develop growth potential

Land Use Goals

Separate incompatible land uses
Expand tax base
Develop balanced employment base
Protect areas of historic value
Develop potential of waterfront
Encourage private redevelopment of older sections
Guide adjustments to Rapid Transit System
Develop opportunities opened by Rapid Transit System
Preserve sound residential areas
Provide more flexibility in development
Encourage maximum use of open space
Maintain single-family areas where suitable
Encourage development of air rights where appropriate
Establish density patterns related to transportation system
Apply neighborhood design concepts where feasible
Acquire open space and improve park land and recreational areas

Housing Goals

Provide a housing stock for a growing population
Eliminate physical blight and substandard housing
Develop a regional framework for the provisons of low and moderate income housing
Provide adequate publicly assisted housing for City residents

Community Facilities Goals

Provide adequate public facilities for expanding population
Expand neighborhood community facilities, including health and welfare services where appropriate
Provide centrally located school sites
Increase school sites use intensity in relation to recommended standards.
Provide balance in recreation facilities
Expand water-oriented recreational facilities
Encourage maximum use of public facilities

Transportation Goals

Protect residential areas from heavy through traffic
Separate through and local traffic
Provide adequate intra-city traffic mobility
Encourage maximum use of transit facilities
Separate vehicular from pedestrian traffic in high-intensity developments
Provide appropriate buffers between residential uses and major highways
Eliminate dangerous intersections and unnecessary rights-of-way
Provide bus and truck service areas where appropriate
Encourage off-street parking where feasible
Discourage truck traffic through residential areas
Widen streets to desired standards and establish street standards according to design control

Urban Design Goals

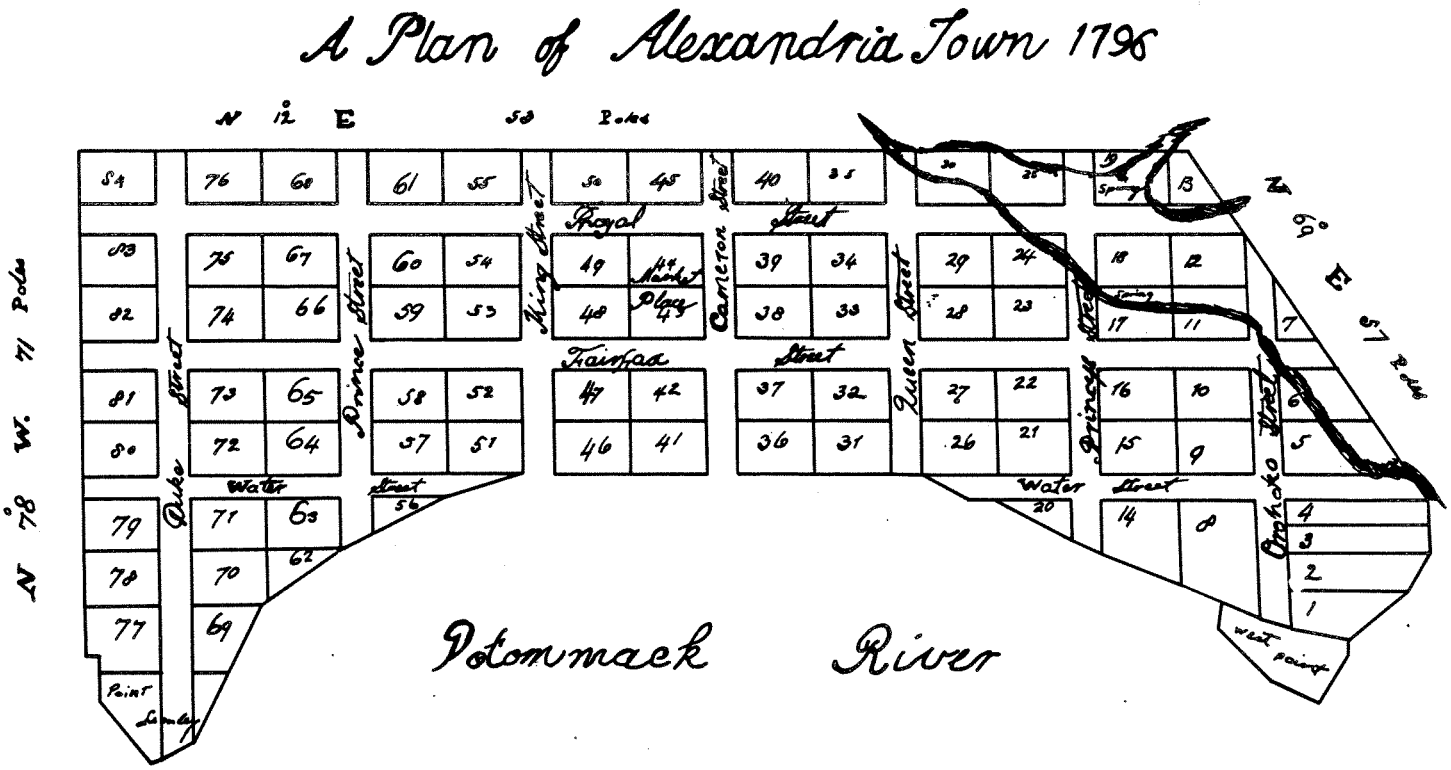
Conserve and strengthen natural features
Improve City street-scapes
Strengthen community identity
Blend old and new development
Encourage development at pedestrian scale
Eliminate above-ground utility lines
Encourage compatible high and low density development
Provide proper highway landscaping
Enhance City landmarks
Retain vistas throughout City
Improve appearance of City approaches
Encourage better building and site appearance

HISTORIC BACKGROUND

The City of Alexandria was established as a Colonial Settlement in 1749 by an Act of the Virginia General Assembly. The Act envisaged that the town "would be commodious for trade and navigation and tend greatly to the best advantage of frontier inhabitants." The town was surveyed and platted by John West, Jr., assisted by 17-year old George Washington, an apprentice surveyor at that time.

The town prospered and flourished and was the most important port town of the eighteenth century, surpassing in its activity the ports of New York and Boston.

The City as originally established was only approximately 60 acres in area. It extended from the Potomac River as far west as the properties on the west side of Royal Street (Map 1). During the 222 years since then the City has grown by annexation on nine occasions. In its historic area Alexandria has many buildings still standing that reflect the changing architectural style and growth of the City during the 19th Century.



MAP 1

Major events in the physical development of Alexandria include the construction of what is now the Southern Railway in 1863 and the Richmond, Fredericksburg and Potomac Railroad in 1872. The first route of the Richmond, Fredericksburg and Potomac Railroad was somewhat east of its present location. The railroad embankment which acts as a major north-south barrier separating Planning District I from Planning District II was not built until 1905.

Generally the rail lines followed the coastal plains, including the marshy land adjacent to Cameron Run. Most of the land which was put into industrial and warehouse use during the last half of the 19th Century was the property directly served by these railroad lines. When zoning maps were prepared in 1923 the zoning tended to reflect the pattern of industrial use which was already in existence.

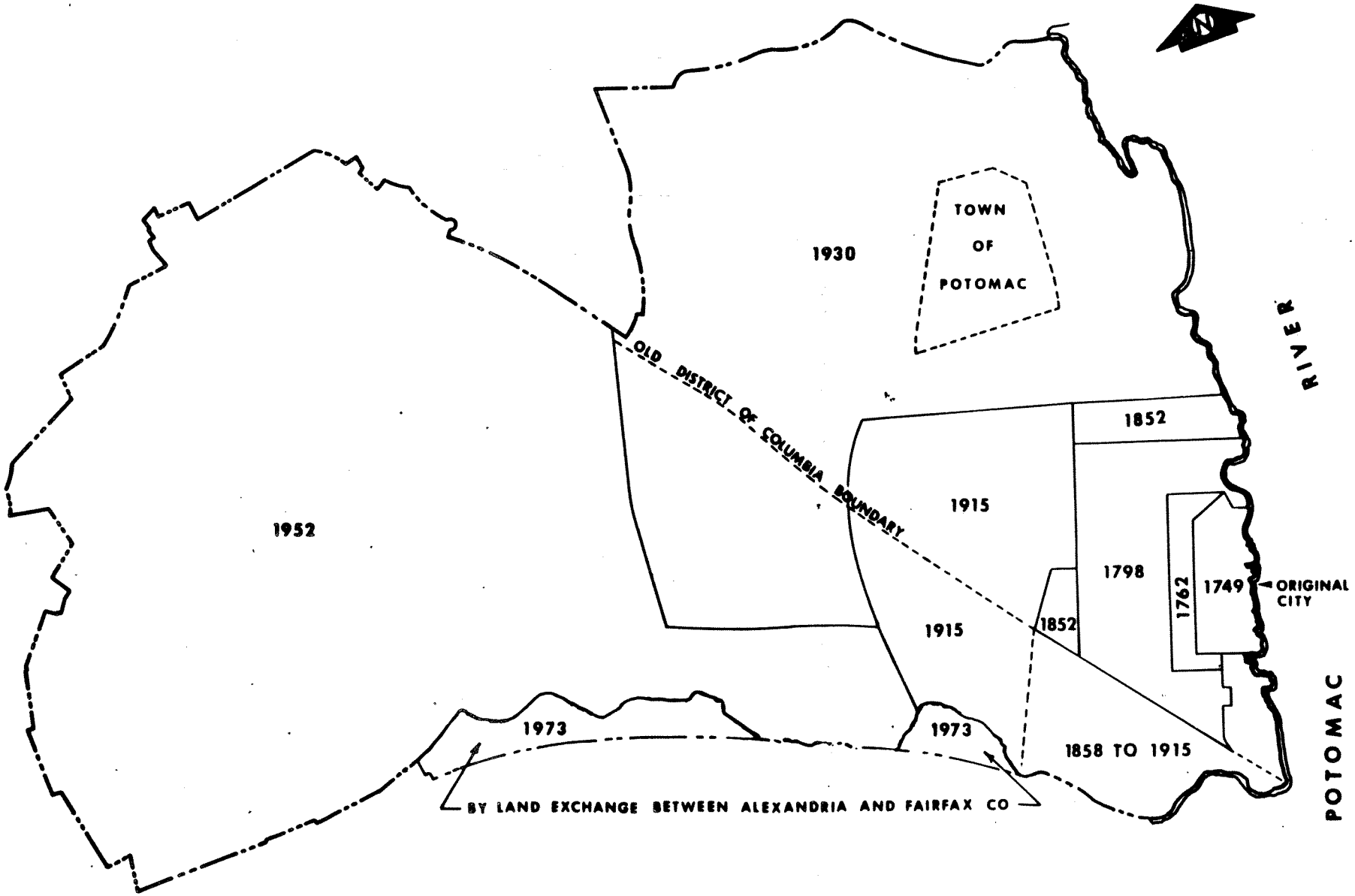
The establishment of a major railroad classification center at Potomac Yards in 1906 provided an impetus for the development of a residential cluster which became the independent town of Potomac. This was annexed into Alexandria along with adjacent residential sections in 1930.

The higher elevation within the present City limits, comprising the western ridge, remained wooded with little development until the mid 20th century. The small amount of construction that occurred there prior to that time included the Episcopal Seminary and scattered residential uses.

The 20th century saw the metropolitan area grow to include and finally extend far beyond Alexandria. The Washington National Airport began operations in 1939 and the Pentagon was built in 1942. World War II had a major impact on Alexandria with the development of public and privately sponsored wartime housing for persons who were employed at military installations or within the civilian branches of the government.

The Shirley Highway was first extended as far as Alexandria in 1946. It has since been extended and improved and has taken on added significance as an integral part of northern Virginia's Interstate Highway System.

The annexation from Fairfax County in 1952 doubled the size of Alexandria and brought it to its present size. This annexation enabled the City to develop the western ridge which then contained a vast amount of vacant land. Map 2 shows the various annexed areas of the City.



GROWTH OF ALEXANDRIA BY ANNEXATION

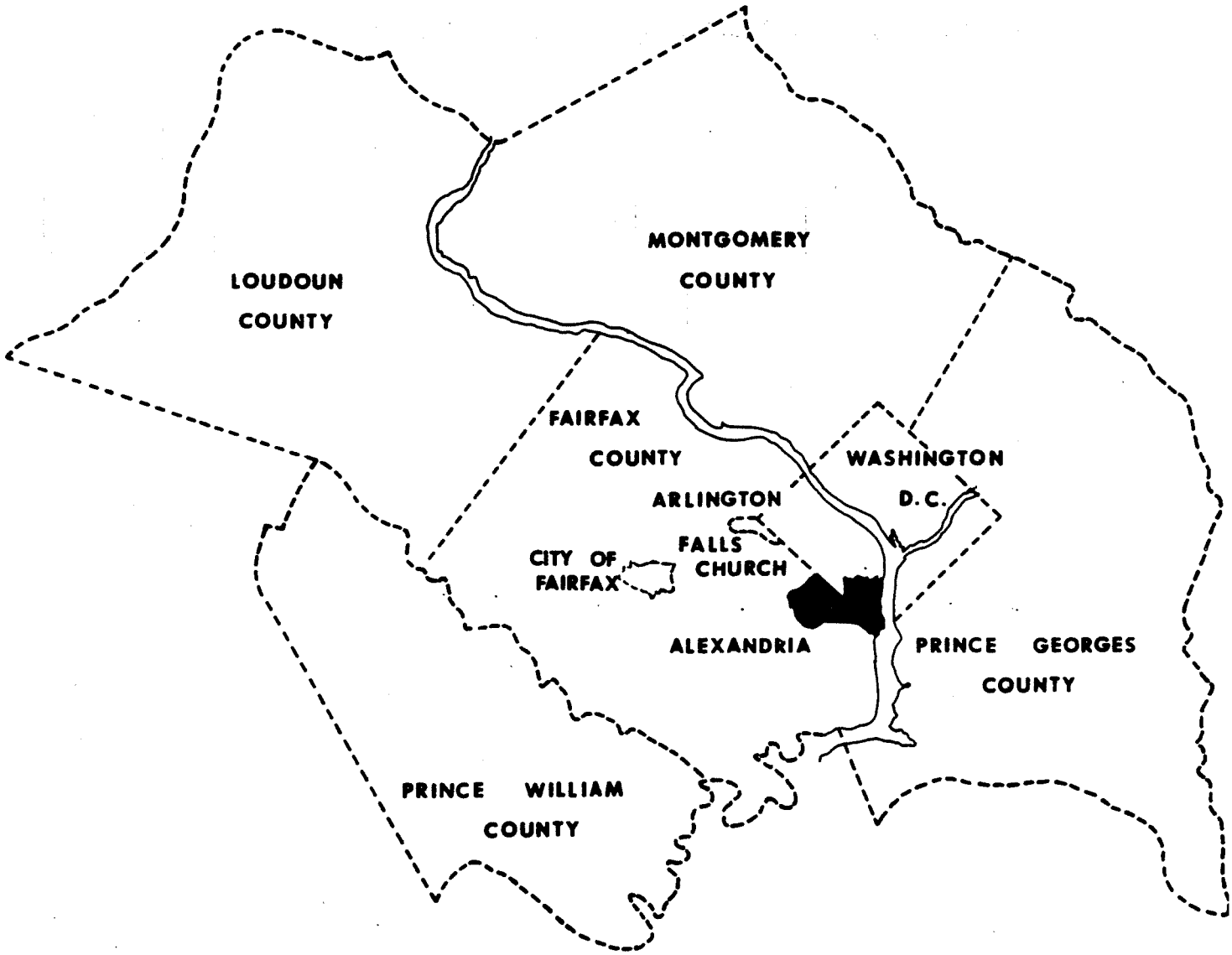
MAP 2

PROJECTED GROWTH

The City of Alexandria is an inner suburb in the Washington metropolitan area, separated from the District of Columbia by the Potomac River. It is convenient to downtown Washington and National Airport, is served by major traffic corridors, and is included in plans for the development of Rapid Rail Transit during the 1970s.

Alexandria has a limited land area of 15.6 square miles. This is less than 1% of the total area of the Washington metropolitan area which is customarily defined as 2,345 square miles (Map 3).

WASHINGTON METROPOLITAN AREA



MAP

Though seventh in order of total population, Alexandria is the second most densely populated City in the metropolitan area. A comparison of total size and population density is shown in Table 1.

TABLE 1
Population of Washington Metropolitan Area

Jurisdictions	Area In Acres	1970 Census Population	Density Pop/Acre
Alexandria	9,990	110,938	11.1
Washington, D. C.	40,128	756,510	18.5
Arlington	16,512	174,284	10.6
Falls Church	1,280	10,772	8.4
Fairfax City	3,840	21,970	5.7
Fairfax County	253,824	455,204	1.8
Loudoun County	330,880	37,150	.1
Montgomery County	316,160	522,409	1.6
Prince Georges Co.	312,320	660,567	2.1
Prince William Co.	220,800	111,102	.5

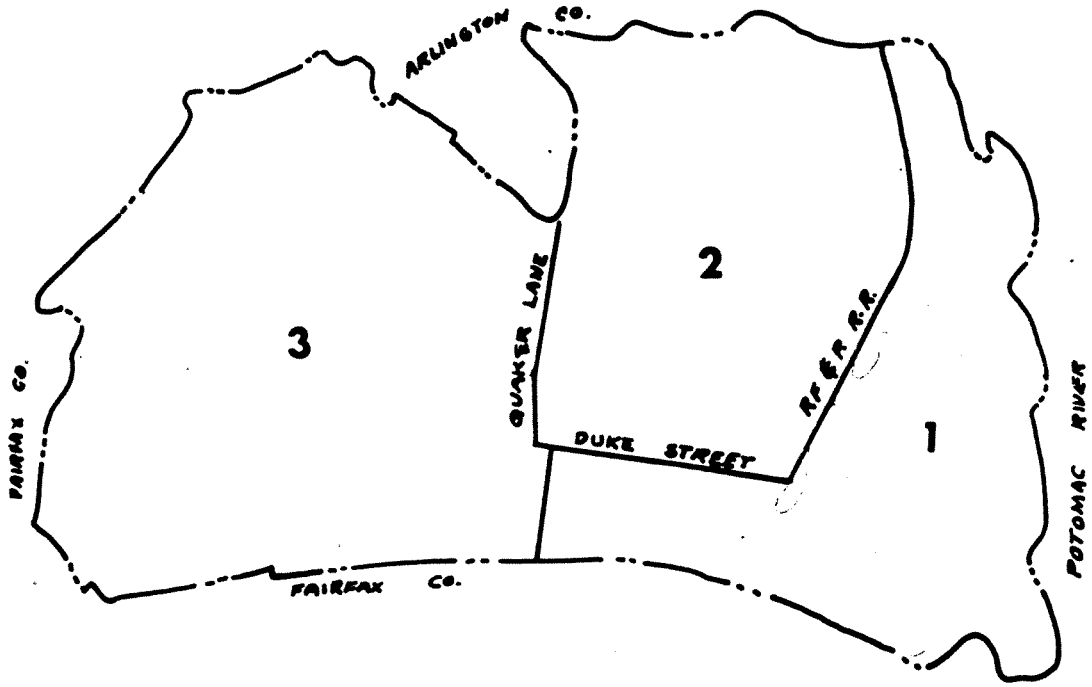
Since Alexandria is an integral part of the metropolitan area, the socio-economic composition of the City will be affected by the growth and development of the region as a whole. The residents of the City have the benefit of urban amenities provided by a large metropolitan area. Its convenient central location gives Alexandria unusual opportunities and also opens the door to some of its most difficult problems. These include the problems of inadequate housing, inefficient transportation and environmental pollution all of which can only be effectively solved on a regional basis.

Coordinating these efforts are various regional agencies in which Alexandria is an active participant. These include the Washington Metropolitan Council of Governments, the Northern Virginia Planning District Commission, the Northern Virginia Transportation Commission, the Northern Virginia Park Authority, and the Washington Metropolitan Transit Authority. The functions of these regional authorities are discussed in appendix I, page A-1.

Population and Employment

Projections are most meaningful when they are based on likely growth of the metropolitan economy. Therefore, metropolitan area forecasts can be expected to be the most accurate; those forecasts

which divide the future projections into growth of individual jurisdictions are less so. In view of the nature of the projections, it has been decided not to estimate the population by areas smaller than the three planning districts. Planning districts for the City were established in the 1962 Generalized Land Use Plan. These districts are shown in Map 4.



PLANNING DISTRICTS REV. FEB. 74

MAP 4

Population/Employment - Relationship to Land Use

There are inherent problems in relating specific employment or residential growth projections to the long-range land development. Private developers are generally provided a certain amount of building discretion within the City's maximum regulatory limits. As a result, office and industrial buildings can be built with varying degrees of employment densities and residential structures can vary widely as to average unit size, thereby affecting the number of persons per unit. These growth projection difficulties can further be complicated by the new

mixed uses of compatible residential, office, and commercial development. Given these qualifications, the following growth projections have been made. These projections are based upon: 1970 U. S. Census Bureau data; a metropolitan area economy study prepared for the Metropolitan Washington Council of Governments by Hammer, Greene, Siler Associates; and Department of Planning staff studies.

City-wide Projections

From a 1970 population of approximately 110,000, the City is expected to reach 200,000 by the year 2000. Graph 1 shows the growth during the thirty-year period; by 1980 the projection reaches 145,000. The employment is expected to increase from 32,500 to more than 80,000 during the next thirty years. By 1980 it is expected to reach approximately 50,000.

POPULATION AND EMPLOYMENT

GROWTH AND PROJECTIONS

1930 - 2000

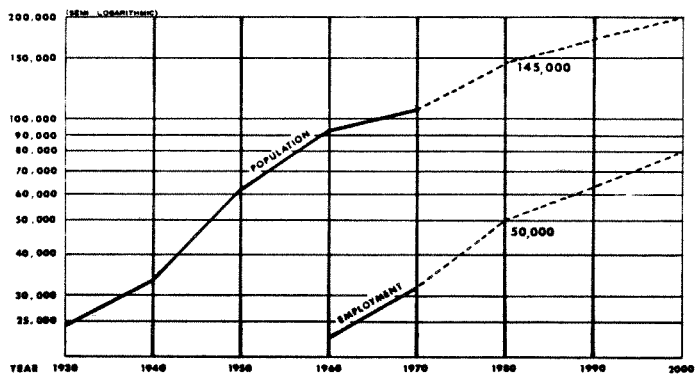


CHART 1

The largest increases in both population and employment are anticipated in Planning District III, and the second largest in Planning District I. The majority of the projected increase during the next thirty years is expected to take place within 19 potential development areas, described later in this Plan. These projections are considered as general approximations based upon the growth of the metropolitan economy. The land use studies of developable and re-developable land in Alexandria indicate, however, that these projections definitely are feasible. This presupposes that the City, with other governmental units, will choose to provide certain improvements in the field of transportation and utilities which will afford the necessary base for such future growth.

Appendix Graph 1, 2 and 3 show Alexandria's population growth since 1900 and the population characteristics by age and sex and race for 1960 and 1970.

LAND USE

As shown on the preceding pages, the City of Alexandria is expected to experience substantial residential and employment growth in the future. In order to relate this growth to the City's future land use, it is necessary to review Alexandria's previous land use plan and development since that time.

Review of 1962 Plan

The Generalized Land Use Plan, adopted by the City Council in 1962, was designed for a population of about 165,000. The Plan envisaged separation of certain incompatible land uses in Planning District 1. It recommended townhouse residential development east of Washington Street and perpetuation of the port and industrial activity along the waterfront. It also proposed to increase the accessibility of the Central Business District. In the areas west of Washington Street the 1962 Plan recommended multi-family construction. Industrial development was proposed to be concentrated south of Duke Street with some exceptions via expansion of light industrial-commercial uses between Henry and Patrick Streets north of Queen Street. The Plan also proposed highrise residential and office development between Cameron and Duke Streets east of the R.F. & P. Railroad.

Only a few land use changes were contemplated in Planning District II primarily because of the predominance of single-family areas in that District. A new high school was recommended along King Street, highrise development north of Four Mile Road and south of Four Mile Run, and garden apartment development in two areas, the first between Commonwealth Avenue and Mount Vernon Avenue south of Glebe Road and the second between Braddock Road and Mount Vernon Avenue south of Adams Avenue.

The Plan recognized the potential for future growth in Planning District III in view of the substantial vacant areas and proposed the following: medium and high density apartment construction along the Shirley Highway and Duke Street corridors as well as in the area between Edsall Road, Duke Street and Reynolds Street; two commercial centers west of Shirley Highway and Duke Street and the other at the intersection of Beauregard and King Streets; industrial development in locations south of Duke Street, and extension of Eisenhower (Wheeler) Avenue.

Land Use Since 1962

Since 1962 low density residential development increased slowly; medium density development increased more rapidly. A large increase occurred in highrise residential construction from about 20 acres in 1962 to 190 acres at present. Commercial development also increased substantially during these years but industrial development did not increase as had been anticipated. The amount of vacant land was reduced during this period with only about 1400 acres remaining in 1971.

Existing Zoning

The first zoning ordinance was adopted by the Alexandria City Council in 1923 dividing the City into two zones, "Residence" and "Non-residence." Major revisions to the zoning laws were enacted in 1931, 1946, 1951, and 1963. The Alexandria City Charter specifies that Council shall not consider zoning amendments more frequently than three times a year, except as authorized under their "emergency" powers. Proposed zoning map or text changes may be initiated either by the City Council or by interested private parties. The rules and procedures regarding zoning changes are carefully prescribed by law. In conformance with Virginia law the City has been reluctant to change the zoning of a piece of property without the consent of the owner.

At the present time the Alexandria Zoning Ordinance includes 22 zones, of which 13 may be considered residential, 7 commercial, and 2 industrial. This ordinance is pyramidal and has the effect of allowing more than one type of use in a zone, especially in the commercial and industrial zones.

The City Council in 1970 amended the CO commercial zone by adding a provision allowing planned developments on sites of 2 acres or larger. This new development plan procedure permits the following range of uses: mixed residential and commercial developments, commercial and professional office buildings, and row dwellings and multi-family dwellings. The purpose of allowing planned residential and/or commercial developments in the CO zone is to encourage large scale developments under a unified and approved development plan. It also offers increased flexibility in site layout and design while providing ample open space and green area and maximizing the use of off-street parking facilities.

The residential zones may be categorized as to the density they allow. There are 13 different residential zones which permit residential densities from 2 per acre to over 100 per acre. Because much residential development took place prior to the first zoning ordinance of 1923, and because of the pyramidal character of the ordinance, some residential development exists in non-residential zones. Thus the residential development in acres exceeds the amount of land so zoned as shown on the City Zoning Map.

TABLE 2

Comparison of Land Zoned and Used by Major Category in Acres

	Zoned[1]	Used
Residential	5,000	5,240
Commercial	1,040	390
Industrial	2,210	1,180
Streets and Roads	1,740	1,740
Vacant Land	--	1,440
Alexandria Total	9,990[1]	9,990

[1]Zoned areas are exclusive of streets. This figure indicates land area available for development.

Table 3 indicates distribution of vacant land by zones. The largest amount is zoned for residential purposes, with Planning District III containing the largest share of this vacant land.

TABLE 3

Vacant Land by Zone (Acres)

	Total	Residential	Commercial	Industrial
Planning District I	90	10	10	70
Planning District II	150	130	0	20
Planning District III	1,080	640	280	160
Water	120	--	--	--
City-wide	1,440	780	290	250

Of the vacant land zoned for residential purposes the largest amount is zoned for low density use with more zoned for high density residential than medium density.

TABLE 4

Analysis of Vacant Land Zoned Residential (Acres)

	Total	Low	Medium	High
Planning District I	10	10	0	0
Planning District II	130	80	40	10
Planning District III	640	320	90	230
City-wide	780	410	130	240

Zoning Map and the Land Use Plan

The Land Use Plan serves more than one purpose, but one important function is to guide the City in its zoning decisions. As a map, however, the Land Use Plan can serve only as a limited general guide in this respect because the six categories of the Land Use Map do not correspond to the twenty-two categories on the zoning map. It would not be desirable for them to do so since the Land Use Plan is intended to be more general than a zoning ordinance and is addressed to the future.

Land Use and Tax Base

Alexandria must become more aware of the financial and social implications of specific planning decisions. The use of land for revenue resources precludes its use for others. While the purpose of a City is to serve its citizens, it must be recognized that it can perform its functions well only if adequate attention is given to the economic realities of a City government.

While the relationship of land use or zoning to the tax base of the City is frequently mentioned, relatively few hard facts are available. The difficulty of assembling meaningful data is related to the fact that in evaluating the impact of various kinds of land use, both revenues and the costs of City services must be considered and matched against each other. The non-residential uses, including office, industry and retail stores, normally require fewer services than do the families who occupy residential buildings. School costs always account for a substantial portion of the City operating budget, (49% during the 1969-70 fiscal year), as well as a heavy share of its capital budget; thus residential units which contain children attending public school cost the City more than do other residential units.

Based on data for the 1969-70 fiscal year, a single-family home containing one school-age child would have to have had a market value of over $52,500 before its real property tax even began to pay for any of the costs other than schools. There are obvious financial as well as social implications to planning decisions. For example, encouraging substantial new garden apartment development would probably yield the lowest ratio of tax return to service costs of any type of residential development.

On the revenue side, the property tax accounts for the greatest share of all city revenues even though this has decreased in recent years because of the enactment of new taxes. The state sales tax, recently enacted, accounted for approximately 11% of Alexandria's city revenues during the 1969-70 fiscal year. The sales tax makes retail development even more advantageous to the city than most other types of non-residential development.

Industrial uses, depending on their individual characteristics, may or may not be particularly advantageous to the city in terms of tax yield. In general, those industries which can be described as labor-intensive, which are more likely to have a higher level of investments in their plant, are more advantageous than those that are not.

Carrying this reasoning to the ultimate, a city composed of all non-residential uses would have the best tax base, but it would not be a "city" in the true sense of the word, since no one would live there. Conversely, a city could be composed of only residential uses. In such a situation, however, property tax rates would be unbearably high, and the residents would be totally dependent on adjacent jurisdictions for both shopping and employment.

A balance in the proportions of residential uses, retail stores, offices and industry in the tax base is necessary for the sake of fiscal viability. As a part of the metropolitan area, it appears reasonable for Alexandria, or any other jurisdiction, to seek a balanced land use distribution including a fair share of those kinds of development which go farthest toward helping to pay for those services which the city must provide. The need

for Alexandria to give its attention to achievement of this kind of balance is accentuated by the growing population. Per capita costs are generally higher in a more densely populated jurisdiction. This is related to increased public expenditures for transportation and the full range of community facilities and services.

If the City is to provide the services and facilities necessary for maintaining and improving the quality of life in Alexandria, it must be recognized that vacant and under-developed land is the City's key resource for meeting its commitments. Land is the foundation of our tax system and will continue to be the foundation for the foreseeable future.

The City must be able to look further ahead, anticipate changing conditions better and faster, and end our concentration on solutions to individual problems with inadequate consideration of how the solutions create or aggravate other problems. Alexandria must be examined as a social, economic, and ecological system in which the implementation of any major planning decision affects many other subsystems of the City.

Alexandria is still in far better shape than many, or even most, other cities. It is a prosperous City with a large potential for increasing its tax base substantially. Nevertheless, with a tax base tied to land values, with only slightly over two and one-half square miles of vacant land remaining, and with the expectation that the City will be fully developed in the foreseeable future, Alexandria cannot afford many mistakes in planning for the economic resources which will be necessary to meet its future social commitments.

Land Use Policy Recommendations

- Development Potential Concept

The City's close-in location within the metropolitan area presents great opportunities and pressures for future growth. Transportation accessibility will be substantially improved by rapid transit. There also will be increasing opportunities for redevelopment of old and deteriorated areas. The adoption by the City of a development potential concept is recommended. Under this new concept the Land Use Plan designates certain areas of the City to be held constant in use and population and other areas are designated as Development Potential Areas in which changes in use and increases

in density will be encouraged within various available policy options.

Most areas presently used for single-family dwellings should be encouraged to remain single-family. A small amount of redevelopment of older single-family areas is inevitable and desirable; however, it is recommended that their current land use maps designation as single-family not be changed at this time.

To take advantage of emerging opportunities and to broaden the tax base of the City, most new residential and employment growth should be encouraged in developing potential areas. While encouraging this development, the City should maintain high standards, and guide the design and functioning of the new projects to enhance their contribution to the physical framework of Alexandria. Nineteen development potential areas are identified and this policy is discussed in greater detail in a later portion of this Plan.

- Mixed Use Development

Mixed use development would encourage walk-to-work patterns which could lessen the impact on the City's transportation facilities and would permit a balanced use of public utilities. A mixture of uses could help eliminate the barrier effect of large scale development in residential or low density neighborhoods, and a well designed development could create a community within a city concept for maximum convenience to residents and employees. A combination of uses would result in a complex that would be used during all hours of the day.

In many large scale development and redevelopment projects, especially in areas surrounding rail rapid transit stations and other major transportation facilities, it is recommended that the City require a mixture of residential, retail commercial, office, and other base employment uses.

In order to avoid a concentration of families within one income level in a few areas, new developments should include a range of housing for various income levels. Because of accessibility to shopping and other conveniences such developments may also be suitable for housing the elderly.

- Non-Residential Development

Obsolete or run-down non-residential uses tend to be blighting influences on residential areas; their replacement opens up land in densely developed areas for new residential and non-residential uses and open space. It is recommended that the City encourage redevelopment of obsolete non-residential structures, especially when they exert a blighting influence on adjacent areas.

- Tax Base

The City needs to develop additional sources of revenue in order to continue to provide a high level of urban services and to offset the rising cost of local government. As the metropolitan economy expands, there will be increased demand for office space in choice locations. Improved transportation, especially rail rapid transit, will increase economic opportunities for the City.

There are a number of existing areas of high development potential for employment complexes which can result in at-place employment that provide great economic opportunities for all City residents. Therefore, it is recommended that the City attempt to attract more commercial buildings within "development potential" areas which will produce a high tax yield while requiring a low public cost.

- Industrial Development

Because it has good truck access and ample room for expansion, the western beltway area provides the best location within the City for industrial development. The City should confine all future heavy industrial development to the industrial belt along the beltway and should discourage mixing of incompatible uses such as residential and heavy industry.

- Old and Historic District

It is recommended that the City encourage the tourist potential of Alexandria resulting from its historic past and its proximity to the Nation's Capital. Compatible uses can be located adjacent to Old Town, especially along the waterfront area. Such a policy can serve to encourage development of adequate motel and

conference facilities to serve the region as well as the City. In doing so, the City should impose requirements that will preserve the historical attractiveness from which this potential is derived.

- Phased Construction

The City has a responsibility to lessen the hardships of relocation for present residents. Time is needed to plan for replacement of any reduction in the low and moderate income housing supply. A more gradual change also would help to lessen possible adverse impact on adjacent communities and would provide the City with sufficient time to make necessary adjustments to streets, schools, sewers, and other community facilities. When large scale private redevelopment is proposed, particularly in low and moderate income residential areas, the City should encourage a phased construction program.

- Development Quality and Incentives

The City should expand its role in fostering good design on large private sites. Amenities to be encouraged include: ample concealed parking, better landscaping, more open space, adequate support facilities and services, maximum utilization of structures, and innovative techniques for overcoming site problems. A policy of incentives could relieve the City of some of the expense and responsibility for certain community facilities and for providing open space. It is recommended that the City continue developing a system whereby a developer can gain certain bonuses as an incentive for providing some on-site amenities.

- Implementation of Plan

There is a need for a continuing review of the City code in order to revise outdated sections which could restrict development and redevelopment. As opportunities evolve for large scale development, greater flexibility in City codes and zoning is necessary for good development. When significant changes in the land use patterns are desirable, the City should be prepared to implement those proposed changes as soon as possible.

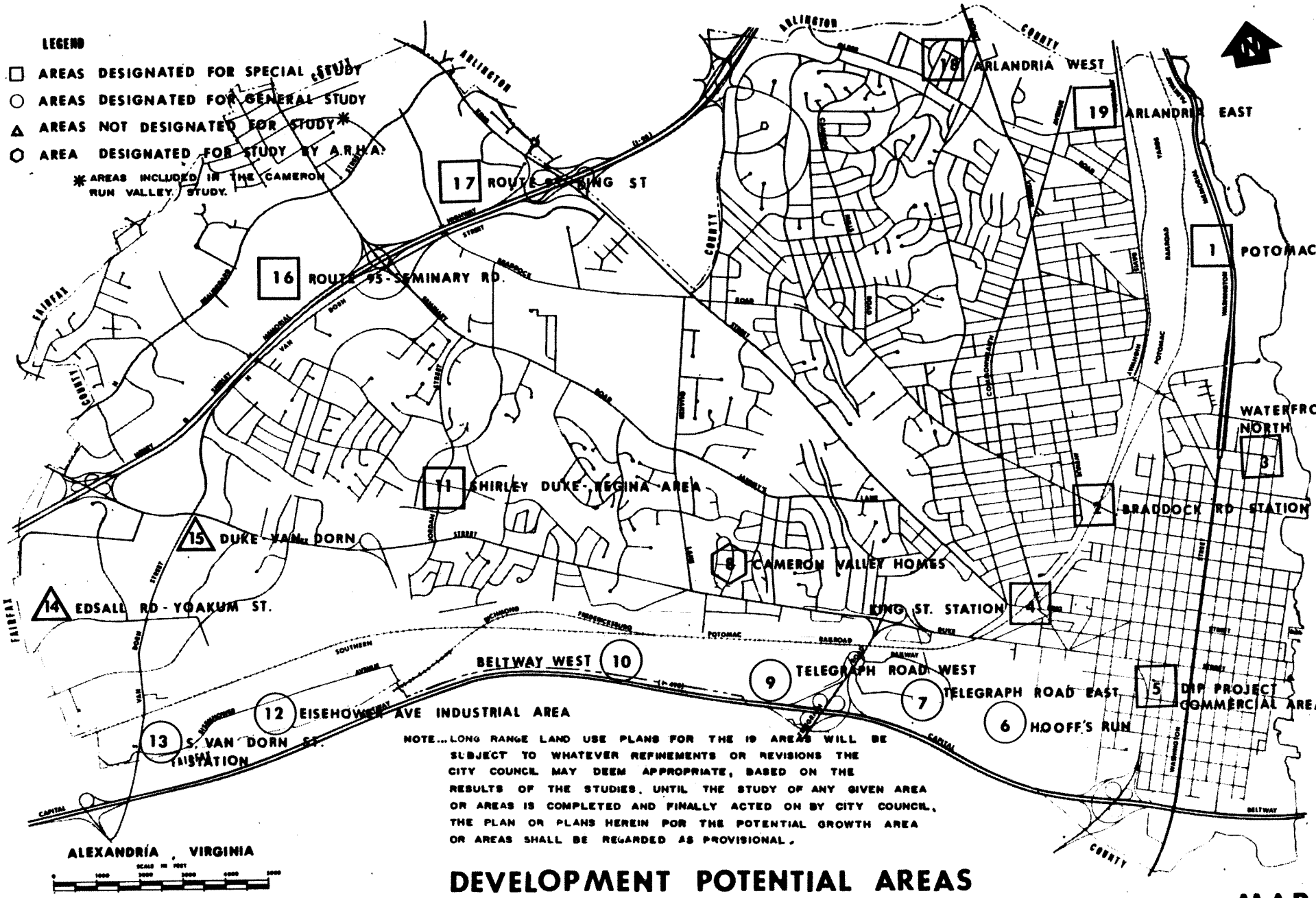
Development Potential Concept

It is recommended that Alexandria channel most of the future growth during the next ten years into nineteen development potential areas. These areas are shown on Map 5. The locations of these areas are such that with proper guidance their development will fit into the City's land use pattern without detriment to present residential areas. The site sizes suggested are intended to be flexible. It appears that these areas can provide enough acreage to absorb all the population increase which has been projected to the year 2000, and more than enough to account for all the anticipated growth in employment.

Only partial development of most of these nineteen areas can be realistically anticipated during the coming decade; first, the market demand will limit the amount of new construction; second, the potential of some of these areas will require the completion of certain capital improvements especially for storn drainage, sanitary sewers and highways.

Development Potential Areas 1970-1980

	Development Sites	Approx. Acreage
1.	Potomac Center	30
2.	Braddock Road Station Area (See Page 38)	10
3.	Waterfront North	30
4.	King Street Station Area	30
5.	Dip Project Area	30
6.	Hooff's Run	50
7.	Telegraph Road East	40
8.	Cameron Valley Homes	40
9.	Telegraph Road West	40
10.	Beltway West	40
11.	Shirley Duke and Regina Garden Apartments	30
12.	Eisenhower Avenue West	60
13.	S. Fan Dorn Street Station Area	30
14.	Edsall Road - Proposed S. Yoakum Street	40
15.	Duke - Van Dorn	50
16.	Route 95 - Seminary Road	110
17.	Route 95 - King Street	50
18.	Arlandria - West	30
19.	Arlandria - East	40



NOTE... LONG RANGE LAND USE PLANS FOR THE 19 AREAS WILL BE SUBJECT TO WHATEVER REFINEMENTS OR REVISIONS THE CITY COUNCIL MAY DEEM APPROPRIATE, BASED ON THE RESULTS OF THE STUDIES. UNTIL THE STUDY OF ANY GIVEN AREA OR AREAS IS COMPLETED AND FINALLY ACTED ON BY CITY COUNCIL, THE PLAN OR PLANS HEREIN FOR THE POTENTIAL GROWTH AREA OR AREAS SHALL BE REGARDED AS PROVISIONAL.

DEVELOPMENT POTENTIAL AREAS

REV. NOV. 74

MAP 5

It is recommended that comprehensive studies be made for all proposed development within each area. Careful review by the Planning Commission, City Council, and citizens should insure the proper scale and level of development for each of the areas. Some of the major elements of each study should include: overall design, impact on transportation facilities, impact on City revenues, level of public improvements to service the area, and overall impact on neighborhood and community environment.

Development Potential Areas

1. Potomac Center

This area is a small portion of the property of the Richmond, Fredericksburg and Potomac Railroad and is presently zoned I-2, heavy industrial. It contains approximately thirty acres of reclaimed vacant land and lacks sewer facilities at the present time. This area is located in the northeast section of Planning District I between the railroad tracks and the George Washington Parkway, north of West Abingdon Drive.

Potomac Center has been selected because of its convenient location to the National Airport and downtown Washington. This area is substantially removed from single-family residential areas. Full development of this site is dependent upon the resolution of access problems. It is anticipated that rapid rail transit will serve the area but there will be a need for the development of highway connections to the George Washington Parkway and the Route One corridor. The eastern portion of this site is within the boundaries of the Old and Historic Alexandria District.

It is recommended that a mixture of residential, hotel, retail and office buildings be developed. The intensity of this development is governed by the overall design of the complex and the impact of projected traffic levels on the surrounding section of the City.

2. Madison Street Station (See Page 38)

This area has been selected to take advantage of the new rail rapid transit system, and contains 10-20 acres zoned industrial. It lies in the northwest section of Census Tract 16 between the R.F.& P. right-of-way and North Henry Street (Route #1). Special attention should be given to building and rebuilding

on the blocks within walking distance of the future transit station; this may possibly include relocation of the Parker Gray Middle School and redevelopment of the school site. The Madison Street Station will be located north of Madison Street adjacent to the R.F. & P. R.R. right-of-way and the station will include both "kiss and ride" and bus facilities.

Mixed use, including residential as well as commercial use, is recommended for this area. Intensive development near the future Stations should not be encouraged. Such development could have serious impact on nearby residential areas.

3. Waterfront North

The properties along the Potomac River are now being utilized for a mixture of land uses including a fertilizer plant, power plant, rendering plant, chemical company, shipping facilities, offices, warehouses and townhouses. It is reasonable to expect that many of the industrial and storage firms will leave this section of the City. There are also many vacant properties zoned for industrial use. The properties which are vacant and those being made available by the relocation of industrial uses, are among the most attractive in the entire Washington metropolitan area.

The ultimate development of this area is related to major capital improvements, such as trunk-sewer capacities and transportation. Access to the area will be improved by the Union Street collector and by the utilization of Montgomery and Madison Streets, one-way, to the Madison Street transit station. For these reasons it is anticipated that development will begin during the 1970's.

Title to property ownership has deterred development along the River in the past. This is being worked on by the City at the present time and it is anticipated that a solution of this problem will be found.

It is recommended that approximately 30 acres out of this 60 acre Riverfront site be developed within the area between Fairfax Street and the Potomac River. Mixed use including water oriented use, pedestrian and recreational uses are recommended north of Montgomery Street. Residential density east of Lee Street should be limited to no more than 40 units per acre.

The entire Waterfront area is designated as a special study area for the consideration of improving parks, recreation and public access to the Waterfront. Future plans for the Waterfront should include a pedestrian mall or park land with an average width of 50 feet between Gibbon Street and Third Street (Third Street extended to the Waterfront.

The City should continue to encourage a combination of residential and commercial uses including water-oriented uses and those with tourist appeal. It is also recommended that the City encourage pedestrian access and recreational uses along the Riverfront.

4. King Street Station

This area is being recommended because of the advantages being offered by the rail rapid transit station which will be located along the R.F.& P. R.R. right-of-way across both King Street and Commonwealth Avenue. The King Street Station will probably become the transportation hub of the City. The impact area of this station is anticipated to be that bounded on the north by Cameron Street, the south by Duke Street, the east by West Street, the west by the R.F.& P. R.R. property. The area is now comprised of an unusually large number of small commercial parcels, many of them less than an acre in size. It is expected that the construction of the station will lead to the consolidation of some parcels and the rebuilding or improvement of many structures. An opportunity to correct an obsolete street pattern will also present itself, with redevelopment.

It is recommended that mixed development in the immediate impact area of the station include commercial and residential uses. Intensive development near the future King Street Station should not be encouraged during the 1970-1980 period. Such development could have a serious impact on nearby residential areas.

Only partial redevelopment of this area can be realistically expected within the next ten years.

5. Dip Project

This area is located roughly between Franklin, Duke, Fayette, and Washington Streets in Planning District I and is generally west and south of the Old and Historic District.

It is a part of an older section of the City which contains incompatible land uses and is characterized by inadequate original construction of many buildings, general lack of maintenance over the years, and through traffic which has harmed the residential nature of the area. Because of these conditions the City has selected this section for urban renewal redevelopment. The area covers 34 acres and is mostly residential with about 4 acres used commercially and 3 acres industrially.

Of the total 214 existing buildings, only 9 will be retained and 205 will be cleared as part of the urban renewal project. The project proposal provides for a total of 328 units, about 180 are moderate-income townhouses, 80 low-moderate income apartment units, and 50 are conventionally-financed townhouses. Most of these will be constructed under the Title 235 or 236 programs of the U. S. Housing Act which provides rent and purchase subsidies.

Total development of this area is expected within the next 10 years.

6. Hooff's Run

The Hooff's Run area is located west of the City sewage treatment plant and covers approximately 50 acres. This property, owned by the Southern Railroad Company, has been reclaimed by land fill, is zoned industrial and is available for improvement.

Better access to the area will be needed. The proposed Eisenhower Avenue Rail Rapid Transit Station and the extension of Eisenhower Avenue will stimulate development by making this property more accessible.

This area is recommended because of its eventual accessibility to the Beltway, and its separation from residential areas.

Mixed uses are recommended for this area and partial development is expected during the next ten years.

7. Telegraph Road East

This area of approximately 40 acres east of Telegraph Road and adjacent to the Telegraph Road interchange with Route 495 is separated from single-family sections. It presently contains an office building, hotel, and a trailer park and is zoned industrial and commercial. A second major office building is currently under construction.

The location has great potential in view of its proximity to a beltway interchange and to the future Eisenhower Avenue Transit Station. Access will be substantially improved by the extension of Eisenhower Avenue which already serves the area with intensive use being contingent upon completion of these new access points.

Mixed use development is recommended for this area.

8. Cameron Valley Homes

This site, owned by the Housing Authority, contains 328 housing units built in 1942 and is located east of Quaker Lane and north of Duke Street. It is predominantly zoned R-8, covers an area of approximately 38 acres and is surrounded by single-family homes on three sides. This project was built by an agency of the federal government during World War II as war housing and now represents under-utilization of the property.

This location has been selected for redevelopment because the housing project shows signs of age, and partial redevelopment would provide an opportunity to make better use of its location on Duke Street. The addition of new buildings will allow the City to provide better housing for residents who need subsidized housing.

The Authority is considering construction of housing for the elderly, local commercial shopping, townhouses and garden apartments. This type of development may necessitate improvements to Duke Street and to the sewer system in the area to accommodate the higher use of the land. It is expected that this redevelopment will be completed during the Seventies.

9. Telegraph Road West

This area is located south of Duke Street, north of the beltway, west of Telegraph Road and east of South Quaker Lane. This section, zoned industrial, contains approximately 40 acres and for the most part is vacant. It is separated from single-family sections and is accessible to the Capital Beltway.

This area will have improved access upon extension of Eisenhower Avenue and construction of a future rail rapid transit station near South Quaker Lane. Intensive development including high rise buildings is recommended, but only partial development is anticipated in the area during the seventies.

10. Beltway West

This vacant area, zoned industrial, is located south of Duke Street and north of the beltway between South Quaker Lane and Cameron Run. It is a low lying area with severe drainage and

access problems. It will have access to one proposed future rail rapid transit station located near South Quaker Lane and another at Clermont Avenue, both along the Backlick line to Springfield.

It is expected that only partial development may be possible in this area during the Sevenites.

11. Shirley Duke and Regina Garden Apartments

This area lies north of Duke Street and on either side of North Jordan Street. Constructed between the period 1945 and 1955, it contains over 2,100 units on 78 acres of RA-zoned land. The surrounding uses are predonimantly single-family residential, but to the south along Duke Street are high rise residential uses and a shopping center.

There are many garden apartment developments within the City which will become relatively old and obsolete by the year 1980. Development potential for these older areas may dictate redevelopment at higher densities in the future. The Shirley Duke and Regina Garden Apartment development area is becoming one of these obsolete residential areas. Rather than to allow such areas to become rundown, it is proposed that the City encourage redevelopment by allowing private developers to implement more innovative development programs when site plans are submitted and approved by the City.

Although there are reasons to recommend that the Shirley Duke and Regina apartments be redeveloped at higher densities it is proposed that the City maintain the existing density level. In view of the scarce availability of moderate income units in the City, it is recommended that this area be redeveloped at medium density residential use. Redevelopment, if it occurs, should be designed to maintain the supply of moderate income housing and to make new structures compatible with nearby single-family homes. It is further recommended that buffers of open space be incorporated within the designs to protect the single-family area on the periphery of the Shirley Duke - Regina area.

12. Eisenhower Avenue Industrial Areas

This area of approximately 50 acres zoned industrial is located along Eisenhower Avenue between the City's west incinerator plant and Clermont Avenue, south of Duke Street, and between the Southern and the R.F.& P. Railroad Tracks.

The City will need land for industrial development in order to continue to provide some balance in its land use during the years ahead. Sites will also be needed for the relocation of industrial firms. This area has been selected as a logical one for this purpose. It has good access to railroad tracks and to the beltway, is sufficiently isolated from residential sections of Alexandria, and it already has become identified as a nonresidential section.

It is recommended that this site be used for the relocation of displaced industries and for new industrial uses. A substantial portion of this acreage may be developed by 1980.

13. S. Van Dorn Street Station

This site at the northeast corner of South Van Dorn Street and Eisenhower Avenue is zoned I-2 Industrial, and contains approximately thirty acres. Although most of the area is vacant land, a large office building is currently under construction. The area is adjacent to warehouses and railroad-associated uses. A City incinerator and police pistol range are also located nearby.

This development area is recommended as a commercial-industrial employment area because it is accessible to the beltway via Van Dorn Street, to the Southern Railway, and to the future rail rapid transit station. The rapid transit station will increase the potential for office building construction as opposed to industrial, trucking or storage uses.

14. Edsall Road - Proposed South Yoakum Street

This RC-zoned site containing approximately 40 acres of vacant land is located on the edge of the City limits across the street from the Southport Garden Apartment development, north of Edsall Road, and west of the proposed Yoakum Street. Most of the surrounding land on both sides of the site is also vacant. A future school and some moderate income housing are planned for the vacant land directly north of this site.

The only constraint to development is the inadequate interceptor sewer along Holmes Run which is expected to be improved within five years. The site has good access to Shirley Highway and the Capital Beltway and is close to the Landmark Shopping Center.

This area is recommended for high density residential and mixed uses and can be utilized to the fullest extent during the 1970's.

15. Duke - Van Dorn

This property totals 48 acres, is located on both sides of South Van Dorn Street, south of Duke Street, and has excellent accessibility to Route 95. The zoning is both commercial and multi-family residential and the site is across Duke Street from the Landmark Shopping Center. To the west, is a new car showroom and a considerable amount of vacant land The properties to the south of the tract are predominantly used for garden apartments.

The area will have better development potential upon completion of the proposed Transit Station at South Van Dorn Street and Eisenhower Avenue, and the proposed Duke Street/Van Dorn Street interchange. The development of this area should be accomplished through a coordinated plan involving a total concept for the entire area, including Landmark Shopping Center. Consideration of parking, access, open space, visual impact, and pedestrian areas should be incorporated in the total plan concept. Mixed office and residential development is recommended for this site.

16. Route 95 - Seminary Road

This area contains a 114-acre commercially-zoned tract which is located along Shirley Highway (Rt. 95) east of Beauregard Street, and is accessible to Rt. 95 by way of the Seminary Road interchange. The present zoning of this area permits mixed use developments. The site is bounded by garden apartments to the south, high rise apartments to the north and vacant land and multi-family residential uses to the west. Access and preservation of forested areas are key design considerations in the future development of this area.

It is recommended for high density mixed uses and is expected to be partially developed within the next ten years.

17 Route 95 - King Street

This area of approximately 50 acres is bounded by Shirley Highway to the east, King Street and garden apartments to the north, high rise and garden apartments to the west, and Braddock Road and

vacant land to the south.

The area was selected because of its accessibility to Route 95 by way of the King Street (Route 7) interchange and its accessibility to Braddock Road. The predominant zoning of this area is multi-family, with some commercial and some single-family residential zoning. As in the previous development potential area, access and retention of forested areas are key planning considerations.

Mixed use development is recommended for this area, and it is expected to be partially developed within the next ten years.

18. Arlandria - West

This area containing approximately 100 acres is located west of Mount Vernon Avenue and bounded on the north by Four Mile Run and on the south by Glebe Road. The area is predominantly residential and contains low, medium, and high density uses. Recent residential construction in the area has been high density; the medium and low density developments are approximately 30 years old. Some of Arlandria West now provides homes for low and moderate income families.

This area has been damaged by flooding over the years resulting in under-utilization of the land. When the City, with federal participation, is able to solve the flooding problem and when the City makes extensive street and sewer improvements, it is recommended that private redevelopment of a portion of this area be encouraged. Considering the constraints to future redevelopment in this area, it is recommended that redevelopment include low and medium residential uses as well as mixed uses. Redevelopment should take into consideration the interests of the present residents of the area and construction should be phased in order to allow relocation of any displaced residents or businesses.

19. Arlandria - East

This area, containing approximately 150 acres, is located east of Mount Vernon Avenue, west of Route One, and north of Glebe Road and by way of the Jefferson Davis Highway (Rt. 1) has good access to Washington, D.C., National Airport and new office development in Arlington County

Most of this area has been under a construction moratorium for some time due to flooding problems. The development of this area is contingent upon the implementation of flood control measures on Four Mile Run. When this project is completed and with improved access, Arlandria could realize substantial development.

It is recommended that the City encourage private redevelopment of approximately 40 acres of this area when the flood control project is completed.

The Existing and Long Range Land Use Maps

The next two pages show the land use maps for the existing situation in 1970 and for the long-range future.

The first map summarizes the existing land use in 1970 and identifies the development potential areas proposed in this plan. Since this map represents an existing stage in the development of Alexandria, it is as specific as possible with respect to the geographic boundaries of the various types of land uses within the City. It is intended as a general reference guide in assessing where major changes should occur and how best to take advantage of new opportunities afforded by the rail rapid transit system and zoning ordinance amendments.

The second map is the proposed long-range land use map. It is intended to serve as a basis for future studies and analysis with a built-in flexibility provided by periodic review to accommodate new or revised proposals. The map schematically represents a plan for the utilization of all land in the City including a waterfront area for special consideration. Details of this waterfront area are discussed in the following sections of this plan; nineteen development potential areas, Alexandria Planning Districts, Recreation portion of Community Facilities and Urban Design. Because the plan map is based upon the overall long-range projections and policy recommendations contained in the text, the geographic boundaries of various land uses are neither intended to be specific nor necessarily conform to individual

property lines. The long-range map should help coordinate regional and local plans that involve long-range capital improvements for such projects as schools, public utilities, highways and water and sewer lines. A major function of the map will be to alert the City to certain potential needs which should be frequently re-examined.

Note:

MADISON STREET METRO STATION

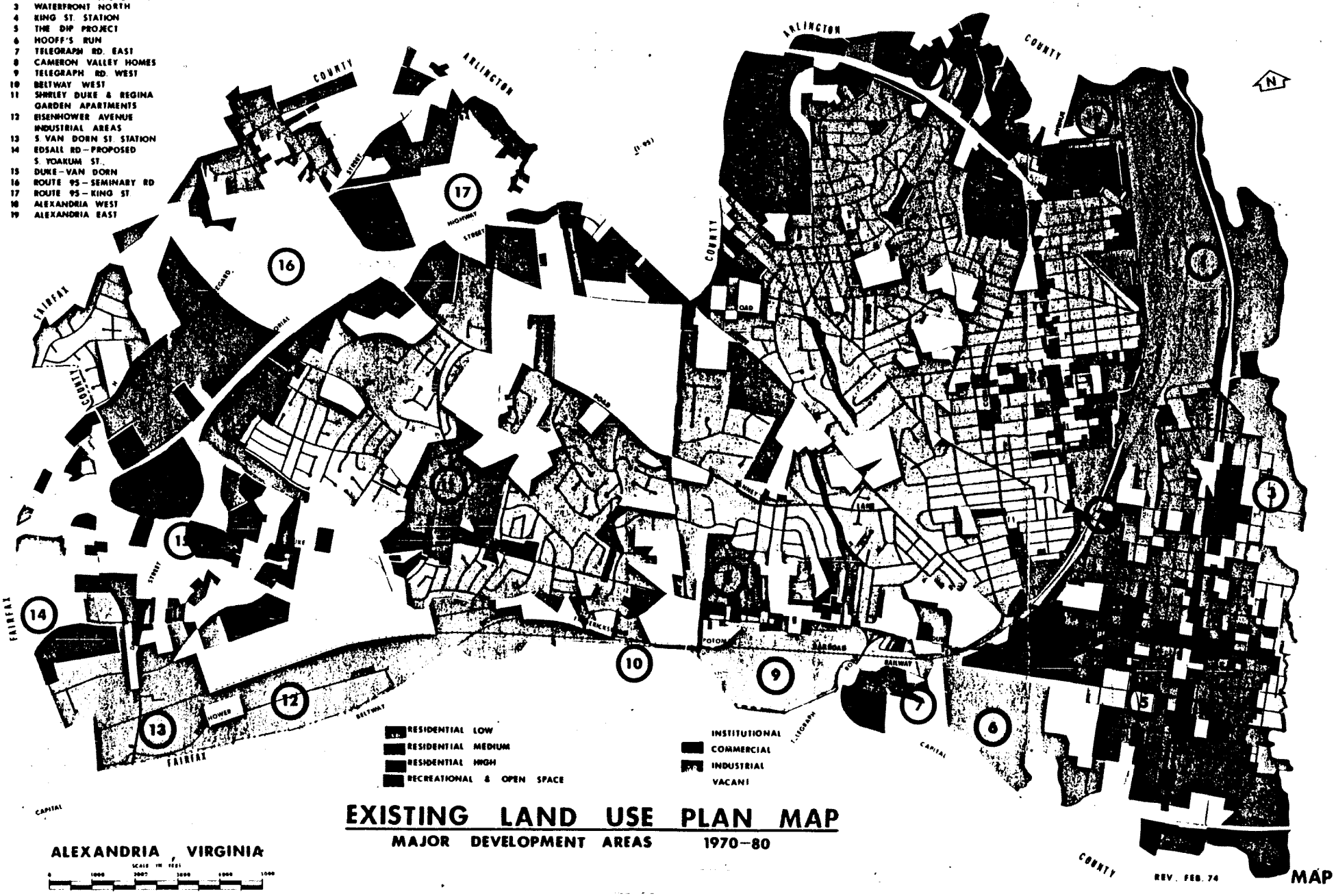
Since the transmittal of the Proposed Comprehensive Plan, the plans for a Metro station in the area just north of Madison Street at West Street were revised to shift that station to Braddock Road. Therefore, Development Potential Area numbered 2 on Map 5 and Chart 2 has been redesignated from "Madison Street Station" to "Braddock Station," and relocated slightly to the south. All text references to the Madison Street station will also apply to Braddock Station.

"COMPARATIVE LAND USES AND DENSITIES OF THE 19 DEVELOPMENT POTENTIAL AREAS"

Development Potential Areas	1974 Existing Land Uses	Recommended Use on 1962 Generalized Land Use Plan	Recommended Use on Consolidated Master Plan -- Long Range Land Use Plan
1. Potomac Center	Vacant	Industrial use	Mixed use to include residential, hotel, retail and office uses
2. Braddock Road Metro Station	Commercial uses, medium density residential uses, industrial uses & public uses	Industrial use	Mixed use to include residential and commercial use
3. Waterfront North	Vacant areas, shipping facilities, industrial uses, medium density residential uses and commercial uses	Industrial use	Mixed use, including water oriented uses, pedestrian and recreational uses
4. King Street Metro Station	Commercial uses	Commercial use	Mixed use
5. Dip Project	Residential uses, commercial uses & medium density residential uses	Industrial, commercial, multi-family and public uses	Medium density residential use
6. Hooff's Run	Reclaimed by land-fill, vacant areas	Industrial use	Commercial use
7. Telegraph Road East	Commercial office, hotel use	Industrial use	Mixed use
8. Cameron Valley	Medium density residential use	Multi-family and single family use	Medium density residential use
9. Telegraph Road West	Industrial use, vacant areas	Industrial use	Mixed use
10. Beltway West	Vacant	Industrial use	Mixed use
11. Shirley Duke & Regina Garden Apts.	Medium density residential use	Medium density residential use	Medium density residential use
12. Eisenhower Avenue Industrial Areas	Industrial use Commercial office use, public utility	Industrial use	Industrial use
13. S. Van Dorn St. Metro Station	Industrial use & vacant areas	Industrial use	Industrial use and commercial use
14. Edsall Road - Proposed Yoakum Street	Medium & high density residential uses, vacant areas	Industrial use	High density residential use and mixed use
15. Duke-Van Dorn	Vacant areas and medium & high density residential use	Commercial use, multi-family residential use	Mixed use and high density residential use
16. Route 95-Seminary Road	Vacant	Commercial use	Mixed use
17. Route 95-King St.	Vacant with medium density residential use under construction	Multi-family residential use	Mixed use
18. Arlandria West	Low, medium and high density residential uses and vacant areas	Multi-family residential use	Low and medium density residential use and mixed use
19. Arlandria East	Vacant areas, open storage areas	Industrial use & single family residential use	Mixed use

CHART 2

1 POTOMAC CENTER
2 BRADDOCK ROAD STATION
3 WATERFRONT NORTH
4 KING ST. STATION
5 THE DIP PROJECT
6 HOOFF'S RUN
7 TELEGRAPH RD. EAST
8 CAMERON VALLEY HOMES
9 TELEGRAPH RD. WEST
10 BELTWAY WEST
11 SHIRLEY DUKE & REGINA GARDEN APARTMENTS
12 EISENHOWER AVENUE INDUSTRIAL AREAS
13 S. VAN DORN ST. STATION
14 EDSALL RD – PROPOSED S. YOAKUM ST.
15 DUKE – VAN DORN
16 ROUTE 95 – SEMINARY RD
17 ROUTE 95 – KING ST.
18 ALEXANDRIA WEST
19 ALEXANDRIA EAST



EXISTING LAND USE PLAN MAP

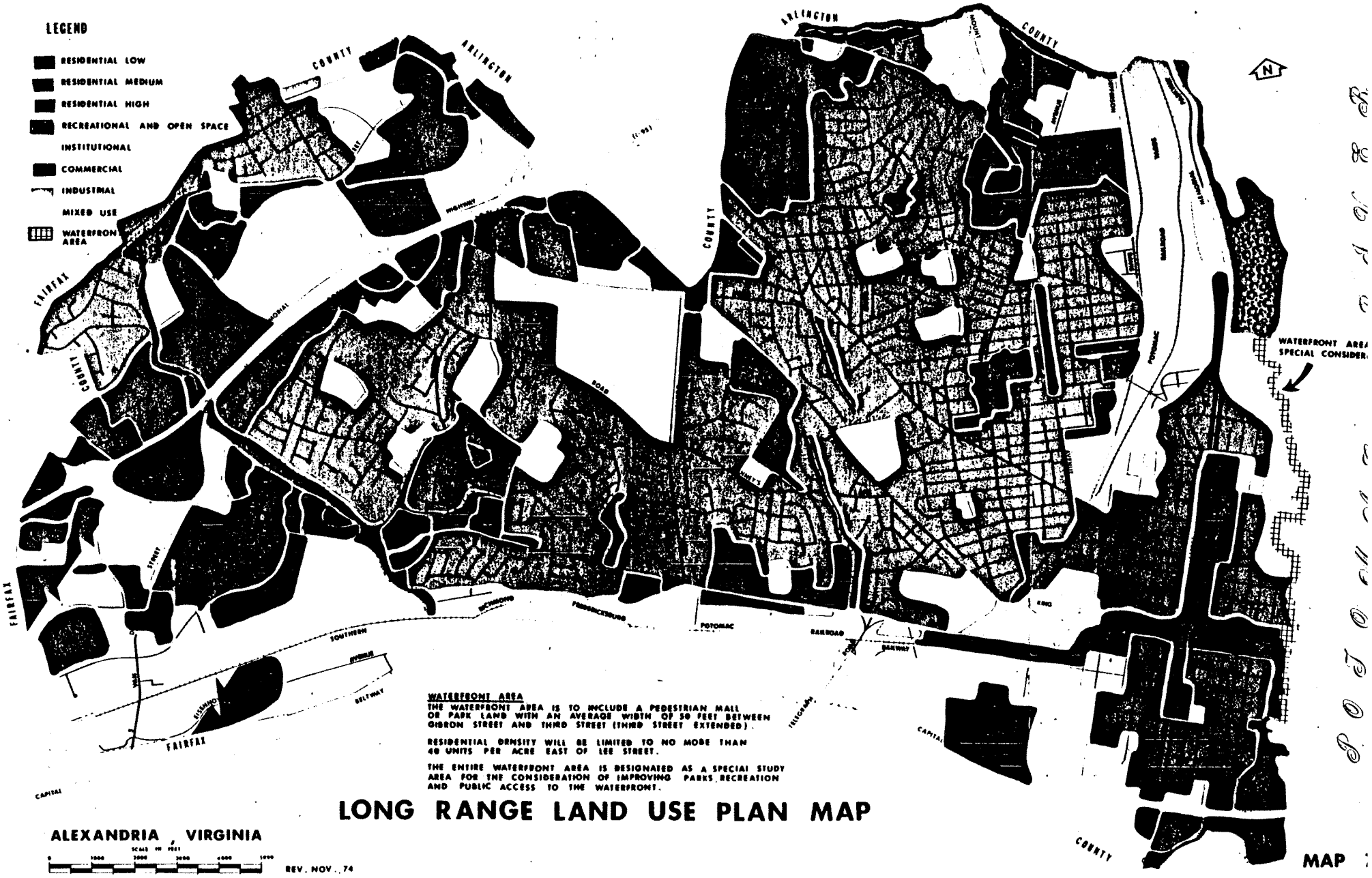
MAJOR DEVELOPMENT AREAS 1970–80

ALEXANDRIA, VIRGINIA

SCALE IN FEET

REV. FEB. 74

MAP



WATERFRONT AREA

THE WATERFRONT AREA IS TO INCLUDE A PEDESTRIAN MALL OR PARK LAND WITH AN AVERAGE WIDTH OF 50 FEET BETWEEN GIBBON STREET AND THIRD STREET (THIRD STREET EXTENDED).

RESIDENTIAL DENSITY WILL BE LIMITED TO NO MORE THAN 40 UNITS PER ACRE EAST OF LEE STREET.

THE ENTIRE WATERFRONT AREA IS DESIGNATED AS A SPECIAL STUDY AREA FOR THE CONSIDERATION OF IMPROVING PARKS, RECREATION AND PUBLIC ACCESS TO THE WATERFRONT.

LONG RANGE LAND USE PLAN MAP

ALEXANDRIA, VIRGINIA

SCALE IN FEET

0 1000 2000 3000 4000 5000

REV. NOV., 74

MAP

Alexandria Planning Districts

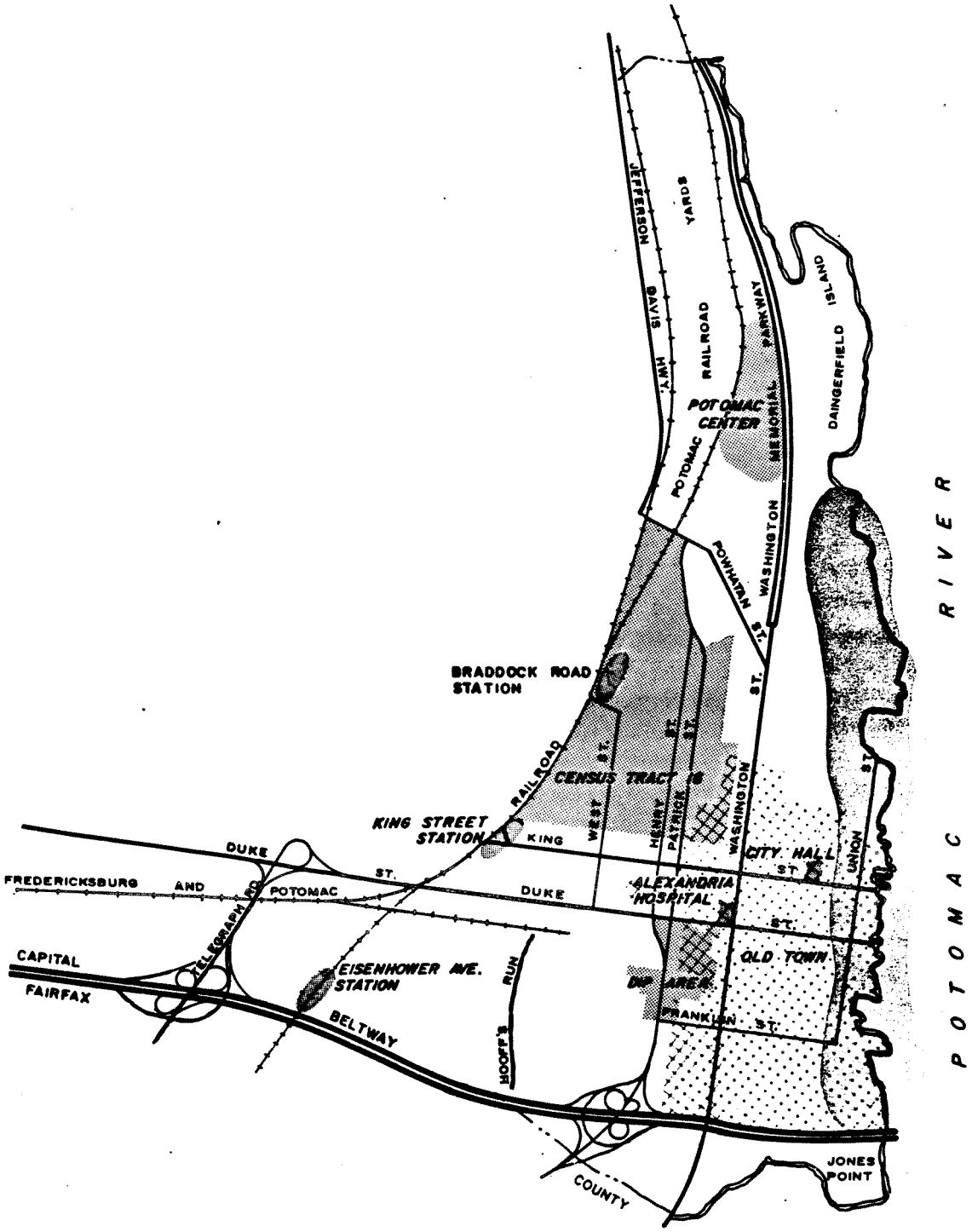
Planning District I

Planning District I, the oldest part of the City, contains elements of great stability, but because these are not continuous over the entire Planning District, it is likely to be the scene of significant changes during the years ahead.

The City recognized the importance of protecting the archtectural and historical heritage of this area and enacted legislation in 1946 (Ordinance #470) which established the Old and Historic Alexandria District. Efforts in recent years topreserve the historical significance of this district have included the purchase of the Lloyd House and the Lyceum by the City, and the Carlyle House and surrounding grounds by the Northern Virginia Regional Park Authority.

New and restored townhouses now dominate approximately 40 blocks of this planning district roughly from the Potomac River west to Alfred Street and from First Street south to the Capital Beltway (I-495). This trend can be expected to continue by spreading to contiguous blocks and by additional townhouse development within the present 40 blocks. The Old Town area appeals to upper income families who want to own a home in an urban setting. A considerable number of detached homes and rowhouses including seven of the eight public housing projects and much of the City's subsidized middle income housing is located immediately west of Old Town.

Many of the retail uses now being attracted to King Street and nearby locations represent a response to the growing tourist interest in Alexandria. This new trend in the nature of retail shops between Washington Street and the River may be expected to continue. Modern elevator buildings with underground parking designed primarily to serve the needs for office space are replacing less functional structures in the Gadsby Renewal Area. The City's plans to encourage a convention center and encourage tourist visits will accentuate this trend during the next decade.



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PLANNING DISTRICT 1

ALEXANDRIA , VIRGINIA

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MAP 8

The future of the section of King Street roughly between Alfred and West Streets is undecided. Studies are being made to determine whether these blocks should be expected to serve a commercial function in the future. Increased pressure for development along King Street near the proposed transit station may somewhat reduce the need for shopping facilities in the center portion of King Street.

The industrial uses within Planning District I are gradually being replaced. This pattern has taken place in recent decades along the old port district and to a lesser extent along Henry Street and near Union Station. Several industrial firms have chosen to relocate their storage or manufacturing operations in areas which offer better accessibility to the Capital Beltway or other major highways.

Planning District I also contains substantial industrial land owned by the railroads. This railroad property and the land vacated by the relocation of older industrial and storage activities will present opportunities for new uses in the future.

Over the years some of the property close to the river has been reclaimed by land fill thus adding to the amount of developable land. Further filling is likely to continue out to the bulkhead line, expanding even further the land east of Washington Street which will then be available for new construction.

As the metropolitan region expands in coming decades, the convenient accessibility of Planning District I will perhaps be its greatest asset; linked by bus service to downtown Washington, D. C. and the National Airport, it will have even greater accessibility with the construction of rail rapid transit.

The Waterfront

Since 1940 Alexandria's port activities have declined. A July, 1964 report by the U. S. Army Corps of Engineers estimated that the cost of dredging and widening the Potomac River channel would be more per year than the annual return. This report confirmed the evidence of the previous one and one-half decades that the Port of Alexandria was not destined for further growth.

Several planning staff studies have been prepared on the riverfront. These efforts were culminated with the adoption by the City in 1967 of an official waterfront General Plan. This included recommendations, some of which are still valid. These include: replacement of older industrial and storage uses, removal of the railroad tracks from Union Street, development of the Union Street collector, construction of at least one hotel-motel conference development along the riverfront somewhere between King Street and the PEPCO Plant, a pedestrian walkway to tie Jones Point to Daingerfield Island, more attention to protecting and preserving the Old and Historic District, and the development of new high rise residential and office development along the north waterfront.

West of Washington Street

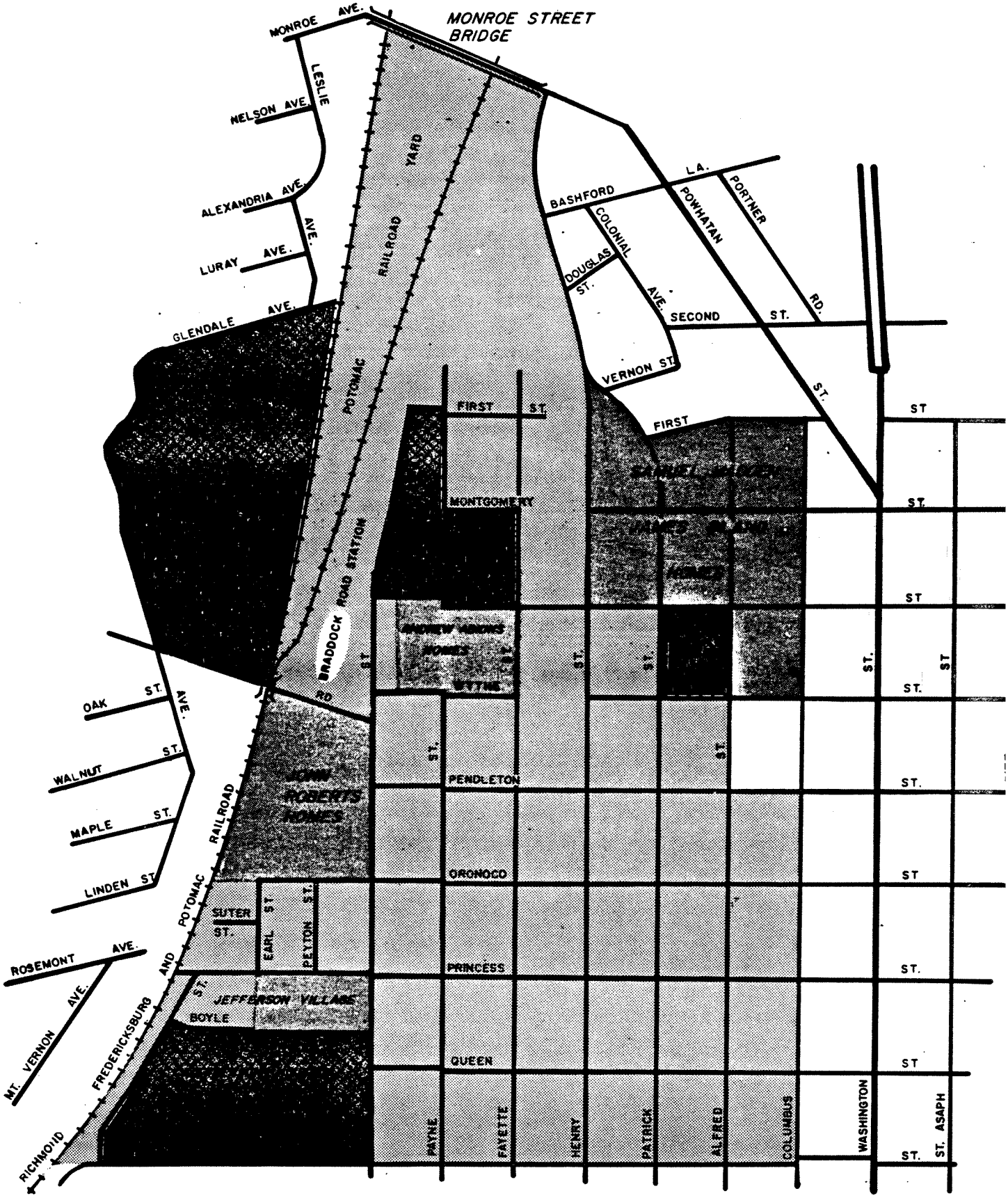
The area west of Washington Street contains a mixture of land uses, with predominantly single-family dwellings on small lots and row houses. This area includes a high proportion of low-income residents and a large share of the City's black population, and is characterized by housing and social problems.

Several studies in recent years have focused public attention on this residential area; special emphasis has been given Census Tract 16, which covers a section delineated by Cameron Street on the south, the R. F. & P. Railroad on the west, and by North Columbus, North Alfred, Henry and First Streets and the Monroe Avenue Bridge on the east and north. (Map 9).

A model cities planning grant application in 1967 requested federal funds to aid the City in further planning of a "Model Neighborhood Area." The City's application was not accepted, but interest in this section of Alexandria continued. The following year the City Manager appointed a task force to continue studying the model neighborhood. Some of the proposals included street improvements which have since been carried out. The program of the Economic Opportunities Commission, begun in 1967, gives considerable attention to Census Tract 16, and a report by Westinghouse Management Services, early in 1970, presented some concepts for regeneration of this area.

The Future

Little change is expected in the generalized land use pattern, population, or employment in the more established sections of Planning District I; this includes the Old Town section and most of the blocks west of Washington Street.



CENSUS TRACT 16

ALEXANDRIA, VIRGINIA

REV. FEB. 74

MAP

On the other hand, there are opportunities for new growth in several key locations. These include the Waterfront North, the DIP and blocks close to the future transit stations at King and Madison Streets.* In addition, there are sizeable areas available for development between Duke Street and the Capital Beltway, and east of Potomac Yards.

The properties identified for development or redevelopment in Planning District I have much in common. Some of the larger parcels are railroad properties but are not likely to continue to be needed for railroad purposes. Several of these parcels have suffered from drainage problems in the past. This condition is being corrected by private action. Some of the properties not owned by the railroads, but served by railroad spur tracks were originally developed entirely or partially for industrial and storage purposes. Although Planning District I has relatively little vacant land, it has considerable acreage that is under-utilized or ready for new uses. On a long range basis, an increase in population is projected from 21,593 in 1970 to almost 47,000, with employment increasing to over 37,000.

Recommendations for Planning District I

- Retain the retail pattern on King Street from Washington Street to the Potomac River.

- Re-examine the retail pattern along King Street between Alfred and West Streets. Alexandria's downtown sections may concentrate closer to the future King Street Station and east of Alfred Street. New public or private uses may then become appropriate in the middle sector of King Street.

- Protect the appearance of Washington Street as the gateway of Planning District I.

- Encourage the relocation of industrial uses from Planning District I to more appropriate sections, when one or more of the following conditions are present:

  - Close proximity to single-family homes
  - New uses being planned
  - Obsolescence of buildings
  - Environmental hazards

*SEE Madison Street Metro Station on page 38.

- Redevelopment of the Alexandria waterfront including:

  - Replacement of older industrial and storage uses
  - Removal of the railroad tracks from Union Street
  - Development of the Union Street collector
  - Construction of hotel-motel conference facilities in the north riverfront area
  - Provision for a continuous pedestrian walkway between Jones Point and Daingerfield Island
  - Encouragement of new high density residential and office development in the North Waterfront area
  - Limit residential density east of Lee Street to no more than 40 units per acre
  - Creation of parks and recreation areas and assure public access to the water

- Carry out the following programs to upgrade and improve the area west of Washington Street (Census Tract 16):

  - Preserve and improve the residential character of the area
  - Where redevelopment is appropriate, emphasize residential reuse and relocation of displaced families
  - Channel through traffic away from residential streets

Planning District II

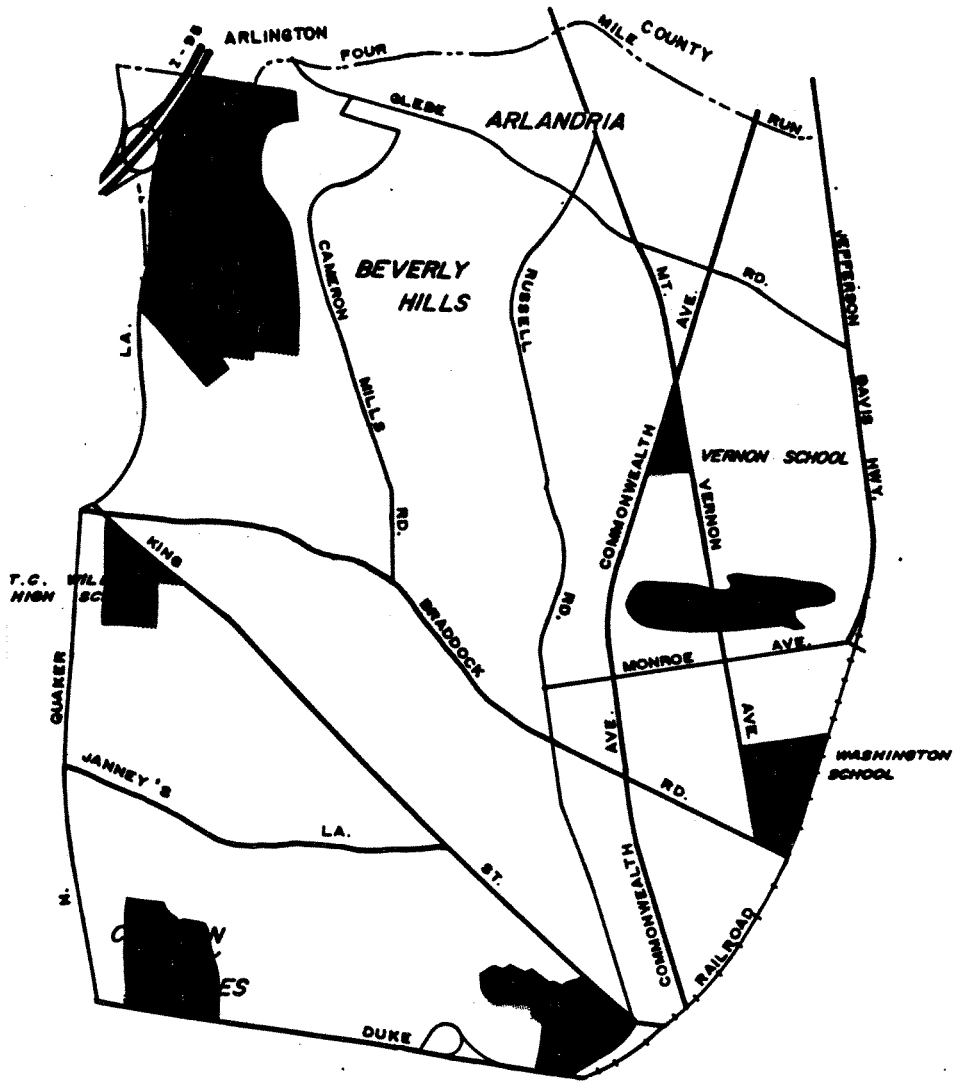
The character of Planning District II is mainly low density residential. In the Del Ray section of this district, most detached homes were built between 1900-1930. A large number of semi-detached dwellings have been constructed since 1945. During and following World War II three large groups of row houses were constructed: Warwick Village, Lynhaven, and a third group north of George Washington High School. Garden apartment buildings are concentrated near the high school, the intersection of Commonwealth and Monroe Avenues, and north of the intersection of Commonwealth and Mt. Vernon Avenues. Two high rise buildings are also located in the area north of the intersection of Commonwealth and Mt. Vernon Avenues.

The northwestern portion of the planning district contains the Parkfairfax Garden Apartment development located on 150 acres of rolling hills. Built during the 1940's this project contains 1,680 dwelling units. This was a pioneer project and received widespread favorable attention at that time for its good site design and relatively low density. Beverly Hills, built mainly between 1930-1940 is the largest single development in this planning district. This area contains single-family detached dwellings constructed on curvilinear streets.

The area to the south of Braddock Road is predominantly single-family. This area contains the Rosemont Subdivision built during the 1920's and 1930's, the George Washington Park Subdivision, built during the same period, and the Clover Subdivision, built during the 1950's.

The western portion of the district contains the T. C. Williams High School and single-family dwellings built during the 1960's under an Urban Renewal Project. A publicly owned vacant parcel containing almost 32 acres adjacent to this area is programmed to be used as a City park.

The southern-most end of the planning district at Duke Street contains the Cameron Valley Public Housing Project constructed as war-time housing during the 1940's, a high rise apartment built during the 1960's, and garden apartments built during



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PLANNING DISTRICT 2

ALEXANDRIA , VIRGINIA

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MAP 10

the 1950's and 1960's. The George Washington National Masonic Memorial, built between 1922 and 1932, is located in the southeastern corner of Planning District II and is an important Alexandria landmark and an attraction for thousands of tourists annually. (Map 10).

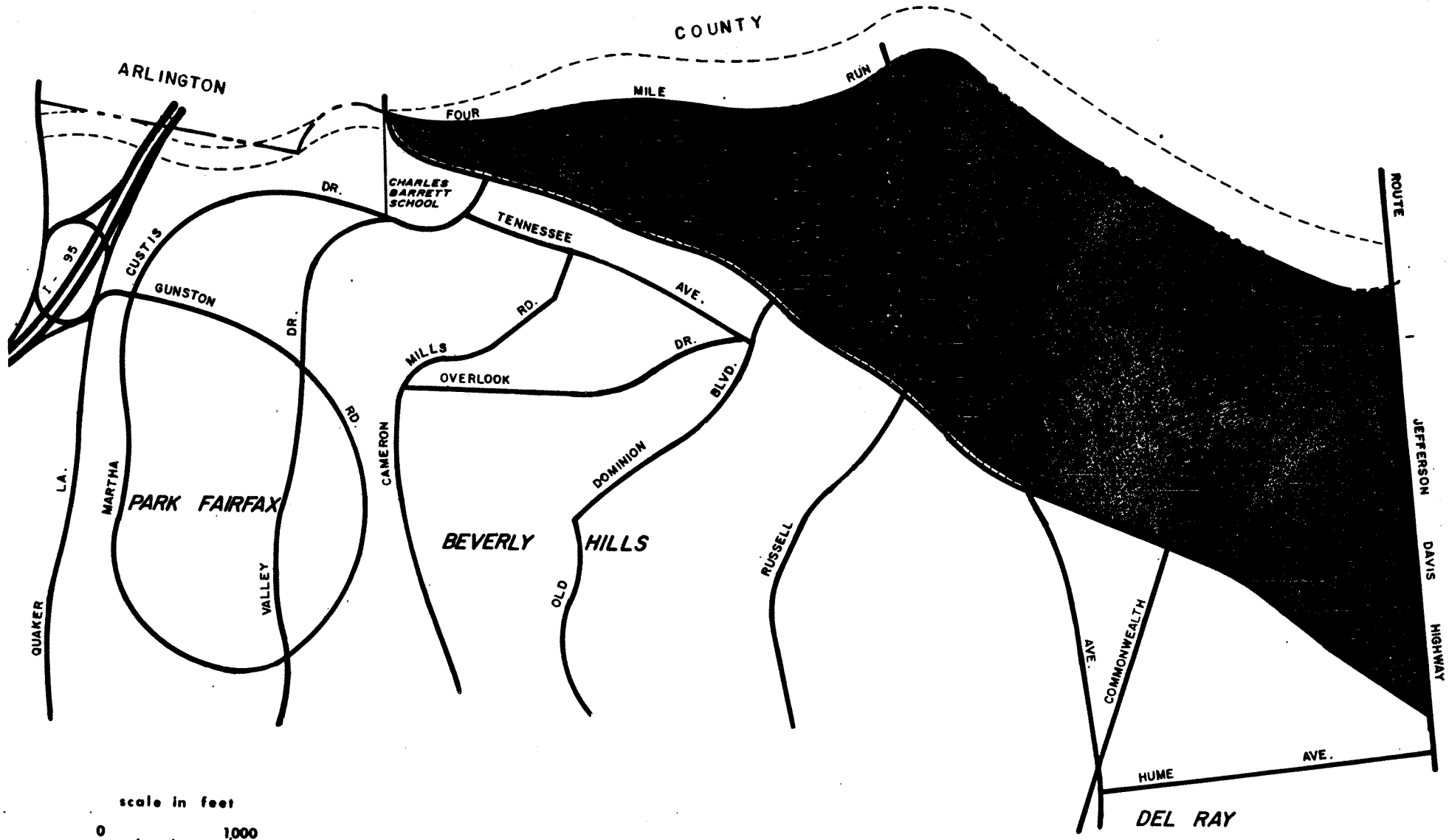
The Del Ray Area

A series of major studies involving the Del Ray area were prepared by the planning staff between 1966 and 1968. A preliminary study resulted in the preparation of a report dated September, 1966, which presented an analysis and a series of alternatives for action including street improvements, changes in land use, and redevelopment of City land for park purposes. Citizen response was received in the form of maps and written reports and were reviewed at a Planning Commission meeting in March, 1967. At the request of the Planning Commission further studies were undertaken. These culminated in a two-volume report in January, 1968 which contained recommendations for a five-year period in the realm of land use, City programs, and changes in the traffic pattern. The staff recommendations were heard by the Planning Commission at a meeting in 1968, but no action was taken. Since that time the City has proceeded to take major steps towards the eventual solution of the flood problem in the northern part of this study area. See page 90 for further details on the flood abatement efforts.

Specific improvement projects have been completed by the City within the Del Ray study area, including several which are related to the Mt. Vernon School. The expansion and renovation of the school into a community center was completed in 1967. Since then the City has constructed a branch library on this site and has also expanded the property northward by the purchase of a small triangular piece of land.

The Future

Planning District II is expected to remain residential, with single-family homes predominating. Whatever changes occur are expected to take place primarily in the older garden apartment developments or along the northern border of Alexandria close to Four Mile Run, including areas in the eastern and western portions of Arlandria (Map 11). As a result, the likely population and employment in Planning District II will increase less than in other parts of Alexandria. Under the long range projections the population is expected to increase from 42,996 in 1970 to a little over 56,000 and the employment increase to approximately 13,000.



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ARLANDRIA

ALEXANDRIA , VIRGINIA

MAP 11

Recommendations for Planning District II

- Maintain the residential character of most of Planning District II.

- Recommend the following for the Del Ray Area:

  Encourage private rehabilitation of single-family dwellings.

  Encourage relocation of strip commercial and industrial uses to shopping center areas or industrial parks when opportunities arise.

  Encourage construction of townhouses in some single-family sections where physical conditions and economics do not permit rehabilitation.

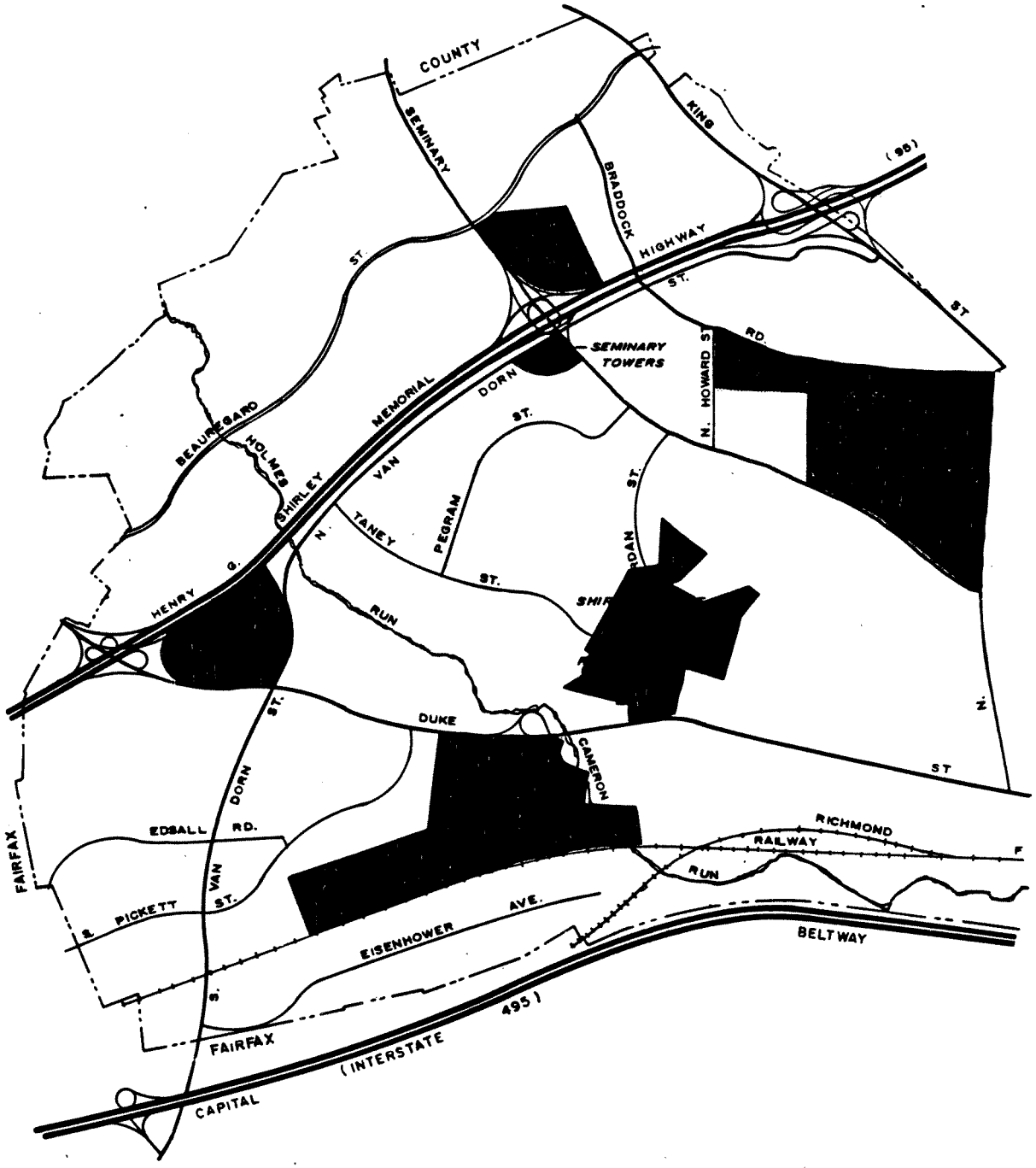
  Discourage through traffic in predominantly residential areas.

  Provide open space and recreational uses.

- Reaffirm the recommendation for a City park at Chinquapin.

- Encourage the protection and upgrading of Parkfairfax as a residential community for middle income families.

- Encourage the enforcement of housing-hygiene codes.



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PLANNING DISTRICT 3

ALEXANDRIA , VIRGINIA

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REV. FEB. 74

MAP 12

Planning District III

Planning District III, prior to annexation from Fairfax County in 1952, was primarily single-family residential in character. Cameron Station Military Reservation (165 acres) and the Virginia Theological Seminary-Episcopal High School (250 acres) were the major nonresidential land uses. Areas along Duke Street had experienced limited commercial growth and the Shirley Duke-Regina garden apartment projects had been built.

The years from 1960 until 1966 brought unusual growth to Alexandria, especially in Planning District III. High density residential development began with the construction of Southern Towers and Seminary Towers along the Shirley Highway Corridor. There are now 6,400 high rise units in this district. Townhouse and garden apartment developments constructed along Beauregard, Van Dorn and King Streets now number approximately 10,000 units. The central portion and the western edge of the district were developed with single-family homes. The amount of land devoted to single-family homes approximately equals that occupied by the multi-family projects.

In 1965 the Landmark Shopping Center was constructed on 60 acres of land located on the northeast quadrant of the Shirley Highway-Duke Street intersection. This regional shopping facility, with three department stores, has become the largest retail center in the City. The Edsall Road/Duke Street area has attracted industrial and storage uses as a result of its accessibility to the Capital Beltway.

The Future

The majority of vacant land, approximately 1,440 acres, in Alexandria is located in Planning District III. With the exception of part of the 26-acre tract which has been recommended for public acquisition as a recreation area, most of the remaining vacant land will be available for private development. This Planning District will receive most of the high density residential development projected for the City. A major share of this development will be located in the area west of Shirley Highway.

Office developments are likely to be located mostly around the Duke Street and Shirley Highway Corridors. It is also expected that industrial uses will increase in the Edsall Road/Duke Street area. Mixed uses and high density residential growth are expected on the property south of Duke Street on both sides of South Van Dorn Street.

The future long range growth is expected to give this Planning District the largest share of new population and employment. Projections indicate that the population will increase from 46,349 in 1970 to approximately 97,000 with employment increasing to almost 33,000.

Recommendations for Planning District III

- Uphold the present zoning pattern to maintain the character of existing single-family sections.

- Encourage the provision of ample open space and of in-structure parking in future apartment developments.

- Provide stream valley parks along Holmes Run and a pedestrian trail along the length of the Run from the western city limits to south of Duke Street.

- Provide for housing for all income groups in future development and redevelopment of Planning District III.

- Encourage consolidation of commercial development.

- Discourage through traffic in residential neighborhoods.

HOUSING

To place Alexandria's housing picture in proper perspective, it is necessary first to understand that problems found in Alexandria are part of a nationwide situation. Most solutions which have been advanced to help solve these housing problems depend on substantial national government participation. In the United States, most factors affecting the housing supply have been left to the control of the private market. Along with this, there has been a large increase in the cost of land as the demand for urban development has grown. The other factors adding to the housing problem include inflation, fragmentation of the homebuilding industry, obsolete building techniques and a shortage of skilled workmen. Compounding these pressures is the fact that Americans are adjusting to changing patterns of housing in response to rapid growth, rising land costs, and the desire for convenient locations. Within the past 20 years the proportion of single-family homes being constructed in metropolitan areas has been decreasing as the demand and supply mechanisms of the private market have encouraged more apartment units.

In response to these long standing national housing problems, the federal government has sponsored housing programs since the mid-1930's. These programs have changed in emphasis and broadened in scope over the years. In the 1960's much of the national emphasis was on middle-income housing, with most governmental activity on the local level being in response to federal programs.

Housing in the Washington Metropolitan Area

The principal housing problems of the Washington metropolitan area are generally considered to be sub-standard housing and overcrowding, the high costs of housing for families of low and moderate income, and housing opportunities for non-whites.

Like the suburbs of other American cities, Alexandria is confronted with rapid metropolitan growth, and is being forced to face the effects of living in proximity to a central city with a substantial amount of obsolescent housing occupied by the poor who are contending with many of the social problems associated with poverty.

While the housing problems faced by the metropolitan area are both many and serious, they are not insolvable. They will, however, take time and money. A recent Washington Metropolitan Council of Governments report states: "Programs and approaches for solving problems and resolving issues are in large measure initiated and accomplished by local communities. As metropolitan Washington grows, local community decisions will have increasing regional significance..." The significance for Alexandria is that it cannot operate in isolation. It is an integral part of its region and must consider the effect of policies in other local jurisdictions.

Housing in Alexandria

Since 1960 Alexandria has shifted from a predominantly single-family to predominantly multi-family community. The following table shows the 1969 composition of housing by type.

Table 5
Housing by Type

	1960		1969	
Type of Unit	Number	Percent	Number	Percent
One- & Two-Family	16,582	56	16,870	37
Garden Apartment	12,269	41	19,780	43
High Rise	794	3	8,860	20
ALL TYPES	29,645	100	45,510	100

As a result of this shift in housing types there has also been a change in the form of housing tenure from one of predominantly owner-occupancy to one of predominantly renter-occupancy. This change in housing tenure was rapidly accelerated during the early and mid 1960's. In 1960 some 62% rented housing in the City and by 1968 this percentage had jumped to over 73% of all the residents.

As the following chart illustrates the majority of all the housing units within the City were built since the annexation of the land west of Quaker Lane. Thirty-five percent (35%) of all the existing units have been built since 1960.

Table 6
Housing Age

Year Built	Number	Percent
1960-1969	15,860	35
1950-1959	11,050	24
1940-1949	9,710	21
1939 & Earlier	8,890	20
ALL YEARS	45,500	100

According to the City's most recent workable program submitted to the Department of Housing and Urban Development on December 12, 1969, 1,000 units of the City's total supply of housing are deficient and need correction. Of the 1,200 families occupying substandard units 45% are white and 55% are nonwhite. Blighted conditions are concentrated in eight of the City's older neighborhoods. The two most serious areas are Census Tracts 16 and 20.

Publicly Assisted Housing

The City of Alexandria has the second largest, and one of the oldest, public housing programs in the Washington area, a local Fair Housing Ordinance and one of the most active urban renewal programs. For thirty years Alexandria has assumed a responsibility to provide needed low-income housing. In fact, it has assumed a share proportionately greater than its size in the metropolitan area. The following table shows that in 1968, Alexandria, with 4.8% of the housing units in the metropolitan area, contained 8.3% of the public housing. Even more dramatic, a difference is shown in terms of Alexandria's share of suburban housing; while accounting for but 7.0% of the total suburban housing supply, the City possessed 55.6% of the suburban public housing units.

Table 7

ALEXANDRIA'S SHARE OF GOVERNMENT ASSISTED HOUSING IN THE WASHINGTON METROPOLITAN AREA

	As of Sept. 1, 1968					
	Public Housing Completed, Occupied, under Construc. or Approved		All Government Assisted Housing Completed, Planned, in Process, or under Construction		All Housing Assisted and Unassisted	
	No. of Units	Percent in Alexandria	No. of Units	Percent in Alexandria	No. of Units	Percent in Alexandria
Metro. Area	12,508	8.3%	24,034	5.1%	931,400	4.8%
All Suburbs	1,860	55.6%	6,889	18.0%	632,600	7.0%
Alex-andria	1,034	100.0%	1,238	100.0%	44,400	100.0%

Alexandria now has 1,034 public housing units all built under federal programs. The first low-rent housing units were occupied in 1941. The City is also trying to meet its housing needs through urban renewal and the Federal Housing Administration's 235 and 236 housing programs.

Plans are being developed for the completion of 354 new low and moderate income dwelling units to supplement the existing federally assisted housing supply of some 1,132 units. Appendix Table 1 on page A5 provides a summary of the federally-assisted developments in Alexandria, and identifies the federal government program used in production of the housing.

JEFFERSON VILLAGE HOUSING AREA 1

Housing for the Elderly

The number of elderly in the nation is increasing and is projected to continue to increase. As a proportion of the total population, however, the number of elderly remains relatively small. Nevertheless, there are certain characteristics of this portion of the population that make the elderly dependent on public subsidy. The income of the elderly is typically fixed at a constant level upon retirement from the labor force. In an inflationary economy, elderly citizens are particularly vulnerable. Because they cannot afford to pay more for housing, elderly homeowners tend to retain their homes even though they might be larger than their needs. This phenomenom may distort figures on sizes of housing units relative to population, because many elderly citizens may be living alone in large homes. Furthermore, elderly persons are tending to live alone, rather than moving in with married sons or daughters, as in past years.

There are three private nursing homes for the elderly in the City, including the Hermitage, located at 5000 Fairbanks Avenue off Seminary Road; the Goodwin House, with 253 units constructed in 1964, at Fillmore and N. Beauregard; and the Woodbine Nursing Home, located on King Street near Janney's Lane. The homes, however, are designed to house elderly persons requiring domicilary medical care at a substantial cost to the elderly person or his family. They are not designed to meet the need for low-cost housing for the elderly.

There was a waiting list of 51 elderly persons, defined as men 65 or older and women 62 or older for public housing in August 1971. There is a need, therefore, for the City to continue its efforts to try and provide adequate housing for its older citizens.

The Lack of Medium-Price Housing

Not only poor and elderly, but middle-income residents are having difficulty in finding housing they can afford. The Middle Income Housing Committee appointed by City Council in March 1969 to study the problem of availability of middle income homeownership in Alexandria, defines middle income as $8,000 to $15,000 permitting the purchase of a home between $20,000 and $34,000.

No owner-occupied housing has been constructed in Alexandria without public assistance since 1968 for under $35,000, except in Del Ray, where a few houses have been built at $30,000. Even though the average income in the metropolitan area is $14,299, the highest in the nation, only the upper 40%, approximately, of the people in the metropolitan area can afford new housing. Virtually all private redevelopment in the City has taken place in Old Town and has centered on expensive homes. Elsewhere in Alexandria three townhouse sites have been privately redeveloped in the Del Ray section, and individual units are valued at $27,000 to $38,000.

Housing Policy Recommendations

Most residential developments, especially those for low-income and low-middle income families, are a net liability to any city in terms of service cost - tax revenue ratio. Therefore, a public policy should be derived not from economic studies but from the acknowledgement of the public responsibility to encourage the provision of housing for all income groups. It is

on this basis that the following policy statements are proposed. The policy recommendations for 1970-1980 are based on anticipation of the future availability of income supplements.

- It is recommended that Alexandria be active in the development of a regional approach to meet the public responsibility in housing. This could be handled through one of the present regional organizations representing either the entire metropolitan area or Northern Virginia. Under such a regional approach, a housing policy would have to be based upon each jurisdiction acknowledging responsibility for a proportionate share of the total regional costs and for actually housing a share of the low income and low-middle income families and individuals within their political boundaries. These shares might be based on a formula involving proportion to total population, taking into account tax base and employment opportunities.

- The housing responsibility of the local government should include maximizing the opportunity for good housing for all residents. This means that the opportunity should be created for all residents to afford and obtain good housing. To achieve this objective, it is recommended that housing standards not be lowered, but that the families and individuals be helped to pay for standard housing. Feasibly, this can only be done at the federal level.

- In cases where it is appropriate for the City to establish priorities, preference should be given to those families or individuals who already have been residing in Alexandria and have some special need, such as relocation from urban renewal projects and highway construction, or those who are already holding a job in Alexandria.

- While a range of housing types is probably appropriate for low and low-middle income families within the metropolitan area, detached single-family homes should not be used extensively within the more intensely urbanized areas of the region such as Alexandria.

- It is recommended that the City take responsibility to help provide housing for the elderly. Such housing should be located within all areas of the City taking into consideration such factors as the suitability of existing or proposed housing and accessibility to shopping, medical services and public transit.

- When large-scale residential development or redevelopment projects are proposed, the City should encourage the development of a variety of housing types, unit sizes, and unit prices to serve a broad range of income levels.

- The City should encourage and promote condominium and cooperative forms of home ownership, while conserving the supply of low and moderate income rental and ownership housing.

COMMUNITY FACILITIES

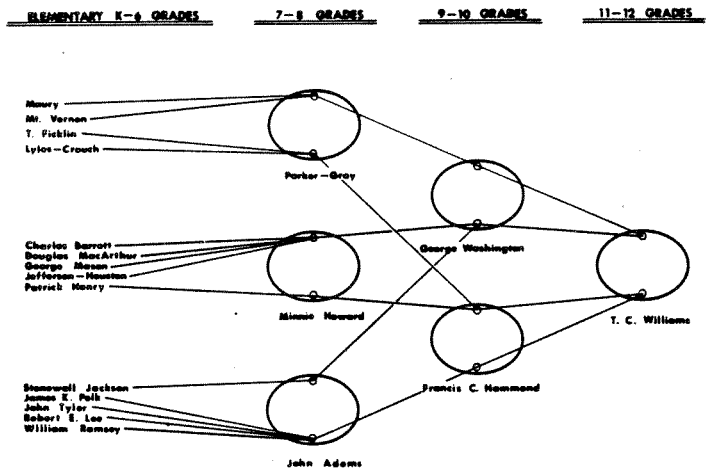
Population growth will create a need for more and possibly different community facilities. A new balance and new locations of facilities will depend in part upon the age composition of the new population. All projections indicate a gradual growth or leveling off of the pre-school and school-age population. Facilities that serve the needs of the adult-age groups, in which the greatest growth can be anticipated, will require more attention than they have been given in the past.

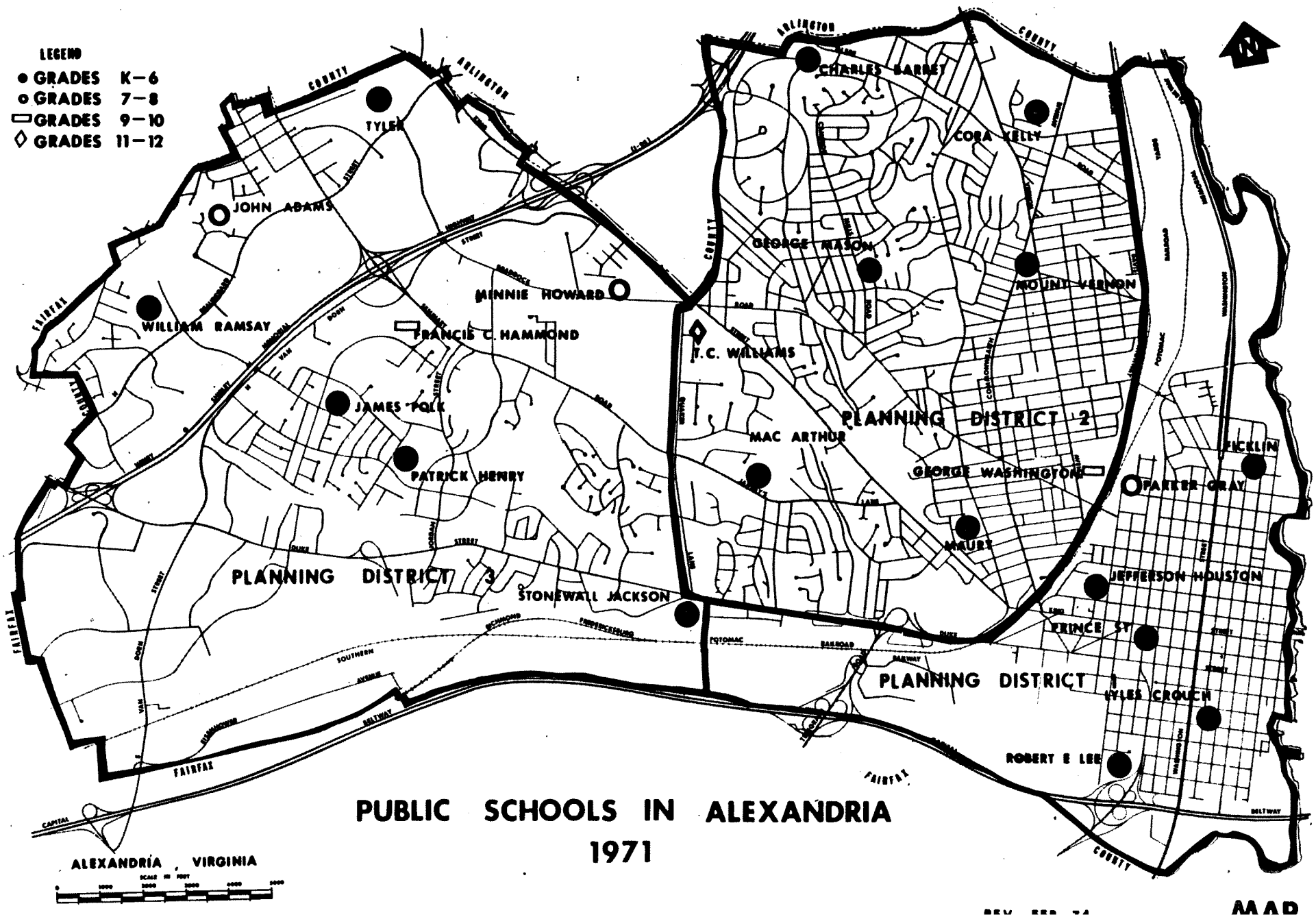
As the region grows, and Alexandria with it, the residents of the City, employees working in the City and commuters traveling through the City will, more than in the past, become three distinct groups with separate sets of needs for various types of facilities. Facilities in the past have often been thought of mainly in terms of resident needs. A shift in Alexandria's role from a bedroom community to an employment center could create a demand for additional facilities. This portion of the Comprehensive Plan will discuss public schools, libraries, recreation, public safety facilities, health facilities, and public utilities.

School System

The decade of the 60's brought about a period of great change in the Alexandria School System. This was the result of population increases, school integration, changes in teaching methods, and the establishment of the kindergarten program. Chart 8 shows the schools which pupils attend as they progress from elementary through high school.

TABLE 8
K-6-2-2-2 SCHOOL PLAN





PUBLIC SCHOOLS IN ALEXANDRIA
1971

ALEXANDRIA, VIRGINIA

SCALE IN FEET

MAP 13

The Charles Houston School was phased out as an elementary school with its pupils transferred to the new Jefferson-Houston School. The City is presently studying the various types of school associated uses to which the Charles Houston School can be converted.

The construction of the John Tyler Elementary School was completed in September of 1971 and was opened to receive students for the fall term. Its opening alleviated the crowded conditions at the Charles Barrett and William Ramsay Elementary Schools.

JOHN TYLER SCHOOL 2

The City School Board operates two schools where special education classes are held and which serve handicapped and slow learning pupils. These are the Secondary School Occupation Center, and the Trainable Center. The latter is located at present at the Robert E. Lee School.

Capacity of the Alexandria School System

School authorities feel that the optimum ratio of students to teacher per classroom in elementary schools should not ideally exceed 25 to 1, and that the maximum ratio should be no greater than 30 to 1. There are presently four elementary schools operating above the 25 to 1 ratio although no school is operating above its maximum capacity of 30 students for each teacher. The City is under capacity in all of the middle and high schools.

Table 9
School Capacity and 1971 Membership

School	Membership Sept. 1971	Maximum Capacity 30/1 Ratio	Maximum Capacity 25/1 Ratio
Charles Barrett	411	660	550
Theodore Ficklin	332	450	375
Patrick Henry	815	1,050	875
Jefferson-Houston	950	1,080	900
Stonewall Jackson	602	840	700
Cora Kelly	624	690	575
Robert E. Lee	363	960	700
Lyles Crouch	377	660	550
Douglas MacArthur	549	630	525
George Mason	510	720	600
Maury	479	660	550
Mount Vernon	1,156	1,350	1,125
James K. Polk	633	900	750
William Ramsay	823	1,170	925
John Tyler	621	900	750
Trainable Center R. E. Lee	65	--	--
TOTAL ELEMENTARY SCHOOLS	9,310	12,720	10,450
John Adams	1,099	1,500	
Minnie Howard	907	1,400	
Parker-Gray	601	1,400	
Francis Hammond	1,439	1,900	
George Washington	1,285	1,900	
T. C. Williams	2,297	2,400	
TOTAL SECONDARY SCHOOLS	16,936	22,220	20,950

Because in secondary schools optimum, or maximum pupil per classroom ratio varies with the subject taught, capacity is given as the capacity of the building.

New trends in education will necessitate a change in community thinking about school facilities in terms of number of classrooms per school building. Team teaching, new developments in the use of audio-visual aids, and other teaching innovations will require the ability to be flexible in the use of space within school buildings. Present thinking suggests that the optimum size for elementary schools is about 1,000 pupils; 1,200 for middle schools, and 2,000 for high schools.

Population projections based on the 1970 Census indicate that the influx of students to the schools during the 1970's will be less than in the preceding decade. Therefore, it appears that the present planned school capacity will be sufficient to meet the needs of the city for the coming decade. The currently planned net additional capacity to be added between 1970 and 1980 is 1,425. When this is added to the 1971 capacity, it provides a 1980 capacity for elementary schools as follows: 25-1 pupils per classroom ratio = 11,045 and 30-1 pupils per classroom ratio = 13,325. Expansion capacity for the next ten years within elementary schools is shown in the following table.

Table 10
Elementary Schools

Expansion of Capacity 1971-1980

	Name	Additional Capacity
1.	Douglas MacArthur	225
2.	Stonewall Jackson	-40
3.	Stevenson (Southwest)	1,000*
4.	Cora Kelly	300
5.	Charles Barrett	-55
	Net Increase	1,425

* No figures or information available, average capacity of elementary schools is 750 to 1,000.

After 1980, as the population increases, additional schools may be needed. Some of the land which would be used as school sites should be purchased before 1980. However, prior to the actual purchase, a careful study of population trends should be made. Policies regarding school locations and size should also be reconsidered.

Virginia state standards for a public grade school site require five acres plus one acre per 100 children. The corresponding standard for public high schools is 10 acres plus one acre per 100 children. The State is cognizant of the fact that few, if

any, urban areas have enough land to meet these recommended site standards and has allowed exceptions to them. With a smaller site size it is necessary to use the land as efficiently as possible, for example, construction of multi-storied school buildings would be possible. The high value and scarcity of land for schools being built in urban areas make it unrealistic to adhere rigorously to State standards. Moreover, new approaches to physical education which recommend greater use of indoor facilities mean that the amount of outdoor play area needed during the school day is less. Several Alexandria schools now contain indoor facilities.

Expanding Use of School Facilities

School facilities are available now for community meetings and recreational purposes, but economic and social pressures will probably result in more intensive use of school buildings. New schools are now designed to allow sections to be closed off, permitting areas designated primarily for school purposes to be separate from those used by the general public, thus allowing for flexibility in the use of the building.

It is possible that in the future school facilities will be used for the after-school care of children of working mothers. This will mean that school buildings will be in use until 6 p.m. and that supervisory personnel will have to be provided.

There is also the possibility that in the next decade the pressure to provide public schooling for children below the kindergarten level (3 to 5 years) will make it necessary to provide facilities for this purpose. Such facilities for pre-school education need not be in school buildings; but could be rented from churches or designed into large redevelopment projects or into new housing developments.

Day Care Centers

There are at present 36 nursery schools in the City of Alexandria. Of these twelve are day care centers which offer, in addition to nursery school education, facilities where the working parent can leave his or her child. The day care centers generally take children from 3-6 years old and as a result there is a need for places where infants (0-3 years) and older children, who are out of school, can be cared for. Four of these centers

are publicly funded; two are operated by the Alexandria Department of Social Services and two, the Hopkins House Centers, receive federal funding.

Post High School Education

In the Northern Virginia area there are the following publicly supported facilities for post high school education:

> The Northern Virginia Community College, with its main campus in Annandale, offers technical courses and a two-year junior college program. It has land for a satellite campus in Alexandria adjacent to John Tyler School.
>
> The George Mason College, a four-year State college, is located in Fairfax City.
>
> The Northern Virginia Center for Continuing Education of the University of Virginia offers graduate and undergraduate courses at various locations in the Northern Virginia area.

The Northern Virginia Community College, and the Northern Virginia Center for Continuing Education offer evening courses; George Mason College does not offer evening courses, but like the other two facilities students can attend on a part-time basis. Because of their low tuition, easy commuting distance, and provisions for part-time and evening study, these facilities provide opportunities for higher education for persons who cannot afford to attend private colleges or technical schools or who cannot afford to live away from home at one of the State colleges.

Library System

The City presently operates three libraries for use by its 110,000 residents. The Alexandria Library was established as a subscription institution in 1794 by the Alexandria Library Company. In 1937 the Queen Street library building was donated by Dr. Robert S. Barrett on property leased from the Society of Friends. In the same year, the City Council formally accepted public responsibility for the expenses of the library system. Since that time, additions have been made to enlarge the Queen Street building and two new branch libraries have been constructed.

The Burke Branch on Seminary Road began operations in 1968, and the Duncan Branch on Commonwealth Avenue opened in 1970. With the completion of the Duncan Library, the bookmobile program was terminated, and the materials were distributed between the two new facilities. Appendix Table 2 shows the circulation of books and other materials for the library system during fiscal year 1968-69.

The materials made available to the patrons of the Alexandria Library are increased manyfold by several cooperative arrangements with surrounding jurisdictions. The library is a member of Mails of Washington, an inter-library loan service inaugurated by the Metropolitan Washington Council of Governments. The system links together all the area public libraries, university libraries, and the facilities of the agencies of the federal government; this makes over 85 million pieces of library material available to Alexandria patrons.

The City Library is also a member of the Washington Suburban Film Cooperative Association, making the entire holding of this group available for loan. The audio-visual department sponsors weekly film programs, as well as a daily lunch hour program. Film and story hours are scheduled weekly as a regular children's service.

Library service is extended to local nursing homes and homebound residents unable to travel to and from the library building; books and other materials are delivered to these individuals on a regular basis. The Alexandria Library is fortunate to be a deposit station for the talking books of the Library of Congress; this service is available to all physically handicapped persons in the area. The library has over 1,000 talking books on hand, and can receive any recording held by the Library of Congress within 24 hours.

Future Needs

Certain anticipated changes in Alexandria's demographic characteristics in the 1970's will have an impact on the amount and type of library services demanded by the residents. In addition to new citizens, Alexandria will experience an increase in non-resident working population as transportation systems, such as rail rapid transit provide improved access to the city; these employees should also have the opportunity to make full use of the library system.

The rising ratio of retired people with both the time and inclination to make use of the facilities offered by the system will be a primary factor influencing future needs. The generally high level of education and the increasing amount of leisure time will also contribute to rising demands on the library facilities. Perhaps the largest impact and the most difficult to effectively assess will result from continued efforts of the library system to reach those segments of the resident population which are presently non-participants in the library program.

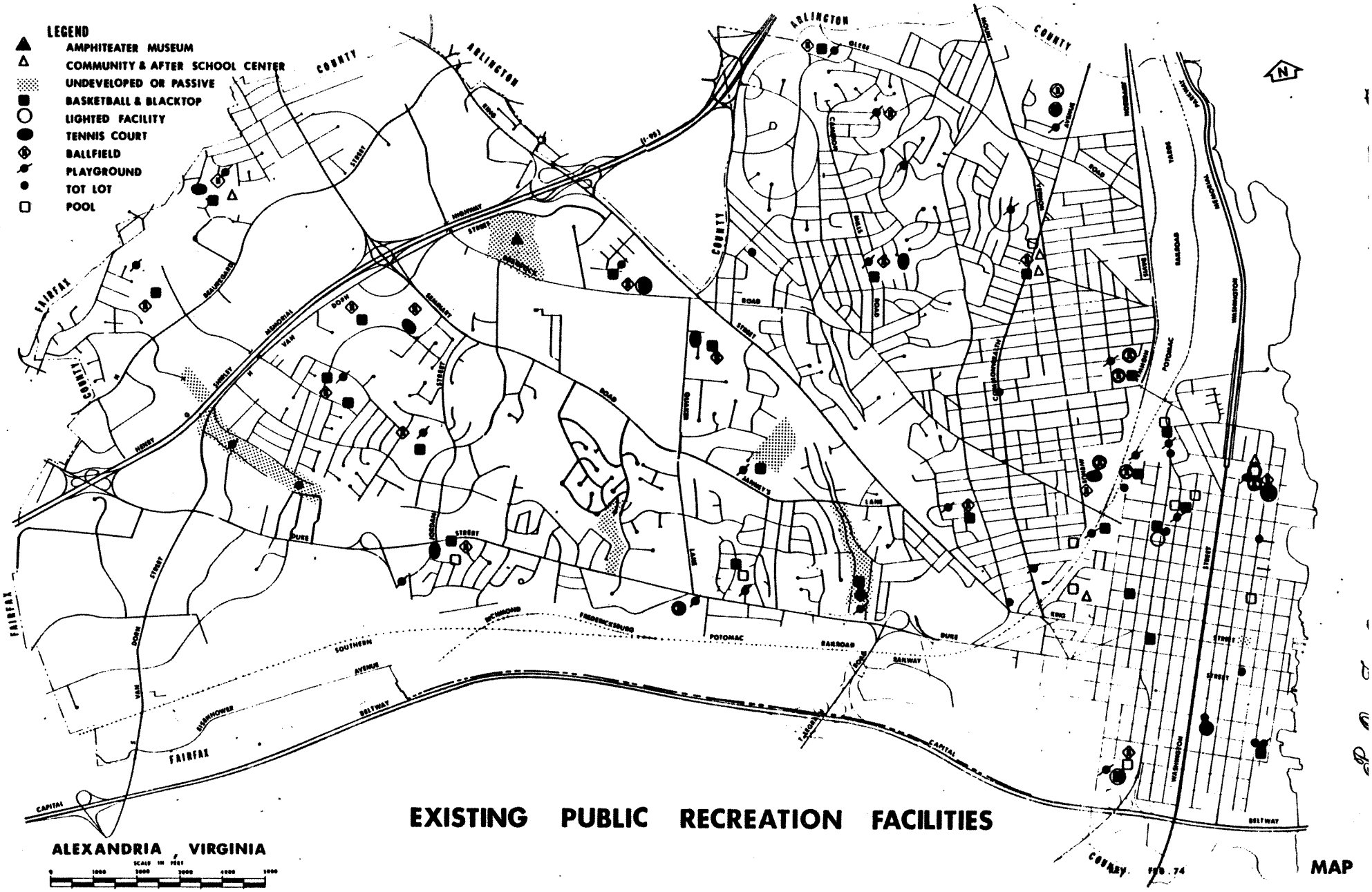
In order to satisfy the anticipated rise in the demand for library services, it is recommended that an addition to the Burke Branch be constructed to house a technical services division. This will free the lower floor of the present building for use by patrons, and will provide increased meeting room space. With the enlargement of the Burke Branch, this building would become the most logical location for the central administrative functions, leaving the Queen Street building as a research library. This will serve the more technical, in-depth needs of the growing number of business and professional patrons operating in the central business district, as well as provide regular service.

It is anticipated that the growth of the City's population will be especially rapid in the southwest sector of the City around Census Tract 4 and the Shirley-Duke area. The 1964 Long Range Plan for Libraries, recommended that a branch library be located at the intersection of Duke and Jordan Streets. It is recommended that a branch library be constructed in the southwestern section of the City in accordance with the recommendation of the 1964 study.

Recreation

The need to preserve open space and provide recreational facilities is becoming increasingly acute in the Washington metropolitan area, while at the same time the limited supply of vacant land accelerates the cost of property acquisition.

The City inventory of public recreation shown on Map 14 identifies recreation sites that total approximately 400 acres. This figure represents the total acreage for all parks plus those sections of school sites deemed suitable for recreation use. This results



EXISTING PUBLIC RECREATION FACILITIES

ALEXANDRIA VIRGINIA

SCALE IN FEET

0 1000 2000 3000 4000 5000

MAP

in slightly more than 3.5 acres per 1,000 population. This figure, however, does not include regional public parks in Northern Virginia in which Alexandria has a share through the Northern Virginia Regional Park Authority. Some of the regional parks operated by the Authority include: Bull Run Park, Occoquan Park, Pohick Bay Park, and the Upper Potomac Park. The Carlyle House Historic Park in the City will be added to this list upon its redevelopment by the authority.

In addition to these regional parks, the lands owned by the National Park Service are available to all residents of the Washington metropolitan area. Great Falls, Greenbelt Park, Piscataway Creek Park, Wolf Trap Farm, and Manassas Battlefield Park, are among the largest of these facilities.

Although the City has made many improvements in the recreation system serving the residents of Alexandria over the past decade, an analysis of the current facilities reveals that many deficiencies still exist. Perhaps the most serious is the lack of aesthetic appeal in an overwhelming majority of the existing facilities. Lack of imaginative site preparation resulting in unattractive and often inhospitable play areas has discouraged participation at many of the sites. Poor landscaping and generally depressing equipment are common problems. The older more built-up sections of the City have a special problem. There are few open areas to provide space for recreation and the older small school sites leave little area available for this purpose.

Alexandria's increasing urbanization has brought about a rising need for facilities to serve as community meeting places and organized recreation centers. The three centers operated by the Recreation Department at Cameron Street, Pendleton Street and Mount Vernon Elementary School receive heavy use. The buildings themselves, however, were not designed to meet the changing needs of the City's population; the need for after school centers serving as meeting places for teens is growing rapidly. The Recreation Department operates several after school centers in school buildings, but difficulties in the shared use of the facilities have somewhat restricted the expansion of this program.

The number of tennis courts in Alexandria has increased substantially since 1965. Existing courts receive heavy use by children as well as adults, and the tennis lessons offered by the Recreation Department are extremely popular.

Although the urban nature of Alexandria makes it infeasible to provide a great deal of open space for passive recreation, the City cannot rely entirely on the regional system to provide such space in outlying jurisdictions. Stream valley parks, primarily serving the purpose of conservation, provide several small green areas for passive recreation. The only community park having open space for passive use is Fort Ward Park. The development of the 35 acre Chinquapin site will provide a substantial amount of the needed additional acreage.

The mini-pools and spray pools developed in the summer of 1969 are an asset to Alexandria's recreation program. The concept of small "learn-to-swim" facilities designed to serve ages 6-14 proved to be extremely successful, and each of the mini-pools recorded high participation rates. The four spray pools provide relief from the summer heat for many of the area's children, however, the community pool, located at the Cameron Street Recreation Center, is the only public facility serving residents of all age groups. Many private swimming pools are available to residents on a membership basis and to certain apartment developments.

CAMERON STREET RECREATION CENTER SWIMMING POOL 3

Recreation Program Objectives

If a recreation program is to make a useful contribution to the community, it is helpful that the objectives of the program be enumerated and accepted. In the context of comprehensive planning, these objectives are expressions of the community's values. Given the broad utility of open space and the future challenges of urban growth and development, the plan for open space and recreation should seek the following objectives:

Provide and maintain attractively a comprehensive, balanced program of parks and recreation services for all age segments of the growing population.

Develop and maintain attractively open space and recreation facilities in older, intensively developed neighborhoods.

Require the reservation fo sufficient open space for future use as park land in all new developments.

Develop the recreation potential of the waterfront.

Preserve areas subject to periodic flooding as open space in order to prevent potential damage to public and private development.

Participate actively in the development of an adequate regional park system.

Preserve and enhance areas of special architectural or historic significance.

Create new open space through innovative urban design and stimulate cooperation by private owners to maintain open space in a way that enhances neighborhoods and provide, where possible, additional areas with public access.

Recreation Recommendations

- Parks

The City should continue to watch all federal programs designed to aid urban areas in the acquisition, development, and maintenance of recreation and open space. In order to correct a serious deficit in the city-wide park facilities, particularly passive recreation land, the speedy development of Chinquapin,

the Waterfront, and an area west of Ramsay School in Holmes Run as community parks is recommended. The development of these sites would also help to provide a balance of passive recreation land among the three planning districts.

- Chinquapin

Several acres of this 35 acre property have already been acquired by the City and additional funds for acquisition and development have been included in the City's Capital Improvement Budget. Park plans drafted for the site in 1965 include the adjacent 17 acre Forest Park, with active recreation facilities and a community center planned for the Chinquapin site, and generally passive uses proposed for the Forest Park area. A community-wide swimming pool for all age groups could be built at Chinquapin, this being a central location within the City and in an area not served by private pools.

A bike trail extending from Chinquapin through Forest Park and along Taylor Run Parkway through Angel Park is recommended. This trail could be developed with only one major street crossing at Janney's Lane.

- Waterfront

Alexandria's riverfront remains a major source of undeveloped recreation land. Its potential for public enjoyment is still unrealized.

It is important at this time to insure public access to the Potomac River. The public uses of the Waterfront indicated in the City's plan, adopted in 1967, particularly the pedestrian walkway, are desirable in order to integrate the waterfront with the City as a whole as well as to provide a needed amenity for residents of the immediate section. It is recommended that in addition to the pedestrian walkway, a bicycle trail extending from Daingerfield Island to Jones Point be provided.

Uses along the Waterfront other than park land for passive use might include a marina with public boating, an aquarium, a marine museum, and landscaping (pools or fountains) with provision for winter ice skating. Certain of these facilities

might be considered regional rather than merely city-wide, and might be developed in conjunction with the Northern Virginia Regional Park Authority.

Because of its federal ownership, Jones Point cannot technically be considered a part of a city park system. However, its size, proximity to high density areas, and its importance as the southern terminus of Alexandria's waterfront makes its development for recreational use an item of priority for Alexandria. Since there is no ballfield east of Washington Street and south of Montgomery Field, the City has requested the National Park Service to allow the use of the section of Jones Point bordered by Royal Street, Church Street, and the beltway for such a facility but no decision has been received. It is recommended that the City, in conjunction with the Northern Virginia Regional Park Authority, explore the possibility of developing regional facilities at Jones Point.

- Holmes Run

To the west of the William Ramsay School and extending from Holmes Run north to John Adams Middle School is a 24 acre tract presently undeveloped and zoned for single-family residential use. This tract, heavily wooded, with sharply varying topography, is one of the largest tracts which at present could be economically purchased by the City as park land. A portion of the area, the Holmes Run flood plain, is shown on the 1962 Generalized Land Use Plan as park land.

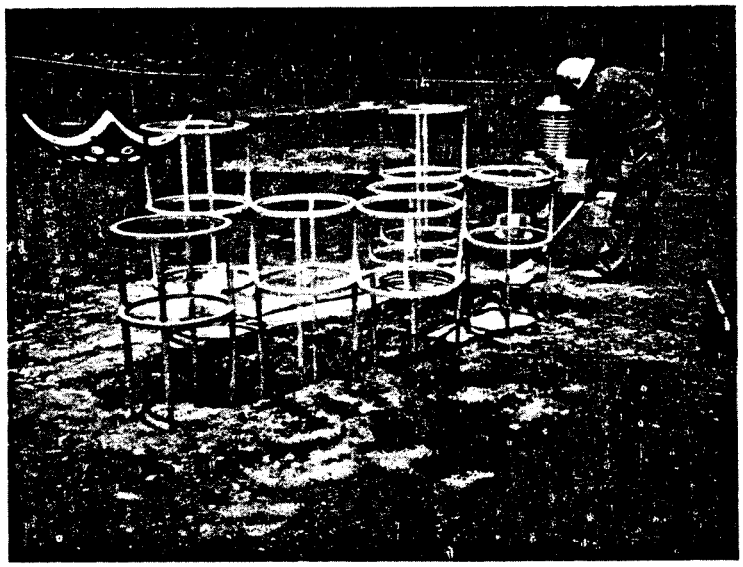
The high population concentration in Planning District III and the anticipated new growth intensify the need for recreation land in this area. The site, with minimal development for passive recreation use, could provide a welcome contrast to the apartment development which dominates the area. It is recommended that some of the tract be purchased as a community park.

- Mt. Vernon School Site

The Mt. Vernon School, with a site of 5 acres, contains the elementary school, a mini-pool, a playground, a recreation center, a golden age center, and a branch library building. A 5 acre site is not adequate to house these facilities. It is recommended that the Mt. Vernon site be expanded so that it may serve as the center for recreation activity in the Del Ray area. Probably the best opportunity for expansion of the site lies to the south, across East Uhler Avenue. If the single-family units in this area were purchased and the street closed, the site would be more adequate to support the various activities including parking for the Duncan Branch Library.

Tot Lots

The City presently contains 11 sites developed for use by preschool children. Map 15 shows proposals for 19 additional facilities. Where possible, development of tot lots has been designated on school sites or other city-owned property or sites recommended for acquisition under the HUD "parks-in-cities" program. In areas where no public land is currently available, an area of need has been indicated by a circle within which development of a tot lot is recommended. Because this type of facility has such a limited service area, it is necessary that a large number be located throughout the community. If maximum use of the older facilities is to be ensured, their aesthetic appeal must be improved. Better site planning, perhaps including the use of artificial turf and natural or man-made shade, in conjunction with attractive play equipment will contribute to higher participation rates at the existing facilities as well as the proposed new tot lots.



TOT LOT 4

- Community Centers

The emphasis currently being placed on social recreation has led to increasing demand for comprehensive community center facilities serving as gathering centers, offering sources of instruction for all ages, and providing meeting facilities for community groups. Properly staffed and well run centers can contribute heavily to the social welfare of the neighborhood they serve, and can do much to promote community identification. The existing centers serving Alexandria will be inadequate to meet the future demand of the citizens, particularly in the older more urban areas of the City. It is recommended that the existing Pendleton Street and Cameron Street buildings be renovated to provide the most efficient use of the available space. To achieve a geographic balance, an additional recreation center is proposed to be a part of the Chinquapin Community Park. The Recreation Department has requested the use of the Housing Authority buildings on West and Pendleton Streets to remove some of the pressure from the existing centers.

The teen after-school program, by providing a meeting place for middle and high school students, is serving a growing community need. Because of the difficulty in using the school's physical plant for after school recreation, it is recommended that new school buildings be designed to allow certain areas suitable for recreation use to be separated from the remainder of the facility. Where necessary, present schools may be modified to permit this type of separation.

- Ballfields

Ballfields are among the most important active recreation facilities. Alexandria presently has 22 sites containing ballfields with some of the sites having more than one field.

It is recommended that ballfields be developed in Census Tract 16 and at Jones Point to serve the urban population in the eastern section of the City. A ballfield is also recommended in the southwestern section, perhaps located on the Stevenson School site when access is made available.

- Pools

Because of the success of the four mini-pools built in the summer of 1969, three additional facilities, all located on city-owned property, are recommended - one in the downtown section at the Parker-Madden playground, one in the extreme north at Florence Drive and Four Mile Run, and one in the western sector at the John Adams Middle School. It is also recommended that a city-wide pool be included in the development of the Chinquapin Community Park.

- Tennis Courts

It is recommended that the existing courts be supplemented with additional facilities at Chinquapin, Parker-Gray School, Jefferson-Houston School, Angel Park, and on the reclaimed flood plain area behind the Cora Kelly School.

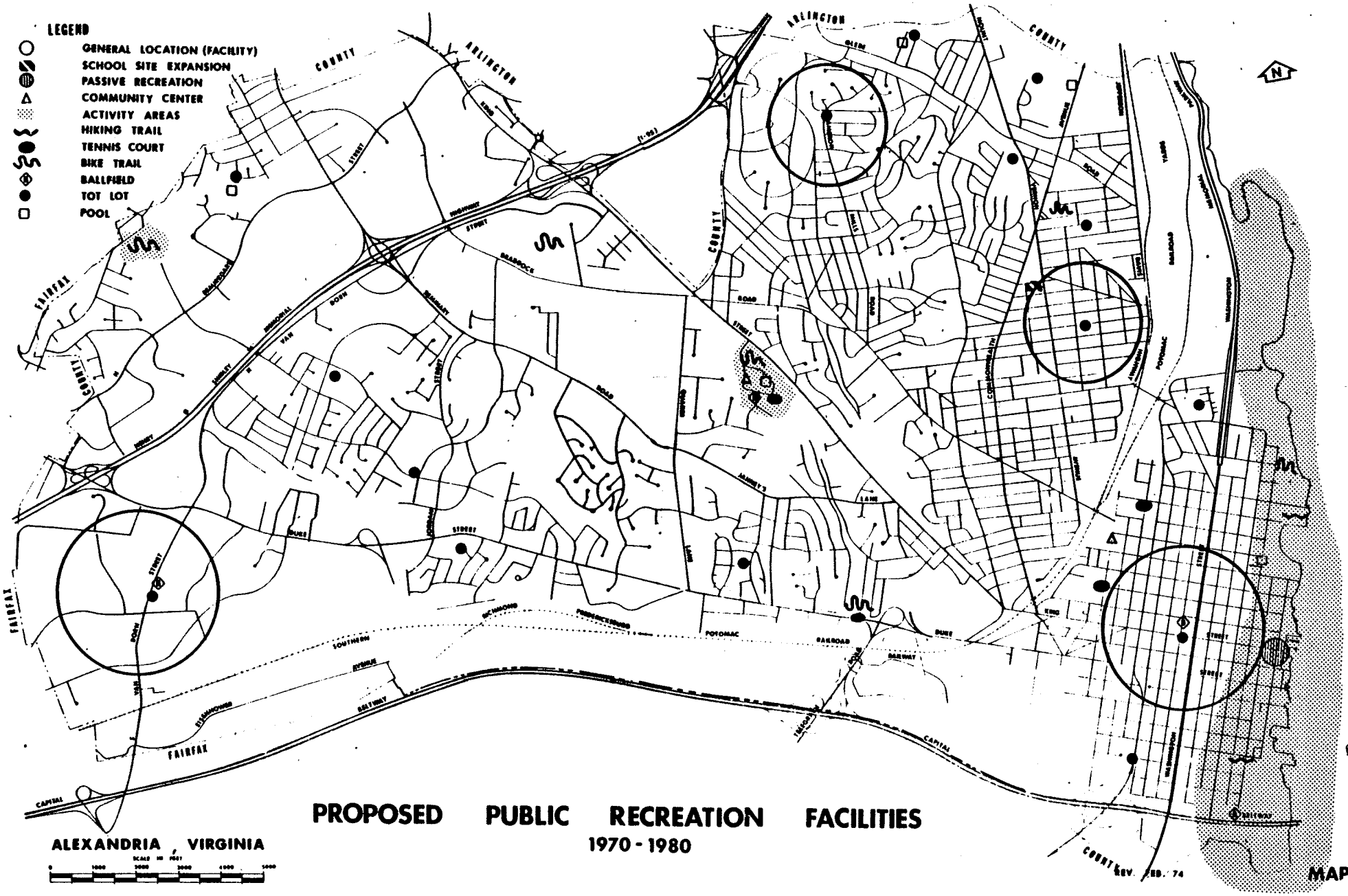
- Bike Trails

Bike trails are facilities which logically belong in park and recreation areas and which can be incorporated into certain of these areas in Alexandria.

The Chinquapin Park site, the Waterfront, Fort Ward Park, and the Old Dominion Railroad right-of-way are logical and safe locations for bike trails. The existing stream bed parks should also be considered as locations (Angel Park, Holmes Run Parkway).

- Hiking Trails

There are now two good possibilities for hiking trails in Alexandria. One is an historic trail through Old Town which would provide greater access and attention to the City's colonial attractions and provide a directional focus for tourists and visitors from the metropolitan area. A second possibility is the Holmes Run Parkway right-of-way. A trail through this wooded area could connect with park land along Holmes Run in Fairfax County to provide a scenic nature trail through an area of ever-increasing density.



PROPOSED PUBLIC RECREATION FACILITIES

1970 - 1980

MAP 1

PUBLIC SAFETY FACILITIES

Police Department

The Police Department is composed of some 190 men within four divisions. These four divisions include: the Administrative, Uniformed, Investigative, and Services Divisions. The Department also includes a K-9 Corps. The City trains its police at the Northern Virginia Police Academy along with police from Fairfax and Arlington Counties.

Expansion and modernization of the police communications center are included in the Capital Improvement Program for 1970-76. This facility would be an emergency center similar to those in operation in several of the surrounding jurisdictions. Because of the availability of more sophisticated communication techniques, the Police Headquarters at 400 North Pitt Street can control operations in all parts of the City. There are, therefore, no plans at present for building a sub-station in the western part of the City.

Fire Department

The Alexandria Fire Department is responsible for the enforcement of all laws and ordinances relative to fire and fire prevention, and for the operation of the City's emergency ambulance and rescue service.

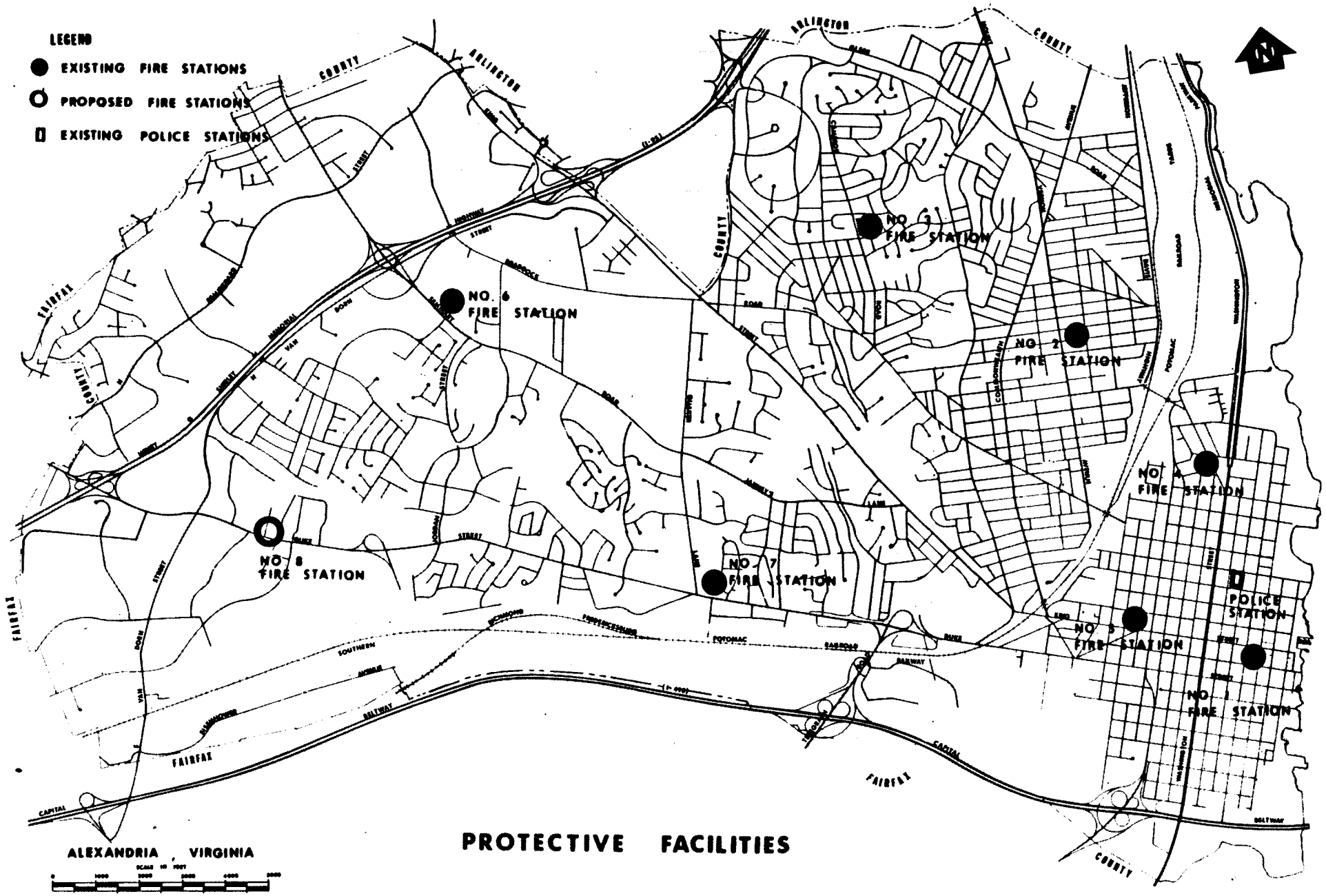
There are seven fire stations in the City of Alexandria with land for an additional station located near the Landmark area on Paxton Street as shown on Map 16. An eighth station is proposed at this site.

A training center is proposed in the Capital Budget request for 1970-76. The construction of this facility is projected for 1970-72. It will be located on city-owned land adjacent to the recently completed police pistol range on Eisenhower Avenue. The present shop facility located next to the police headquarters on N. Pitt Street is ultimately proposed to be replaced by constructing a new facility on the Eisenhower Avenue property.

It is recommended that the need for a future fire training center be restudied in some detail. There appears to be doubt as to whether open burning operations should be conducted at the

Eisenhower Avenue site or elsewhere within Alexandria. Cooperative efforts with the fire departments of nearby jurisdictions might provide opportunities for a suitable structure to enclose the burning operations, and equipment to screen the smoke emitted in order to remove pollutants. It is suggested that consideration be given to such a study on the regional level.

It is recommended that there be no consolidation of stations in the older part of the City at this time.



PROTECTIVE FACILITIES

REV FEB 74

MAP 16

HEALTH FACILITIES

Few communities can support the full range of health facilities and services needed. Most are dependent on those available in surrounding areas. Alexandria is served not only by local facilities and services, but also by facilities and services found in the Washington metropolitan area.

Hospitals

Within Alexandria there are three hospitals: the Alexandria Hospital with two facilities, one at 709 Duke Street and one at 4320 Seminary Road, Circle Terrace at 904 Circle Terrace Drive and the Jefferson Memorial Hospital at 4600 King Street. Circle Terrace and the Jefferson Memorial Hospitals are proprietory hospitals; the Alexandria Hospital is a voluntary non-profit hospital. The Alexandria Hospital plans to move all its facilities to the Seminary Road location. The anticipated opening date for the new structure is sometime in the spring of 1973; at that time the hospital will have about 428 beds.

The Community Health Center

The Center located at 208 South Columbus Street is a private non-profit organization offering comprehensive out-patient medical services and laboratory services for those unable to pay for private care. The Center received a planning grant from HEW under which it is planning community needs for its services and examining possible sites for its facility.

The Alexandria Health Department

The Health Department is a public service agency which maintains the public health standards of the community and offers services in the areas of public health nursing, sanitation, communicable diseases, health education and medical care, and operates the following clinics; venereal disease, chest clinics and X-rays, maternal and child health, dental care for indigent school children, and an alcoholic clinic.

The Alexandria Community Mental Health Center

The Mental Health Center is a state mental health agency which diagnoses and treats the emotional difficulties of adults and children, and acts in a consulting capacity for schools, courts, and other agencies.

New Approaches in Health Services

New approaches are being developed to bring health services to those who are unable to pay for private care or who, because of age or infirmities, need easy access to health facilities and services. The use of mobile clinics, and the use of space in existing community facilities for scheduled clinics are being tried in some communities.

Health workers can go out into the community to acquaint potential clients with the services available to them and can also arrange transportation to existing health facilities.

Working under the supervision of licensed physicians, paramedical personnel can supplement the work of the physician enabling him to treat more patients while still keeping high standards of medical care.

PUBLIC UTILITIES

Water

The water supply within Alexandria is distributed by the Alexandria Water Company, a private enterprise. In 1962 the Fairfax County Water Authority began to acquire the properties and the installations of the Alexandria Water Company in Fairfax County. At that time, the City of Alexandria was invited to join the Authority; this would have meant the acquisition of the Alexandria Water Company properties and installations within the City limits and the integration of this system with those of the Fairfax Water Authority. City Council decided not to enter the condemnation case and the Alexandria Water Company continued to distribute water within the City.

The Fairfax County Water Authority does not have a contract with the Alexandria Water Company to augment city supplies in the future when demands increase. Alexandria has therefore recently contacted the U. S. Army Corps of Engineers relative to acquiring water from the Dalecarlia Reservoir.

The Alexandria Water Company purchases about 13 million gallons of water per day (average) in bulk from the Fairfax County Water Authority, and is at present its biggest bulk consumer. The present source of water supply is the Occoquan Creek, located twenty miles south of Alexandria.

Alexandria's average daily demand for water is expected to double within 30 years. It is estimated that the Fairfax Water Authority may require a water supply of 334 MGD by the year 2010. Because the Occoquan Creek source can provide only about 93 MGD maximum, new water sources must be found. The Potomac River is the most likely future water source for the region.

It is recommended that the City either join the Fairfax Water Authority or investigate the possibility of joining other regional authorities in the transmission of water in bulk from new sources on the Potomac River or from the expanded D. C. Water Plant after the available potential of the Occoquan Creek is exhausted around 1975.

Sanitary Sewer and Storm Drainage System

Present System

The Alexandria sewage disposal system serves three major watersheds: The Potomac, Holmes Run, and Commonwealth drainage areas. The section north of Seminary Road and west of Howard Street is served by Arlington County. The Alexandria system includes a treatment plant, three major interceptor sewers, and two pumping stations. The interceptors, pumping stations, and main treatment plant are designed for the year 1973.

In view of topographic conditions, the conveyance, collection and disposal of sewage cannot be done strictly on the basis of municipal boundaries. This calls for participation of more

than one jurisdiction so that the proposition is most economical on a sub-regional basis. Part of the areas south of Alexandria which fall in Fairfax County connect their sewers to the Sewage Treatment Plant of the City of Alexandria. Almost one-third of the capacity of the City's Plant is used by Fairfax County. To this extent the sewage disposal operations is a joint venture. Similarly, part of the northwest corner of Alexandria, west of Shirley Highway, drains into the main sewers of Arlington.

Sections of Fairfax County are presently served by the Alexandria Treatment Plant. The plant's present capacity is 18 MGD of which Fairfax purchases 5.4 MGD: Fairfax also uses approximately two-thirds of the Holmes Run trunk sewer capacity.

Development Constraints

Planning District I has a combined storm and sanitary sewer system; during heavy storms there are a number of sewage overflows in this system which discharge into the river. Priority is being given to plans for separation of the sanitary sewage from the storm water which will take at least five years to complete. Until then there may be constraints on high intensity developments which would involve increases in sewage flow.

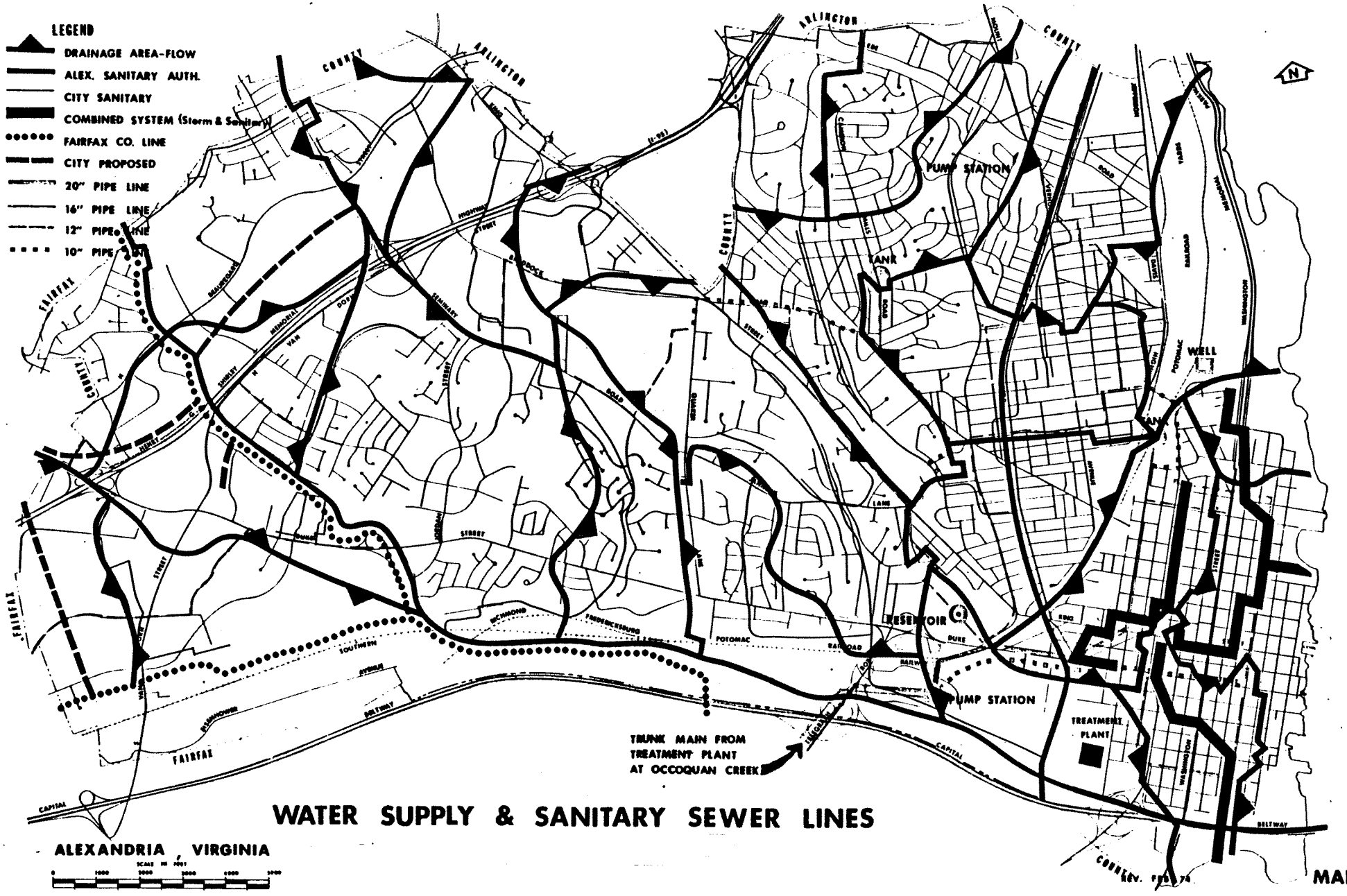
The Del Ray area has a separate sanitary sewer system with limited capacity, therefore, any high intensity development should be preceded by redesign of the existing neighborhood sewer network to augment capacities.

Sewerage and Storm Drainage Improvements

The Alexandria Capital Improvements Program (1971-77) includes projects for sanitary and storm sewer improvements. These include the following:

a. The Corps of Engineers study for the Four Mile Run flood control project. This will cost approximately $16,500,000 dollars, and will include flood basins for storm water.

b. $5,400,000 worth of improvements to the sanitary sewer shown in appendix item VII.



WATER SUPPLY & SANITARY SEWER LINES

ALEXANDRIA, VIRGINIA

SCALE IN FEET

MAP 1

Disposal services are expected to be adequate to meet future growth. A five year lead period for improvements will be required for intensive development or redevelopment in Planning District I and the Del Ray area. Development of the Arlandria area and some areas along the beltway south of the railroad tracks will require drainage improvements; this may also require a lead time of about five years.

A project involving both Fairfax County and Alexandria to expand the capacity of the treatment plant and upgrade the treatment of materials is in the design stage. The total project's preliminary estimate is approximately $16,625,000 of which $7,765,000 will be paid by Alexandria. This expanded facility would serve a 1990 population of 377,000 persons, or a daily flow of 45 MGD. Nearly 50% of this capacity will be needed to meet the requirements of Fairfax County. From the remaining capacity it is estimated that a total of about 200,000 people could be served within Alexandria.

There is being planned a $15,000,000 project to separate the sanitary sewer and storm drainage system in the Potomac drainage area. This improvement comes under federal pollution regulations requiring plans to be completed by December 31, 1971.

Gas

The Washington Gas Light Company supplies gas to Alexandria consumers through a major feeder line running along King Street and then down Quaker Lane. Representatives of the Gas Company have indicated that the Company will have no difficulty in supplying enough gas to users during the next decade. Distribution lines extend from this major feeder line providing service to individual residences. The Old and Historic Alexandria District has an extensive low pressure network of pipes leading to the user. The rest of Alexandria utilizes a network of high pressure lines; regulators then reduce the pressure for delivery to individual users.

Electric Power

Electric power is supplied to the City by the Virginia Electric and Power Company under a franchise agreement. VEPCO is interconnected with the power systems of the neighboring jurisdictions and neighboring states. Major capital improvements expected in the next decade such as the rail rapid transit and high density developments will increase the demand for power, and VEPCO has been preparing plans to meet that demand. The Company plans to double its capacity in the next six years, according to its representatives, and for the next decade forsees no difficulty in meeting additional requirements for power. This increase in total capacity will, however, require some additional circuits and sub-stations.

TRANSPORTATION

As Alexandria becomes more of an inner suburb within the metropolitan area, commuter traffic becomes increasingly heavy. The livability of the City and the stability of property values depend upon satisfactory management of these traffic conditions. Appropriate solutions should be found to the traffic and transportation problems confronting Alexandria in order to accommodate both residential commuters and other commuters through the City and to protect the City's residential neighborhoods.

Modern transportation planning requires the reconciliation of two sometimes competing types of objectives - user objectives and community objectives. The most basic user objectives are the removal and prevention of traffic congestion. Tied closely to this principle are the objectives of providing faster, safer, and more convenient means of travel for all residents in the City. Important community objectives include protecting residential areas from traffic, preserving areas of special historic value, and providing access to intensely developed areas.

The plan presented herein is the outgrowth of studies of these objectives. The objectives and alternatives were reviewed with both local and regional interests in mind. The principal transportation elements considered were the rail rapid transit line and station locations, the location and frequency of bus service and the network of through highways. Most of the recommendations apply to the highway system. The rail system alignment and station locations were assumed fixed and no longer subject to major change, the bus service is relatively easy to alter compared to such large fixed investments as the road and rail systems; therefore, it was not studied in depth. An additional reason for concentration on the road system is that recommendations adopted by the City Council can be expected to become part of the City's Major Thoroughfare Plan. This document has legal significance and controls the acquisition of land for the City's through streets. Because of this binding legal effect, the future street system was analyzed in greater detail than the bus and rail services.

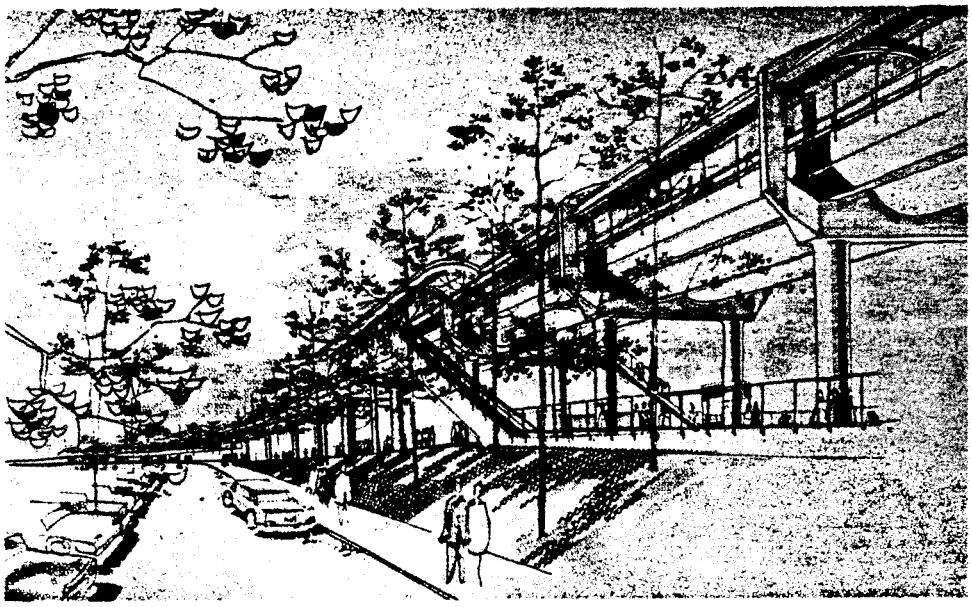
The rapid transit and bus elements of the plan will be summarized before discussing the detailed portions of the highway plan.

RAPID TRANSIT SYSTEM

With the tremendous growth in suburban population, and the great dependence upon the automobile for commuter travel, local jurisdictions realize that proper growth of the region depends upon a more balanced transportation system. Interest and acceptance of the regional rail rapid transit system, adopted in March 1968, were evidenced by voter response in support of bond issues to finance the system.

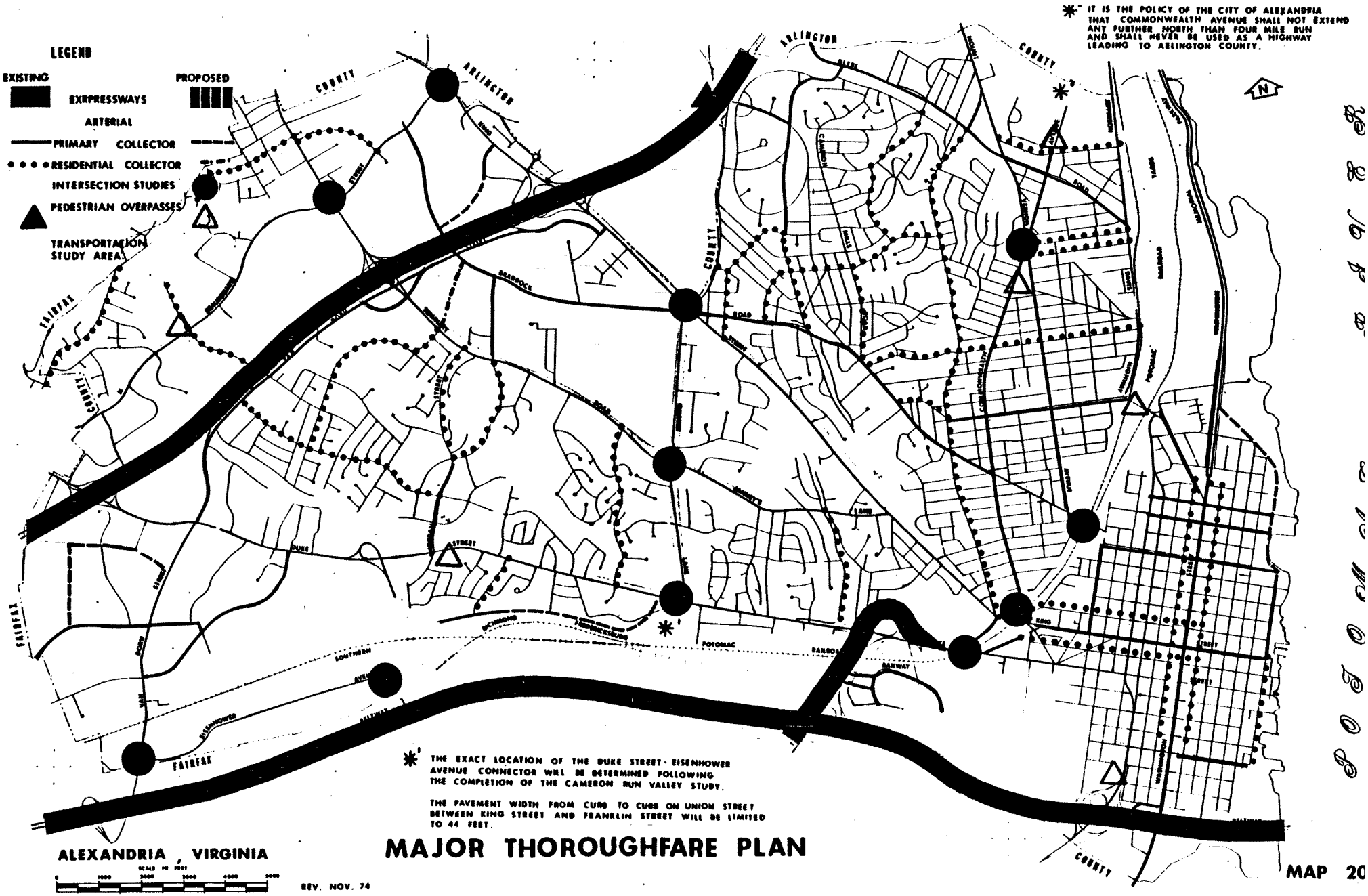
The adopted rail rapid transit system is composed of seven radial routes totaling approximately 97.7 miles; two radials of nearly 30 miles in length run through Northern Virginia, and one route of approximately seven miles runs through the City of Alexandria. Map 18.

The rail rapid transit alignment is presently being refined jointly by the City staff and the staff of WMATA and is basically the same as the route adopted by the Transit Authority on March 1,1968, and amended on February 7,1969. The City has previously accepted four major station locations: Madison Street*, King Street, Eisenhower Avenue, and South Van Dorn Street. Three other transit stations - Potomac Center, Cameron Station and Quaker Lane - will not be built at the time the transit line is constructed, but it is projected that these stations will be needed in the future. If tracks are properly aligned, these stations could be added later with no interruption to transit service.



Conceptual sketch of an aerial side-platform station. There will be four stations of this basic type in Virginia and two in the District of Columbia.

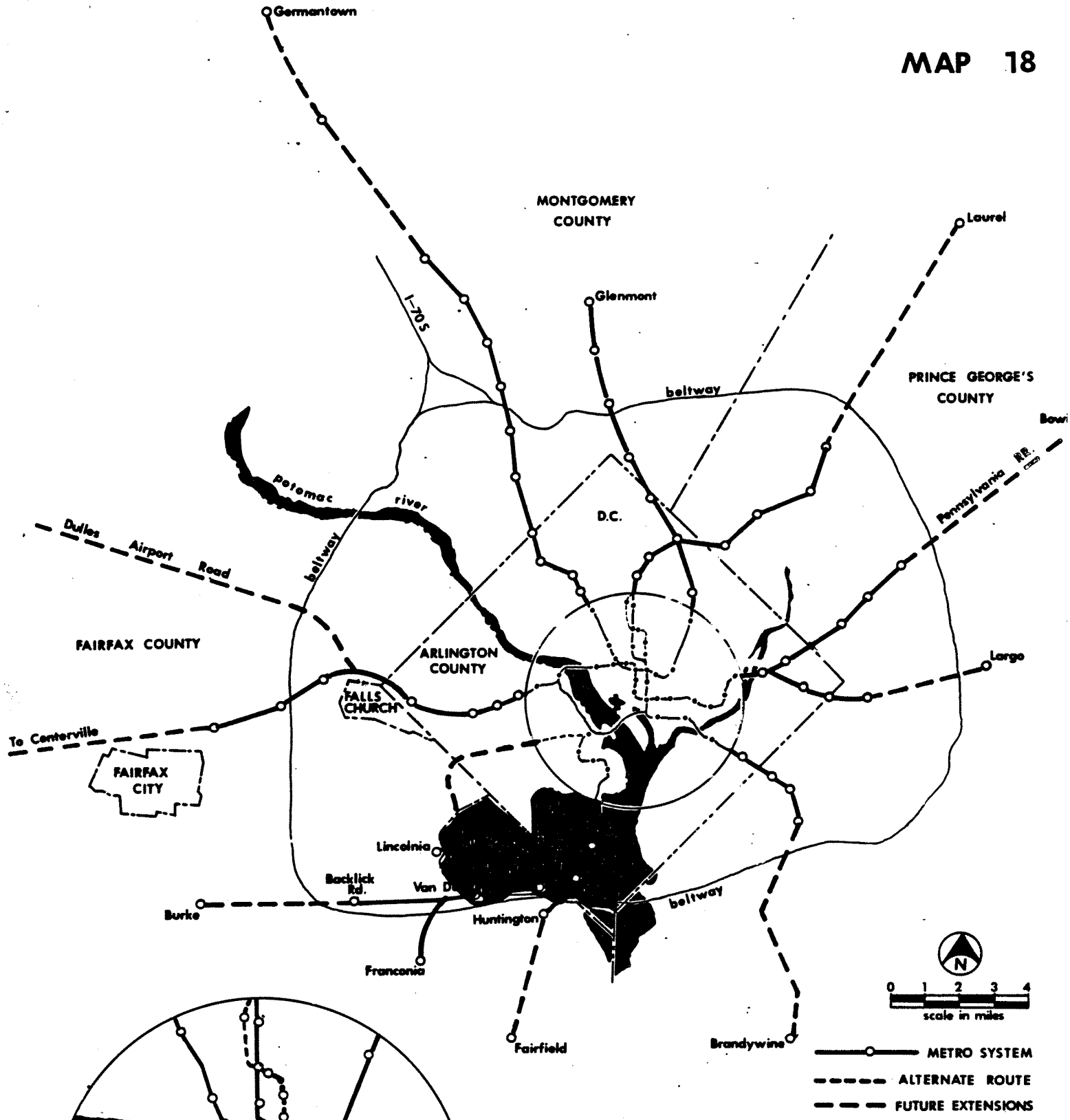
*SEE "Madison Street Metro Station" on page 38.



MAJOR THOROUGHFARE PLAN

MAP 20

MAP 18



M
metro

regional rapid rail transit system

Adopted March, 1968—Revised February, 1969

Authorized by Congress December, 1969

BUS SERVICE

Bus service provided by private transit companies is available throughout the Northern Virginia Region. For Alexandria, service is provided by the A.B. & W. Bus Company. It is expected that buses will be used in the future extensively for feeder service to rail rapid transit stations. In addition, the use of the reversible lanes along Shirley Highway exclusively for buses is presently being tested, as is the use of express buses from selected parking areas throughout the region.

HIGHWAY AND STREET SYSTEM

Alexandria's current comprehensive highway and street plan consists of a single map, the Major Thoroughfare Plan, and the map's explanatory text. As previously noted, this plan, upon adoption, becomes the official document which controls City land acquisition for highway purposes.

The preparation of a Major Thoroughfare Plan for a mature City such as Alexandria involves relatively few options, because the existing street pattern of this city is very permanent. Nevertheless, those decisions which are made in preparing a transportation plan are extremely important. The distinctions between major streets and residential streets are of great consequence and the introduction of new highways and rapid transit presents the opportunity for new transportation patterns to be substituted for the older ones.

Traffic Forecast

The continuous westward expansion of urban development in the Northern Virginia Region, coupled with the State's dynamic program of highway construction, has created traffic volumes in excess of previous expectations. This growth is exemplified by the fact that average daily traffic crossing the Loudoun and Prince William Counties boundaries with Fairfax County increased by nearly 200 percent between 1950 and 1960. During the same period, traffic volumes entering Alexandria and Arlington increased approximat 100 percent. Most of this is commuter traffic which has primarily a northeast-southeast orientation, with most persons travelling from some section of Northern Virginia to work in the District of Columbia. Traffic volumes recorded at the Potomac River bridges indicate an increase of over 80% during the past ten years. Gains were recorded on every bridge except the Memorial Bridge.

Based upon the Consolidated Master Plan's projected population and employment growth for the City and the metropolitan area, Alexandria's traffic flow will probably double within twenty years. The area of the City west of Quaker lane deserves the

greatest amount of attention because the projected large increases in population there will generate proportional increases in the labor force. Within twenty years, the labor force expected in Planning District III will be greater than the 37,800 persons which constituted the entire labor force in the City in 1960. A substantial percentage of this increase will commute north along the Shirley Highway Corridor to the District of Columbia and Arlington County. In 1960, 4,400 persons, or 60 percent of the labor force, in Planning District III commuted to employment centers north of the City. By 1990 this figure will increase to some 19,000 persons. Large intra-city commuter patterns are also anticipated by 1990. In 1960, only 1,750 persons living in Planning District III worked inside the City limits. Within twenty years it is expected that this figure will increase to over 12,000.

The distribution of work trips for Planning Districts I and II is not expected to change considerably from the existing commuter patterns. While these two areas represented some 70 percent of the City's commuters in 1960, they will represent only 45 percent of the commuters in 1990. Commuters from these areas will be primarily working in employment centers north of the City, therefore, the impact on commuter patterns of these Planning Districts will decrease in importance.

The projections for 1990 indicate that, although the recent trend in employment centers is away from the downtown area of the District, Alexandria and Fairfax commuters will still be travelling along the City's congested north-south highways. Most new employment centers will still be in "close-in" locations such as Rosslyn, Crystal City, Pentagon City, Ballston, and the proposed Potomac Center. Most of these employment centers are located north of the City limits. Downtown Washington will continue to be the major job center in the area, but its relative importance will decline as a result of significant increases in suburban jobs. By 1990, Alexandri can expect to have approximately 35,000 work trips per peak hour in one direction travelling through the City, and nearly 10,000 work trips travelling in the opposite direction.

Recent Highway Improvements in Alexandria

Before analyzing specific traffic forecasts and problems within the City, it is important to summarize recently completed and proposed major highway improvements within the City.

The widening of Route One along Patrick and Henry Streets from Bashford Lane to Franklin Street is one of the highway improvements that has been completed since the 1962 Major Thoroughfare Plan. Money has been appropriated by the City, State, and Federal governments for widening Route One from Bashford Lane to Bellefonte Avenue, including a new bridge over the Potomac Yards.

With the completion of the Route One improvements south of Bellefonte Avenue, the bottleneck north of this point will be further aggravated. As a third phase of this program, the City is considering widening the remaining portions of Route One from Bellefonte Avenue to the northern City line.

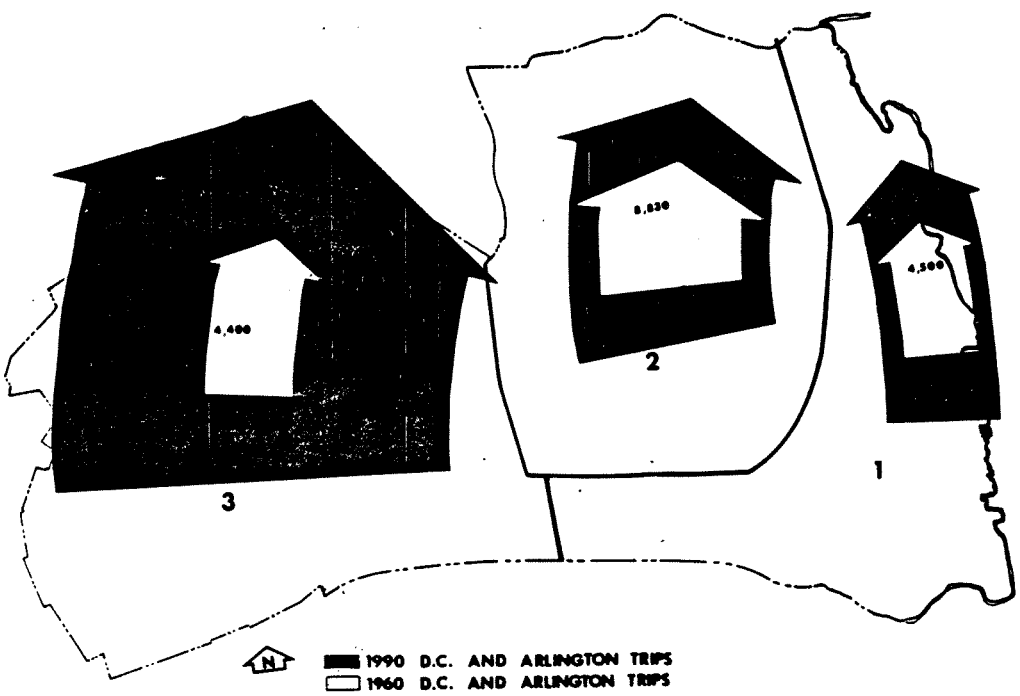
The Duke Street-Telegraph Road interchange was completed in 1967. Phase II of this construction involving the area from Roberts Lane to Diagonal Road is scheduled for future construction. This section is now carrying greater traffic volumes than it can move efficiently. In the future, traffic generated by the rail rapid transit station at Union Station will also be using these streets.

HIGHWAY ANALYSIS: NORTH-SOUTH DIRECTION

The City has been divided into three traffic corridors (Route One, Quaker Lane, and Shirley Highway) in order to examine the existing capacity of the major north-south streets and highways and compare them to the expected regional traffic volumes for year 1990. The Route One corridor is comprised of the major streets and highways east of Quaker Lane and contains Washington Street (George Washington Memorial Parkway), U. S. Route One, Commonwealth Avenue, and Mount Vernon Avenue. The Quaker Lane Corridor bisects the City. The Shirley Highway Corridor lies to the west of Quaker Lane and contains three major north-south highways: Van Dorn Street, Shirley Highway, and Beauregard Street.

For the purpose of measuring the existing capacity along these corridors and comparing it with projected traffic volumes, a cordon line was established at the Alexandria boundary with Arlington County. The cordon line is a specific location on the three corridors where the highway capacity of existing roads can be compared with anticipated traffic volumes. This line is then representative of the entire corridor and becomes the basis for analyzing future highway needs. Total 1960 and 1990 daily work trips are shown on the following illustration.

WORK TRIP DISTRIBUTION



REV. FEB.74 CHART 3

The capacity of each route in the three major corridors is shown on Table 11. In all cases, practical highway capacity was used. Practical capacity is the maximum number of vehicles that can pass a given point on a roadway during an hour without delay, hazard, or restriction to the driver's freedom to maneuver under prevailing roadway and traffic conditions. According to the U. S. Bureau of Public Roads, the practical capacity of limited access freeways is between 1,500 and 2,000 vehicles per lane per hour, with 1,500 vehicles per lane per hour being the figure generally used. The practical capacity of 1,000 vehicles per lane per hour can be expected on non-limited access highways where the volume of turning and cross traffic is sufficiently low so as not to require traffic signals. On non-limited access highways, where signals are required, a practical capacity of 500 to 750 vehicles per lane per hour can be achieved.

TRANSPORTATION NEEDS BY MAJOR CORRIDORS - TABLE 11
Existing and Committed Capacities as Compared With
Peak-Hour Volume in Direction of Heaviest Flow

Corridor One	Type	Lanes One Direction	Capacity per lane per hour	Peak-hr. total. cap. one direction	Projected 1990 peak-hr. volume	Est. 20-yr. Deficiency peak-hr. volume
Jeff. Davis Hwy.	Uncontrolled	2	750	1500	3000	-1500
G. W. Pkwy.	Limited access	2	1000	2000	4000	-2000
Mt. Vernon Avenue	Uncontrolled	1	500	500	1000	- 500
Common-wealth Ave.	Uncontrolled	0	---	---	2000	-2000
				4000	10000	-6000
Corridor Two						
Quaker Lr.	Uncontrolled	2	500	1000	2000	-1000
				1000	2000	-1000
Corridor Three						
Shirley Hwy.	Limited access	5*	1500	7500	8500	-1000
Van Dorn St.	Uncontrolled	2	750	1500	2000	- 500
Beauregard	Controlled	2	1000	2000	2000	---
				11000	12500	-1500
Total of Corridors				16000	24500	-7500

Route One Corridor

By 1990 approximately 10,000 automobiles are expected to cross the cordon line in the Route One Corridor during the morning or evening peak hour. Of these automobile trips, it is projected that 3,000 will be from Planning Districts I and II in Alexandria; 3,500 will be from the Mt. Vernon and Rose Hill Planning Districts in Fairfax County; and 3,500 will be commuting from Prince George's County, Maryland. Most of these commuters will be travelling to employment centers in Arlington and the District of Columbia and will travel on Alexandria's north-south highways.

A Virginia State Highway Department Study prepared by Hayes, Seay, Mattern and Mattern released in 1969 and entitled North Virginia Major Thoroughfare Plan proposed the following expressways through the City of Alexandria: Potomac Freeway paralleling the R. F. & P. R. R. on the east side from the southern city limits north through the City, Potomac River crossing paralleling the Woodrow Wilson bridge from Jones Point west connecting with the Potomac Freeway, Four Mile Run Expressway paralleling Four Mile Run from Shirlington Circle and I-95 east to the Potomac Freeway, Monticello Freeway located between N. Beauregard Street and the City limits generally parallel to N. Beauregard Street.

Quaker Lane Corridor

By 1990 approximately 2,000 automobiles are expected to cross the cordon line in the Quaker Lane Corridor during the two peak hour periods. It is estimated that much of this traffic will be generated from residential areas south of the City. The estimated peak hour capacity of this corridor is 1,000 vehicles per hour in each direction, leaving a deficiency of 1,000 vehicles per hour.

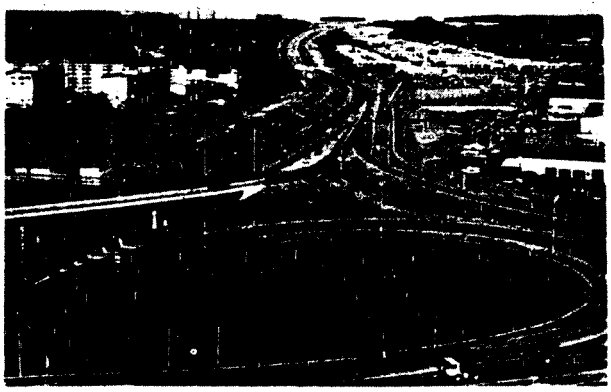
Shirley Highway Corridor

The 1990 peak hour traffic volumes expected along the Shirley Highway corridor are slightly more than the volumes projected for the Route One Corridor. In this corridor as in the other two corridors, much of the peak hour commuter traffic will be generated from outside the City limits. Of the estimated 12,500 automobiles projected during the morning and evening peak hours, 8,500 will come from residential sections in Fairfax and Prince William Counties and 4,000 will be generated from within Alexandria.

At present, Shirley Highway is being widened to eight lanes, three in each direction with two reversible lanes in the center. This will provide five lanes of limited-access highway in the direction of heaviest flow. In addition, the City has recently

completed the extension of Van Dorn Street from Seminary Road to King Street, and in the future, plans to widen Beauregard Street to six lanes from Morgan Street to its connection with Walter Reed Drive in Arlington County.

These improvements will provide for a 1990 highway capacity of 12,000 automobiles per hour; a deficiency of 1,500 compared to the projected volume. Future studies will be required along this corridor as we proceed toward the year 1990.



SHIRLEY HIGHWAY 5

HIGHWAY ANALYSIS: EAST-WEST DIRECTION

Previous highway studies for Alexandria were primarily concerned with commuter traffic in the north-south direction. Although this is still the area of greatest concern for the city, traffic volumes on other major highways are now increasing at the same rate and must be given consideration in plans to solve the City's overall transportation problems.

It was anticipated that the opening of the Capital Beltway would relieve traffic along Alexandria's east-west arterial streets, however, the effect of this circumferential highway has not been to improve traffic flow in Alexandria. It has only redistributed traffic volumes from other regional highways.

The Capital Beltway has been opened slightly more than five years and it is already experiencing over-crowded conditions as it passes south of the City. The volume of traffic crossing the Potomac River is already above the recommended capacity of the bridge. The Beltway interchanges at U. S. Route One.

Telegraph Road and Van Dorn Street are also near capacity. This is especially true of the Van Dorn Street interchange where heavy truck traffic slows down traffic flow during all periods of the day.

The study prepared for the State Highway Department previously mentioned on page 101 recommended improvements to relieve these problems. This study recommended a second river crossing in the vicinity of Jones Point to relieve the congestion along the Woodrow Wilson Bridge and a new expressway which would border the City at Four Mile Run and would travel north along the old W & OD Railroad alignment in Arlington County.

Traffic volumes on Duke Street approach its recommended capacity, at the point where Duke Street enters the City. Peak hour deficiency also occurs along the remaining portions, especially in sections where Duke Street has only four traffic lanes.

The City's new east-west arterial highway, Eisenhower Avenue, south of the Southern Railway, will relieve some congestion along Duke Street by handling much of the industrial traffic in the area. This highway is already planned, with the western portion recently completed. Because of the irregular boundary between the City and Fairfax County, close coordination between the two jurisdictions is absolutely necessary in planning this improvement.

At the point where King Street enters the City, the amount of traffic normally exceeds the recommended capacity of 1,500 vehicles per hour. At Seminary Road and the City limits, the volume of traffic has been calculated between 1,000-1,500 vehicles per hour during the peak hour periods. The capacity of this section of Seminary Road is similar to that of King Street. Both roadways are experiencing rapidly increasing traffic volumes due to the continued development of the area.

To summarize this analysis: capacities on north-south and east-west major thoroughfares are not expected to keep up with the potential or projected traffic growth.

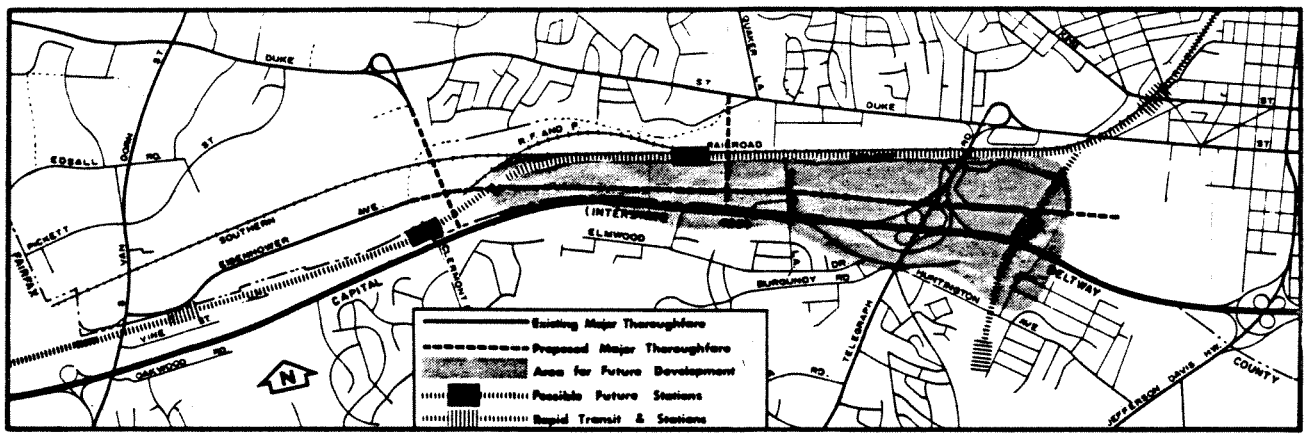
AREAS REQUIRING SPECIAL ATTENTION

There are certain sections in the City that will be directly affected by extensive public and private developments now under consideration. They could have a direct impact upon the City's transportation system. For this reason, these areas are being given special attention.

Beltway Study Area

The Beltway study area, a four mile long stretch bounded by the Southern Railway on the north, South Payne Street on the east, South Van Dorn Street on the west, and the Capital Beltway on the south is the area of greatest concern.

BELTWAY STUDY AREA : PROPOSED TRANSPORTATION IMPROVEMENTS



REV. FEB. 74 **MAP 19**

This section of the City has been slow to develop due to its low and marshy terrain, and the fact that Cameron Run meanders through the area and floods from time to time. The land to the west of Clermont Avenue has, in recent years, attracted new development, especially movers' warehouses and light industrial uses.

The City anticipates that several large tracts of land to the east of Telegraph Road will be developed for office uses. Such development usually generates greater numbers of employees than industrial uses. This will, therefore, generate greater traffic volumes than had been anticipated with heaviest volumes concentrated at peak hours.

Most of the land east of Clermont Avenue to Telegraph Road is almost "landlocked". Telegraph Road is the only access road to the Beltway and the only major street which connects this area with the streets north of the railroad. Quaker Lane extends through the area crossing several railroad tracks at grade, making it too dangerous to use. Clermont Avenue is connected to Fairfax County by a one-lane road under the R.F. & P. tracks and Linnean Street passes over the Beltway and connects to Elmwood Drive in Fairfax County, but these streets are not designed for major traffic. This situation is intensified by the fact that the capacity of the new Telegraph Road bridge is needed almost entirely to fulfill its function as an interchange on the Beltway. This lack of accessibility stems from previous City decisions which had anticipated open storage and other industrial uses on this low terrain.

The City plans to extend Eisenhower Avenue eastward from Clermont Avenue to the area just west of Holland Lane to provide access for office complexes and for new warehouses expected in the western section of the area. The Beltway will require another interchange to supplement the existing one at Telegraph Road and Route One and the interchange at Van Dorn Street will need improvement to handle the projected truck traffic. s for the east-west direction, the Beltway will require widening nless an alternative route could be constructed elsewhere to alleviate the Washington, D.C. commuter traffic problem.

Potomac Center

In the future, heavy traffic volumes can be expected in that section of the City north of Slaters Lane and bounded by the Potomac Yards and the George Washington Memorial Parkway. The extent of development on this site depends upon the accessibility available. At present, the only road that serves this industrial area is a narrow unpaved roadway that connects to Slaters Lane and runs parallel to the railroad tracks.

It has been recommended that the transit line be constructed along the east side of the R.F. & P. Railroad tracks with a future station in the vicinity of this site. In order to handle the large volume of traffic in this area however, additional access will be needed. Better connections to the City's local streets will be required to handle the traffic generated by this development and not served by the transit system.

The Dip Project

Presently the City is preparing plans for redevelopment of certain sections of Planning District one. The first phase of this plan is for that area referred to as the "DIP", bounded generally by Henry, Franklin, Washington and Duke Streets. A number of collector streets run through this area and it appears that the area will be

redeveloped as a neighborhood unit with through traffic and local traffic being separated. Because this area is still under study, no recommendations are being proposed.

North End of Waterfront

Presently the north end of the Waterfront is served only by local streets with right-of-way widths of 66 feet. The proposed Major Thoroughfare Plan indicates a primary collector street along Union Street north of King Street. This would connect directly to Route One and the George Washington Parkway.

The improvements recommended in the Plan probably will be adequate to handle expected traffic volumes if the waterfront develops in accordance with the 1967 adopted Waterfront Plan. If, however, the Waterfront is to develop with higher intensity uses, the proposed highway capacity in this area will probably be inadequate.

HIGHWAY AND STREET PLAN RECOMMENDATIONS

Expressways

The City's need for improving its present highway system is a direct result of the rapidly increasing volume of commuter traffic passing through Alexandria from south of the City limits to destinations north of the City. Traffic of this nature, which is characterized by large volumes at peak hours, primarily requires limited access type highways.

The 1962 Major Thoroughfare Plan indicated two limited access highways; Shirley Memorial Highway and the Capital Beltway. The possibility of additional expressways through the City has been mentioned in the 1969 Virginia Department of Highways Study, but this proposed comprehensive plan does not recommend any additional expressways at this time.

The proposals for added expressways exemplify the conflict between user objectives and community objectives mentioned earlier. Recognizing this conflict, the City cannot continue to accommodate increasing traffic volumes by the construction of more freeways. Construction of this magnitude disrupts the continuity of residential neighborhoods, displaces large segments of the society, and has an adverse effect on the environment. Alternative methods of meeting the increased need for transporting people from one location to another must be explored.

The rail rapid transit system is one of several alternatives which hopefully will demonstrate that there are other available and effective methods of moving people. Within the City of Alexandria, express bus service, mini-bus service to transit stops and perhaps fringe parking lots would be three ways to deal with projected traffic increases. It is imperative that the City play an active role in investigating and encouraging feasible alternative methods to freeways for meeting future transportation needs.

Because of the focal nature of the King Street intersections near the proposed rapid transit stations, a study was commissioned to consider ways of solving the traffic flow problems in that area. The study was prepared by the consulting traffic engineering firm of Hayes, Seay, Mattern and Mattern. That study assumed the previously proposed Potomac Freeway would be built and proposed connections with this freeway to accommodate north-south through traffic. Without construction of the freeway, the consultants recommendations would result in a road network which diverts heavy north-south through traffic onto existing residential streets.

The proposed comprehensive plan does not recommend that the Potomac Freeway be built. For this reason, this proposed plan does not endorse the recommendations of the consultant's report. Further study is recommended with the following objectives:

- Separating east-west from north-south commuter traffic;
- Facilitating north-south commuter traffic on a limited basis;
- Easing east-west traffic flow;
- Easing access to the future metro station from all parts of Alexandria
- Accommodating future development potential in that designated area;
- Deleting from consideration the facilitation of north-south commuter traffic through residential areas on streets such as Commonwealth Avenue and Russell Road.

- <u>Arterial Streets</u>

Arterial streets bring traffic to and from the expressway system and serve those major movements of traffic within the metropolitan area not served by expressways. They interconnect the principal traffic generators within the City, and handle large volumes of through traffic, differing from expressways in their right-of-way width, their design, and the amount of traffic they carry. Because they handle large volumes of traffic, arterial streets should be four to six lane divided highways, with some control of access.

In the future, the City's inter-city arterials will be required to meet new traffic demands because interstate highway construction will create large increases in traffic volume along major connecting highways. Intra-city arterials also will be required to meet demands created by increased population and employment facilities within the City.

In order to upgrade the City's arterial highways to meet the traffic demands expected by 1990, a number of improvements will be required, especially to those highways designed for intra-city travel. These improvements include: U.S. Route One, Cameron Station Interchange, and portions of Duke and King Streets.

- U. S. Route One

In order to handle the volume of traffic anticipated in the Route One corridor, the section of Route One north of the Monroe Avenue Bridge will require widening to six lanes. This is a necessary step to increase capacity and eliminate the bottleneck created by the six lanes of traffic south of the bridge and the fact that the City plans to construct a new overpass at Monroe Avenue which will provide for three lanes in each direction. Arlington County plans to widen Route One to eight lanes north of the Airport access ramp.

South of the bridge, the Route One alignment appears to be an attractive alternative for the proposed north-south expressway. With both public and private redevelopment expected along this roadway, a new two-way alignment, preferably depressed with grade separated intersections at designated locations and six lanes for traffic, is recommended to improve traffic flow and to protect the immediate environment.

- Commonwealth Avenue and Mt. Vernon Avenue

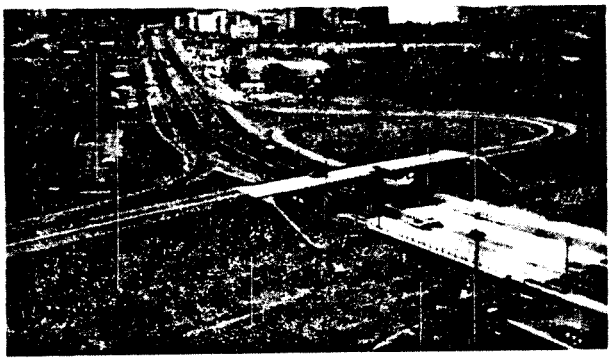
The recently completed improvements along Telegraph Road and the proposed construction along Callahan Drive and Diagonal Road have created possible additional north-south arterials to supplement Route One and the George Washington Memorial Parkway.

Proposals to increase traffic capacity along Commonwealth Avenue have been suggested periodically by several City departments, but are not recommended in the Plan. An alternative, however, is a Mt. Vernon Avenue alignment. This alignment would have the effect of encouraging redevelopment of at least one side of Mt. Vernon Avenue, while at the same time, protecting the character of the residential blocks on both sides of Commonwealth Avenue. Several problems must be dealt with before this alternative could become practical.

- Cameron Station Interchange

Before 1990, it will be necessary to increase access from the Capital Beltway. Since the State Highway Department requires a minimum distance of one mile between interchanges, the most beneficial location for additional access is in the vicinity of Clermont Avenue.

This location provides a direct access to Cameron Station and the anticipated employment centers in that location and also complies with the minimum distance requirement. A grade separated connection to Eisenhower Avenue should be provided.



CAMERON STATION INTERCHANGE 6

- Other Streets

In addition to the programmed improvement to Van Dorn Street and Beauregard Street, Duke Street and King Street will also require additional improvements. Widenings are already planned for certain segments of these roadways.

Collector Streets

The City Code defines a collector street as a feeder distributor or secondary street which serves the internal traffic movements within the City, draining traffic off local streets and leading it to arterial highways. Collectors can also function as connectors between two arterials, two collectors, or an arterial and collector.

Along with the adoption of the Major Thoroughfare Plan, it is recommended that Section 34-17 of the City Code be amended to include two classifications for collector streets, residential collectors and primary collectors, each having different right-of-way widths 66 and 80 feet respectively. Residential collectors serve basically as feeder streets for local traffic. Their function is to provide a means of access from residential areas to other collector streets or to arterial highways.

Collector streets of a non-residential character are located throughout the City in areas where commercial or industrial development is located, or in areas adjacent to sections of the arterial highway system. These streets called primary collectors differ from the residential collectors in their function in the traffic volumes they carry. These primary collectors function as connectors between two arterial highways, or between an arterial and a collector street. They are medium speed highways for through traffic or for internal traffic movement of a greater length than that designed for residential collectors. Their secondary function is to provide direct access to shopping areas and to serve as alternative routes for arterials.

It is difficult to construct collectors of optimum design standards in densely developed urban areas. For example, collector and local streets should meet at "T" intersections rather than cross each other; uses along collectors should discharge the traffic they generate onto local streets that feed collectors rather than directly onto collectors themselves; parking on collector streets should be discouraged unless sufficient width is available to accommodate four moving lanes at all times.

Most residential collectors are in the western and central section of the City. Those that are located in Planning District I pass through sections of predominantly residential use, some including buildings of architectural or historic merit. Streets of this nature are not recommended for widening; where particular problems associated with traffic movement exists, one-way pairings are suggested.

- Local Streets

A local street is defined in the Code as a minor street with the primary function of providing access to properties abutting the public right-of-way in a residential area. With the exception of the gridiron pattern in Planning District I, most local streets are not continuous connecting streets of the kind included in the Major Thoroughfare Plan system.

The alignment of most of the local streets in Planning District I was laid out about 150 years before the development of the automobile. Thus the gridiron street pattern creating short, narrow blocks encourages all forms of traffic to use the local streets at will. In order to discourage commuter, commercial and industrial traffic from using the local streets in Planning District I and to channel this traffic onto major thoroughfares, it is recommended that a one-way street system be implemented on certain local streets using criteria developed by the City's Traffic Department. This also should apply to similar street patterns in the Del Ray section

- Parkways

Parkways are presently defined as arterial highways for non-commercial traffic with full or partial control of access, and located within a park or a ribbon of park-like development. In addition to the amendment recommended to Section 34-17 of the City Code with respect to collector streets, it is also recommended that this section of the Code be amended to eliminate parkways from the Major Thoroughfare Plan. Parkways should be considered local streets, located within a park-like development.

MAJOR THOROUGHFARE PLAN

Since the adoption of the City's Major Thoroughfare Plan in 1962, the City has amended the Plan on four occasions. These amendments include:

1. The deletion from the collector system of Pickett Street between Duke Street and Holmes Run.

2. The deletion from the collector system of the connection of Dartmouth Road and Trinity Drive from Quaker Lane east to Taylor Run Parkway.

3. The deletion from the collector system of Union Street south of King Street.

4. The addition to the arterial system of a new alignment for Wheeler Avenue. The old Wheeler Avenue alignment was deleted from the collector system. The street name designation of Wheeler Avenue has been changed to Eisenhower Avenue.

1974 Major Thoroughfare Plan

The 1974 Major Thoroughfare Plan maintains the street designations of Planning District I as shown on the 1962 Major Thoroughfare Plan and adopts the street designations of Planning Districts II and III as recommended by the Planning Commission in its actions and transmittal report.

Recommended Amendments

The following list represents changes recommended to the Major Thoroughfare Plan:

Expressways

That portion of the expressway system, previously proposed along the Potomac Yards has been deleted from the Plan. It is recommended that this area be shown as a transportation study area rather than as a proposed expressway. No new expressways or river crossings should be constructed within the Alexandria City limits.

Arterials

Quantrell Avenue has been included in the arterial system. This arterial provides direct egress from Shirley Highway.

An arterial street in the vicinity of Clermont Avenue has been included in the system. Additional access from the Beltway is needed due to the growth potential of the adjacent areas.

Franklin Street between Patrick Street and Washington Street has been included in the arterial system and deleted from the collector system. This street is currently under study for possible improvements.

U.S. Route One between the old W.& O.D. Railroad bridge and Powhatan Street has been included in the arterial and deleted from the collector system. This is a part of a continuous north-south commuter route, and will not function unless built to arterial standards for its full length.

The Duke Street - Eisenhower Avenue connector east of Telegraph Road was deleted from the Plan.

The Commerce Street arterial designation between Duke and Prince Street was deleted from the Plan.

Collectors

Kenmore Avenue has been placed on the collector system. This street is an integral part of the interchange network at Shirley Highway and Seminary Road.

Sunset Drive has been placed on the collector system. This street is part of the King Street Transit Station Complex.

Van Dorn Street north of Duke Street has been included in the collector system and deleted from the arterial system. This portion of Van Dorn Street is not considered a through route, but is intended to be a collector street serving Seminary Valley and areas west of Shirley Highway.

Mount Vernon Avenue east of Commonwealth Avenue has been included in the collector system and deleted from the arterial system. Further study is needed before a determination is made on the location of a major north-south route through this area. In the interim Mt. Vernon Avenue should be designated as a collector street.

Commonwealth Avenue south of the Reed Avenue intersection has been included in the collector system and deleted from the arterial system. Commonwealth Avenue north of Reed Avenue was deleted from the Plan.

Braddock Road between Quaker Lane and Mt. Vernon Avenue has been included in the collector system and deleted from the arterial system. It is recommended that heavy traffic volumes be discouraged from this residential street.

King Street between Columbus Street and Royal Street was designated as a primary collector.

Pendleton Street between West Street and Washington Street was changed from an arterial street to a primary collector. Its future status as part of a one-way pair with another street is under further consideration.

Madison Street between Henry Street and Lee Street was added to the Collector Street System.

The portions of Sanger Avenue and Chambliss Street proposed to go through the Rolf Tract were deleted from the Plan.

Cameron Street and Prince Street west of Patrick Street were changed from arterial streets as shown on the 1962 Thoroughfare Plan to residential collectors.

Cameron Street and Prince Street between Patrick and St. Asaph Streets were designated collectors.

The Cameron Street and Prince Street collector designations between St. Asaph and Royal Streets and the Royal Street collector designation between Cameron Street and Prince Street were deleted from the Plan.

Cameron Street and Prince Street west of Partick Street has been included in the collector system and deleted from the arterial system. Cameron Street is part of a one way pair with Prince Street. Collector street standards will be adequate for expected traffic volumes.

Howard Street, between Seminary Road and North Jordan Street, was changed from a primary collector to a residential collector

Columbus Street between Powhatan Street and Franklin Street., St. Asaph Street between Franklin Street and First Street and First Street between Washington Street and St. Asaph Street were designated as residential collectors.

Madison Street between Lee Street and Henry Street was designated as a primary collector.

S. Union Street between Franklin Street and King Street was designated as a residential collector.

Franklin Street between Washington and South Union Street was designated as a primary collector.

South Pickett Street collector designation west of South Van Dorn Street was deleted from the Plan.

Map Notations

A notation was added to the Major Thoroughfare Plan Map to indicate that any future improvement to Union Street between King Street and Franklin Street, the pavement width from curb to curb will be limited to 44 feet.

A notation was added to the Major Thoroughfare Plan Map to indicate that Commonwealth Avenue shall not extend any further north than Four Mile Run and shall never be used as a highway leading to Arlington County

Note: An index of designated thoroughfares is provided in appendix item VIII.

- Intra-City Traffic

The importance of intra-city traffic relates to City identity as well as opportunities for shopping and driving to community meeting places. Several factors combine to place barriers on intra-city traffic. In Alexandria, these barriers include the R.F. & P. R.R. right-of-way, Shirley Highway, and certain troublesome intersections.

The City intends to increase the capacity of the R.F. & P. Railroad yard crossings, with improvements planned for three of the four crossings. A new bridge is proposed for Monroe Avenue, the underpass at King Street is recommended for widening, and the overpass at Duke Street is recommended for improvement with deceleration lane to serve left hand turning movements at Diagonal Road. Although the underpass at Braddock Road is narrow and has minimal overhead clearance this is not a trouble area and at present no improvements are scheduled.

Several intersections create bottlenecks to intra-city traffic causing major obstacles to smooth traffic flow to all sections of the City during all periods of the week. These present major problems in developing adequate solutions to intra-city travel. The Major Thoroughfare Plan Map indicates the intersections recommended for special study.

- Pedestrian Overpasses

Separated pedestrian ways have been recommended as additions to the transportation plan because of their importance in the

movement of people as the City becomes more developed. It is suggested that these be in theform of overpasses rather than underpasses in order to make them more open and easier to keep under surveillance.

Presently, there is one overpass existing in the City and one committed for construction. The existing pedestrian way crosses Shirley Highway at Seminary Road. It connects high density residential areas with neighborhood shopping and bus routes. The committed facility is recommended in conjunction with the improvements to the Monroe Avenue Bridge. It is needed to provide access to George Washington High School. Both facilities would separate pedestrian traffic from heavy traffic volumes.' A third overpass which will connect Parkfairfax to Shirlington is nearing completion. The need for pedestrian overpasses exists in various areas of the City; most locations relate to school crossings. The intersection of Beauregard Street and Sanger Avenue where children cross to Ramsay School and the section along U.S. Route 1 where children cross to Lee School are examples of this. In addition the intersection of Duke and Jordan Streets where a shopping center, a large garden apartment complex, a number of semi-detached houses, and a newly constructed City park exist also requires a separation between pedestrian and automobile traffic. Any improvements to either Commonwealth and Mount Vernon Avenues should include pedestrian overpasses. If Cora Kelly School remains at its present location and heavy traffic is routed along this section of Commonwealth Avenue an overpass serving the school should have high priority. Additional overpasses also will be needed at each transit station.

- <u>Parking in Old Town</u>

On-street parking will be allowed to continue in the Old and Historic District regardless of the street designation on the Major Thoroughfare Plan.

URBAN DESIGN

A modern city is many things. It is continuous traffic movement, and often traffic jams. It is houses, and often housing problems. It is shopping centers, used car lots, signs, noises, schools, churches, growing things, poles and wires, crowds, changing seasons and sidewalks. Basically, though, a city is the people it contains. It is a sum expression of what these people have been, what these people are and what these people seek. Many things are expressions of its people, but few tell as much as our cities. They are seldom the work of one generation. They are the accumulative work of many. More than anything, a city is its people .... all of them, and all of their institutions, **their ways of doing things.**

VIEW OF CITY FROM SOUTH 7

The objective of Urban Design is to offer ways to make a city more livable, to make it graceful socially and sensually (visually), to provide guidance of aesthetics, and to make the city dweller and its user conscious of its parts. It also means to stimulate variety in its parts. It means creating organized systems which can support great variety and change order with variety. It means appreciating the fine old parts of the city and finding ways to keep them; it means discerning the obsolete parts of the city and finding ways of fixing or replacing them; and it means understanding the future and preparing for the growth it brings.

Ecology

Geology

Alexandria lies in a distinct geological zone, the coastal plain, one of three that compose the Washington Metropolitan Region. The land in coastal plains is generally soft, not too steep and readily carved by water erosion; it is usually well drained with many stream systems underground. Alexandria's geology is the root of its physical form or topography.

Topography

Alexandria has a fairly flat plain area on the east - the locale of the original city - with a large central plateau in the center, rising to an elevation of +280 feet above sea level. In the western part of the City, Holmes Run has carved a broad and in some places deep gulley. A ribbon of steep terrain parallels the run along the side of the plateau.

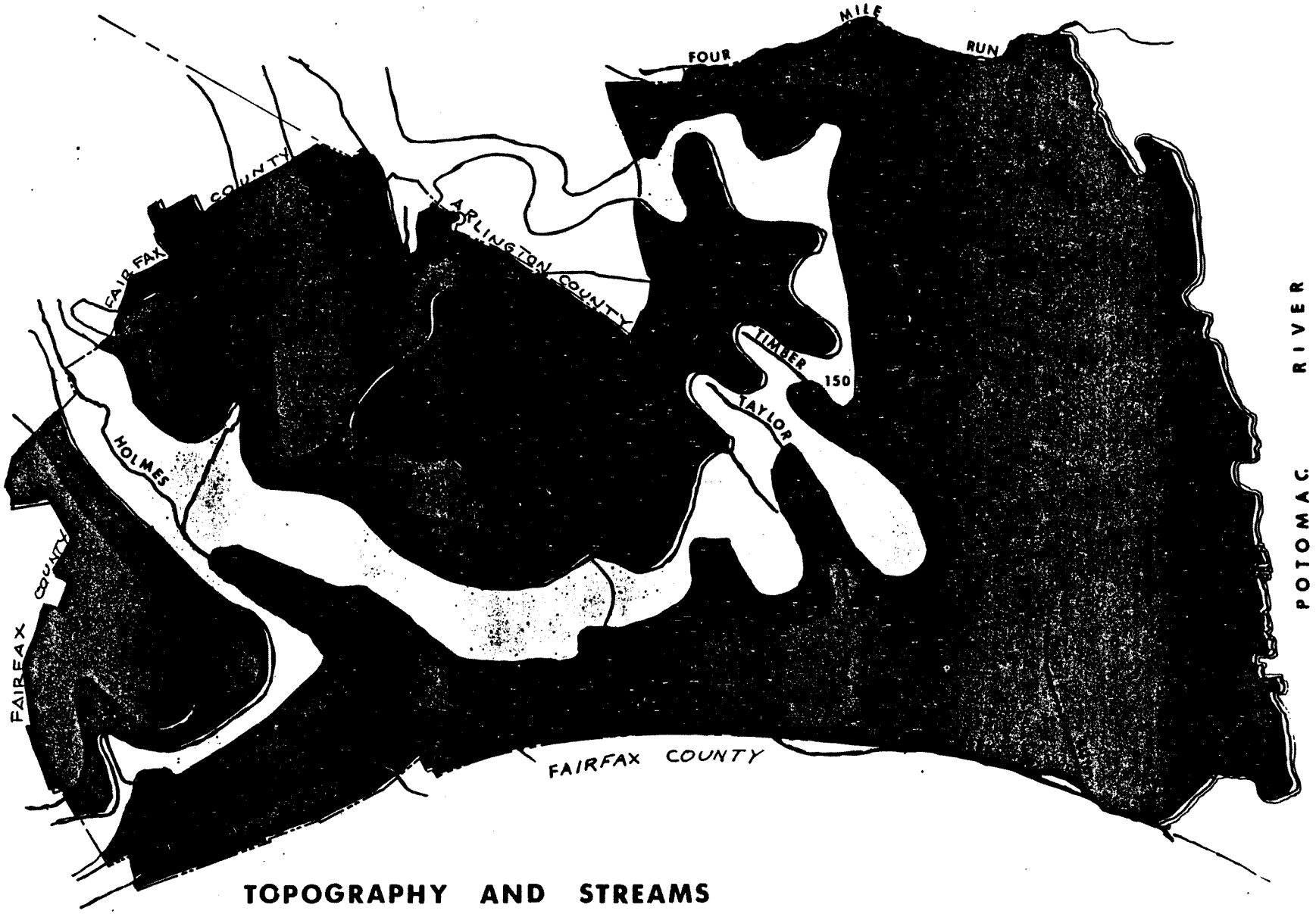
The landscape and its form are the basis of all city design. It is the foundation of the city. A landscape form that is projected, celebrated in a sense, by the form of the city that rests on it is a cornerstone of urban beauty and grace.

Streams

Alexandria's topography identifies its drainage patterns. The principal stream systems, Four Mile Run and Holmes Run, along with the Potomac River, define about half of the City's perimeter. The stream system gives a certain degree of identity to the City, particularly Holmes Run and Cameron Run. Taylor Run, Timber Branch and Hooff's Run, however, are less distinctive and Four Mile Run is mainly a drainage system. Surface run-off water may be so excessive and rapid so as to overload these streams thereby creating major drainage problems.

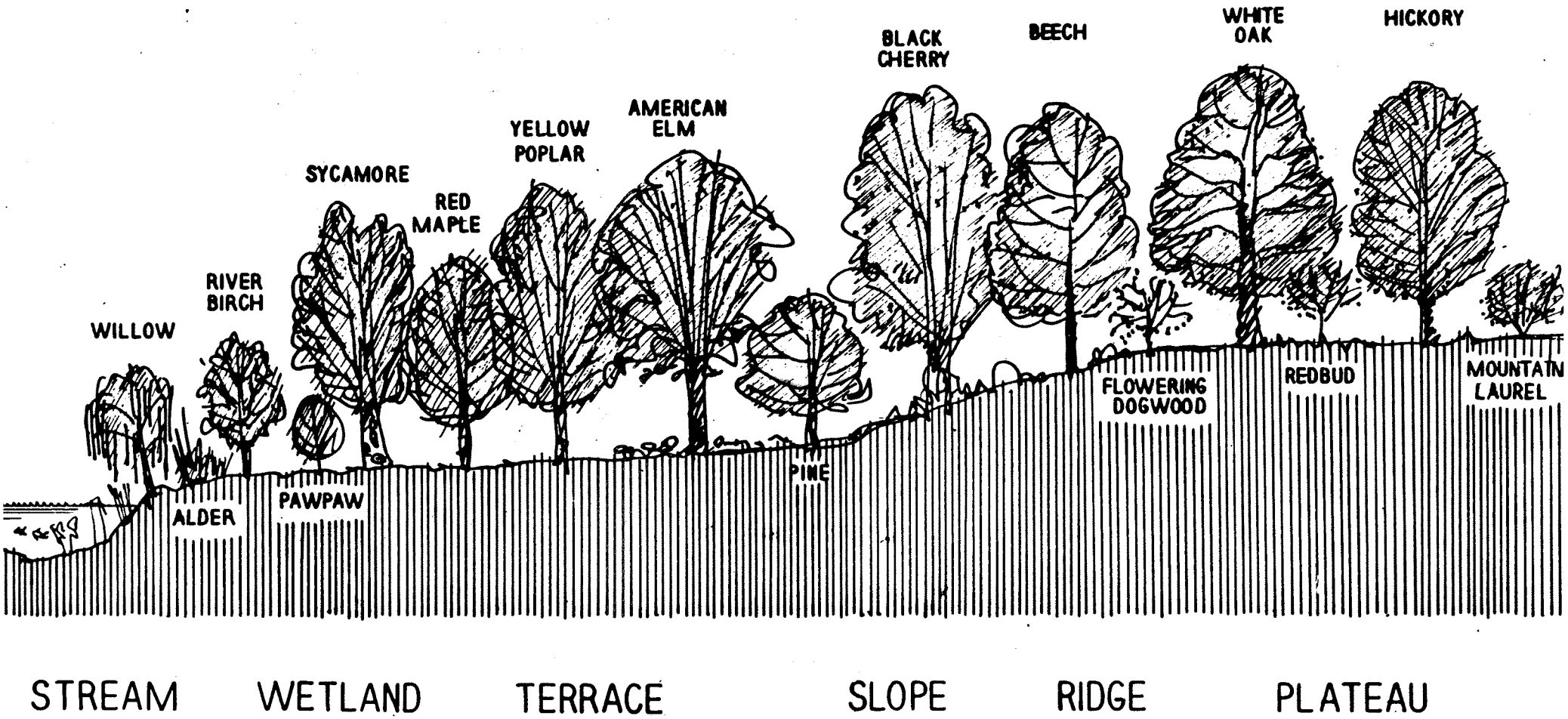
Vegetation

The City of Alexandria has a great variety of natural vegetation. There is a correspondence between tree type and terrain - sun exposure, moisture, soil type and slope. The sketch on page 119 illustrates the principal tree types found in this area from wet land to plateau.



TOPOGRAPHY AND STREAMS

MAP 21

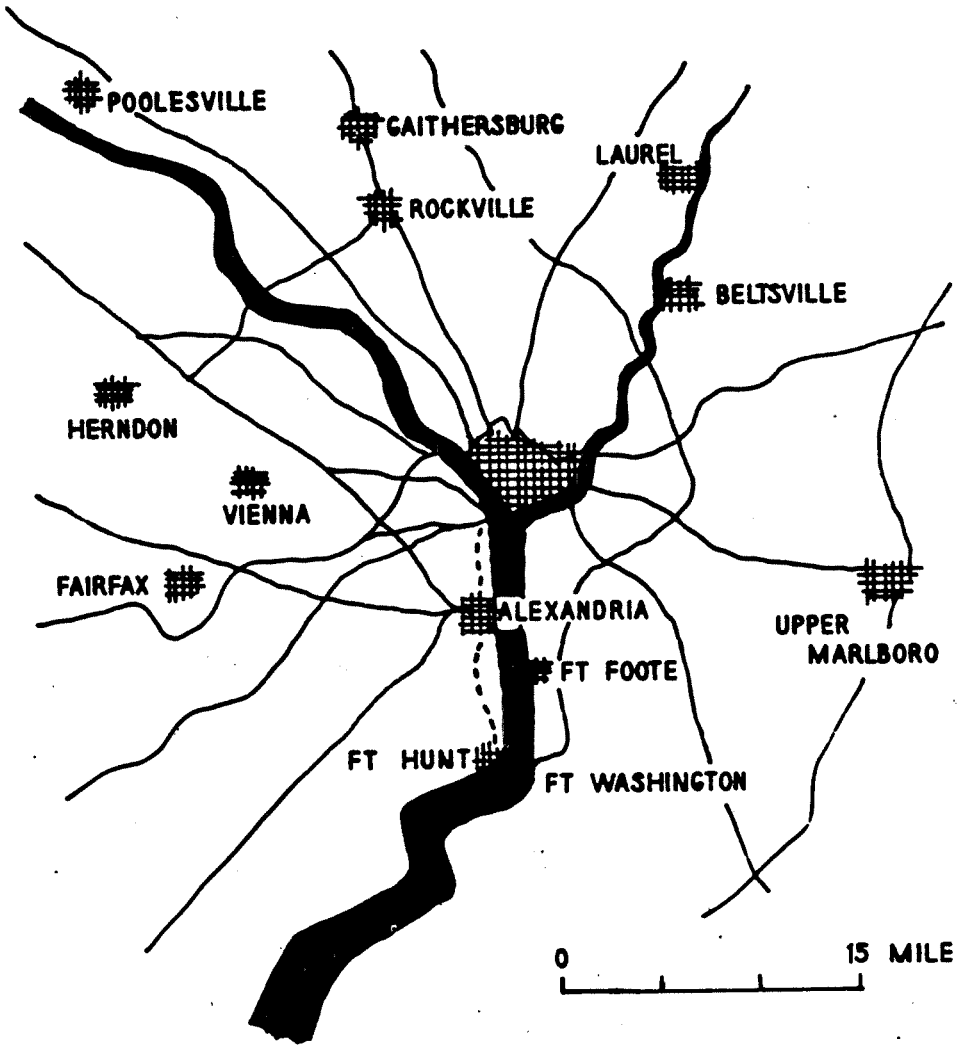


VEGETATION

CHART 4

Regional Setting and Evolution

Alexandria is one of several towns that developed near the fall line zone (area between the coastal plain and Piedmont Region) of the Potomac River. Like the earliest towns, its location was influenced by a combination of flat terrain, waterfront, and access to inland routes. Although it existed before Washington, D. C., it was early surpassed in size by it and Georgetown. It was, however, never overwhelmed by metropolitan growth and seems to have been located just far enough from Washington to retain its own identity but near enough to benefit from the larger city's economy. The relation between the two cities has had a real effect on Alexandria's urban form.



EARLY SETTLEMENT PATTERN
ALONG POTOMAC RIVER FALL LINE

MAP 22

Most cities have a characteristic way of growing outward or radially. Continuing this type of growth eventually causes severe congestion in town centers. At the same time growth occurs along the radial spokes at the edge of the city and it becomes logical to connect these new growth areas. A circumferential road or loop around the city evolves and creates the radiocentric city pattern, which looks like spokes and a wheel.

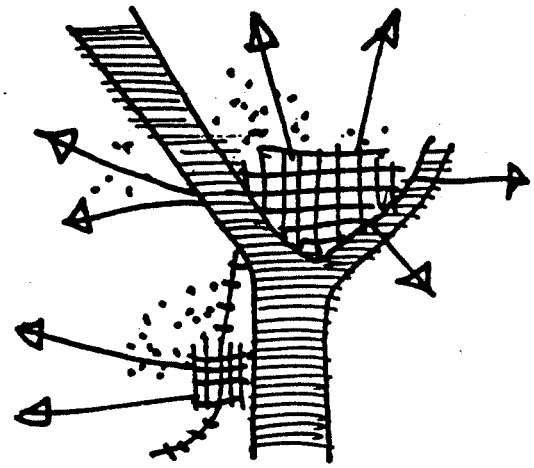
Alexandria, however, grew in one direction; inland or westward. The two main spokes were King and Duke Streets. The streams north and south of Alexandria acted as obstacles to expansion.

Washington, D. C. and Alexandria have a most interesting relationship, in the way that their radiocentric systems coincide. One of the first big radials from Washington to Alexandria was Route One. That was augmented by the George Washington Parkway, and somewhat later by the Shirley Highway. The Beltway is the major circumferential. These overall growth patterns are summarized in Chart 4.

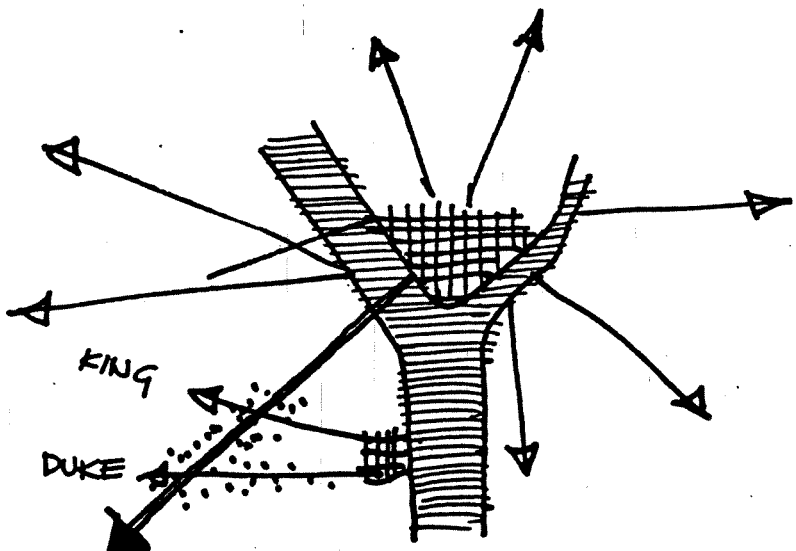
Alexandria also developed its own sub-system of radials (spokes) and circumferentials (wheels). The spokes were Duke, King, Braddock, and roads northward and southward. Quaker Lane was a very early but partial circumferential, connecting some of the radials, and Van Dorn was a later one. Shirley Highway is the major radial-connector, as well as a major radial in the larger metropolitan system.

All radials siphon off activity from the central city as well as affording access. King Street was developed for residence and community social uses (churches and schools). It has strong ties eastward to the city, and was protected by earlier and strong development near it. Duke Street on the other hand developed in response to external forces, largely the military activity of the region. It is a non-descript commercial strip, containing an early form of auto-oriented shopping. It is also part of an industrial corridor. At its intersection with Shirley Highway a modern shopping center, Landmark, has been built.

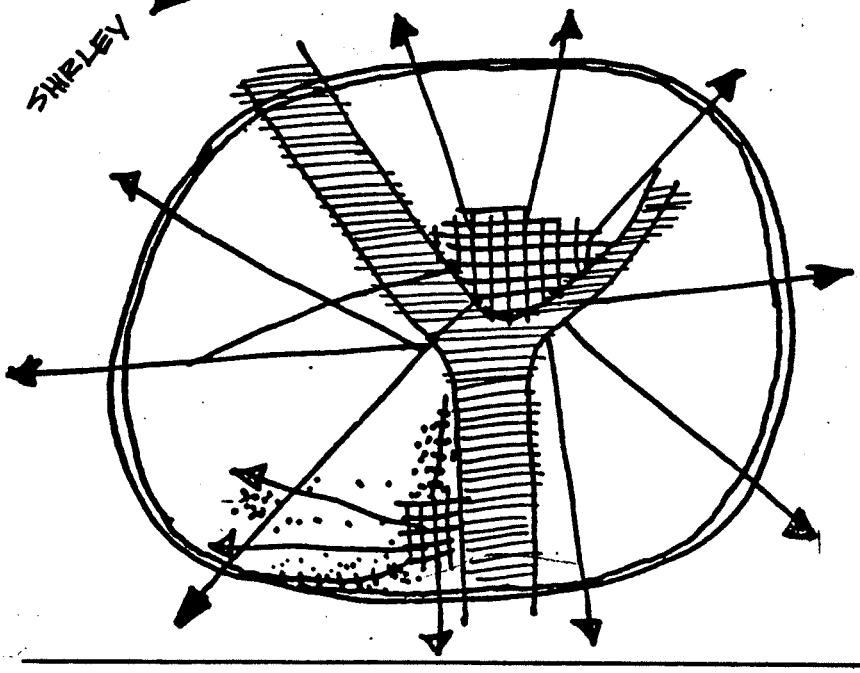
Urban evolution introduces a point of view that is vital in anticipating the future - that is to understand the forces at work in city growth. In Alexandria's colonial days a very limited urban technology and a very limited, but highly artful



Two cities founded and develop. One becomes dominant. Growth occurs outward along the radial routes of each. Alexandria's growth is spurred by railroad yard development. Prestigeous residential development occurs on high ground.



The radial routes of the larger town, Washington, are enlarged and extended. One of them, Shirley Highway, becomes a big spur to growth. Alexandria's two main radials, King and Duke, contribute to access. The futur beltway will increase access further. Highway building is obviously a major key to determi ing development patterns.



The beltway is built. Access to Alexandria is very high. A future rail rapid transit line will spur corridor development along the old rail lines. Few large land parcels are left. Growth will be by intensificatio and rebuilding. The next stage of building is one of refinement Better and more effective develo ment mechanisms will be needed. Coordination between public and private sectors, between bordering municipalities, and private entrepreneurs will be needed.

JOINT EVOLUTION OF ALEXANDRIA AND WASHINGTON

CHART 5

architectural vernacular resulted in a gem of American urban design, Old Town. When the Del Ray section was developed, there were also limitations, though the sense of artisanship had changed. In the Beverly Hills and Parkfairfax areas, a considerably larger urban technology was available and was used with great restraint and taste. Many contemporary efforts have accomplished less in suiting topography in scale and grace.

The real determinants of urban design are important to review. In early Alexandria it was a combination of skill, taste, and technological limitation and a certain grace prevailed. During the last decade, market pressure for large scale development coupled with a broader technology has produced the often poorly sited structures, including some highrise buildings.

The system encourages developers to build large scale, fairly homogeneous developments, with large concentrations of the same type of tenants. Such developments are the ones most prone to obsolescence because they are least able to withstand change of habit. The developer, planning for an investment span of five or ten years, doesn't have to worry about this, but the city does. The real issue is whether the present development system, including both private developers and public agencies, is adequate to take full advantage of Alexandria's development potential. This, more than anything, will determine Alexandria's future urban design.

COMPOSITE IMAGE

A city and its component parts are an intimate and complex combination of pieces. These pieces have size, shape, interrelationships, function and various qualities. The physical appearance of the various pieces is involved with views of them and from them. Their edges and finiteness are aspects to consider in continuing the design process of a city. To prepare for this future design the parts must be reviewed.

Alexandria's composite image is one of several parts. Its main image, or projected personality, is comprised of:

Districts
Natural Features
Circulation corridors or routes and portals
Landmarks
Vistas

Districts

There are four types of districts in Alexandria: Residential, shopping and community use, industrial, and institutional. (Map 23). Commercial and shopping areas are of two types, and both are in two forms. The two types are region-serving and local (Landmark in comparison with Mt. Vernon). The two forms are concentrated and linear (Landmark in comparison with Duke Street). The industrial areas or communities tend to be linear.

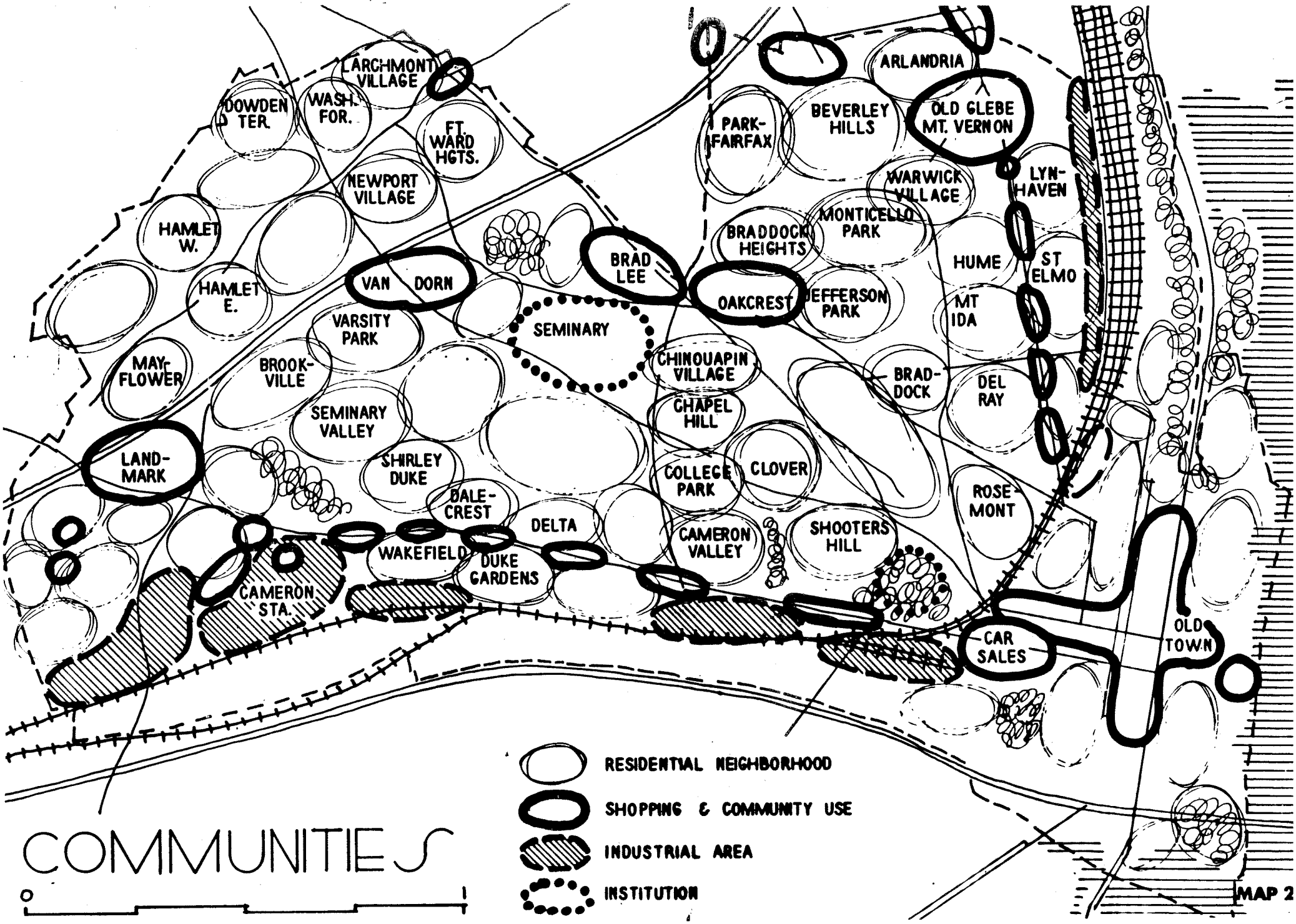
From a design standpoint, each district should have its own identifiable character; express the terrain where it is located; make use of the natural vegetation types; emphasize appropriate and sufficient landmarks; use existing vistas outwardly and inwardly; and should be a finite recognizable entity. These characteristics add up to a city that has variety and character -- variety within order. Urban design is, of course, not isolated from social content, but it is possible to study it as a distinct phenomenon. However, physical form and social content are inseparable. Urban design provides a firmer understanding of physical form so as to benefit the social life of the community.

Residential Communities

Residential communities should be finite in extent, imageable, with a range of internal variety, free from through traffic, and with access to other nearby areas.

Old Town

Old Town lying in flat terrain, on the river, is characterized by a grid street system and small-scale highly-crafted old buildings. The waterfront and several decay pockets suggest considerable opportunities for further development. There are several intrusions, including the typical facilities for automobile circulation. The area depends largely on cars, but should not be overpowered and ruled by them. A more subtle threat to the character of Old Town are imitations of historic architecture. To be sure modern architecture can be just as intrusive, but questions of facade style and detailing should not obscure the more telling factors of mass, scale, siting, profile and appearance of buildings as ensembles. The question of architectural appropriateness is a vast one, and basically is a responsibility of community consciousness and sensibility.


LARCHMONT VILLAGE
DOWDEN TER.
WASH. FOR.
FT. WARD HGTS.
NEWPORT VILLAGE
HAMLET W.
HAMLET E.
VAN DORN
VARSITY PARK
MAY-FLOWER
BROOK-VILLE
SEMINARY VALLEY
LAND-MARK
SHIRLEY DUKE
BALE-CREST
WAKEFIELD
DUKE GARDENS
CAMERON STA.
DELTA
SEMINARY
BRAD LEE
CHINOUAPIN VILLAGE
CHAPEL HILL
COLLEGE PARK
CLOVER
CAMERON VALLEY
SHOOTERS HILL
PARK-FAIRFAX
BEVERLEY HILLS
ARLANDRIA
OLD GLEBE MT. VERNON
WARWICK VILLAGE
LYN-HAVEN
MONTICELLO PARK
BRADDOCK HEIGHTS
HUME
ST ELMO
OAKCREST
JEFFERSON PARK
MT IDA
BRAD-DOCK
DEL RAY
ROSE-MONT
CAR SALES
OLD TOWN
RESIDENTIAL NEIGHBORHOOD
SHOPPING & COMMUNITY USE
INDUSTRIAL AREA
INSTITUTION
COMMUNITIES
0
1
MAP 2

Continuity, milieu, architectural ambience -- this in an urban or collective scale is what buildings create, and is the great merit of Old Town.

Other Residential Communities

The other identifiable communities include the Del Ray section, the Beverly Hills section, the several sections in the triangle between Shirley Highway, King and Duke, those west of Shirley Highway, and those south of Duke. Taken together they are a fascinating collection, their chief asset being their variety and proximity. The sound ones should be maintained, the weaker ones strengthened and the poor ones replaced or improved. All of them should be related or made accessible to each other and the town center.

Commercial Centers

Commercial centers should be accessible, clear in size and extent, varied and with ties to other nearby communities. Main commercial centers include: Old Town, Shirley-Duke, Landmark, Van Dorn, the auto-sales area, Bradlee-Oakcrest and the Glebe-Mt. Vernon complex. Each of these is quite unique, but all suffer from one or two shortcomings. They may have good auto access, but poor relations to their local communities. On the other hand, where they have important ties to their local communities they are severed by traffic roads. The through traffic roads bring a certain amount of shoppers by car, but also prevent the centers from functioning as community centers.

Duke Street is an example of "strip commercial." Strip commercial roads which are a typical urban component, are a serious problem. They are dangerous, have low traffic volume, and are unsightly. Perhaps most serious, they are a poor substitute for real social-commercial centers. The solution to this problem is long and difficult, and for Duke Street, probably lies in the redevelopment of the whole Cameron-Backlick Run area.

Industrial Areas

Industrial areas should not cause nuisance to non-residential areas, by noise, traffic generation, or air fouling.

The industrial corridor of Alexandria is clearly defined by the rail line. It is the southern edge of Alexandria along the beltway, and becomes a dividing strip between Old Town and Del Ray. The industrial corridor's great urban design advantage

is its future development potential and its clarity of form. With good design, this corridor can be a distinctly new urban component and, in many places, can constitute new social and functional ties for the city.

Institutional Areas

Institutional areas should be finite, and possess a special character. The main institutional enclaves are the Seminary Area and the Masonic Memorial. The Seminary is growing, and developing close physical ties to its immediate neighbors on Seminary Road and Quaker Lane. The upper perimeter of the Masonic grounds has a good relation to the surrounding houses, except the metal fence restrains pedestrian use of open space. Some low shrub landscaping around the car parking area would be helpful. Permeable gravel would be nicer to walk on, and could allow small trees to be planted in the parking lot. The parked cars would be kept cooler in the summer months when the visitor load is high.

Natural Features

The natural features of Alexandria are composed of the presence of the river; the two main stream systems and their branches; the valleys, slopes, hills and plateaus; and the natural vegetation. There is a clear correspondence between the quality of an area and the treatment of the original natural site.

Alexandria's biggest asset is its variety, in both natural terrain and man-made form. The terrain has been used well in many cases, but poorly in others. Generally, a more sensitive adaption to land form is found in older work than in more recent development. Greater understanding of terrain potentials is needed and the public should insist on proper use of the terrain.

The streams of Alexandria are another asset, but have been disregarded. They seem to have been treated as drainage problems rather than positive landscape assets. This can and should be corrected. Much could be gained from a city-wide stream park system.

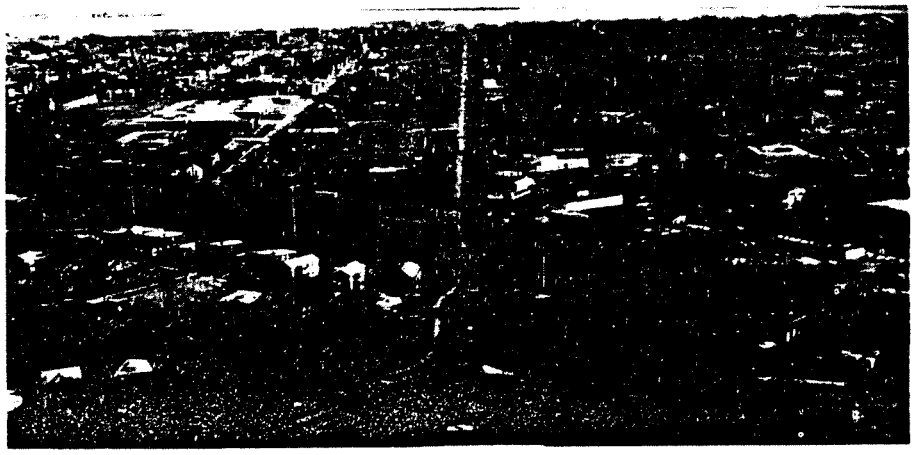
The City is endowed with a variety of trees, and there is a strong consciousness and appreciation of them. This should be supported and expanded into areas of the City needing tree programs. Trees can alleviate climate extremes, help convey the natural terrain attributes of a particular area, shade motorists eyes against glare, and can be used as form-giving design elements so as to characterize certain streets or places.

Although Alexandria does not have sufficient open spaces for play and recreation, there are several opportunities for major open space developments: Jones Point, Chinquapin and the Waterfront. Open spaces, however, need not be big. The basic open space of a city is its public sidewalks. Several opportunities for small open spaces exist such as the abandoned Old Dominion right-of-way.

OLD DOMINION RIGHT-OF-WAY
NORTH FROM HUME AVENUE 8

Circulation, Routes and Portals

A city has corridor and entrance doorways or portals. Alexandria's street system, on close study, clearly reveals the forces active in its various stages of development. Street patterns are one of the principal components of city form by which a city was envisioned. A pattern of Alexandria's routes and portals with arrows indicating the major entry points is shown on Map 25. The pattern is mainly a system of radials going to the center. All major routes should project a clear image of their location in the city and how they fit an overall pattern. That is not always the case; however, Alexandria's streets do seem to be quite successful in their sense of orientation. Most of the through-routes are fairly clear and reasonably well related, but some improvement is needed. A view of Alexandria from the Masonic Temple is shown in Photo 9. Washington Street seems to bear too much through traffic.



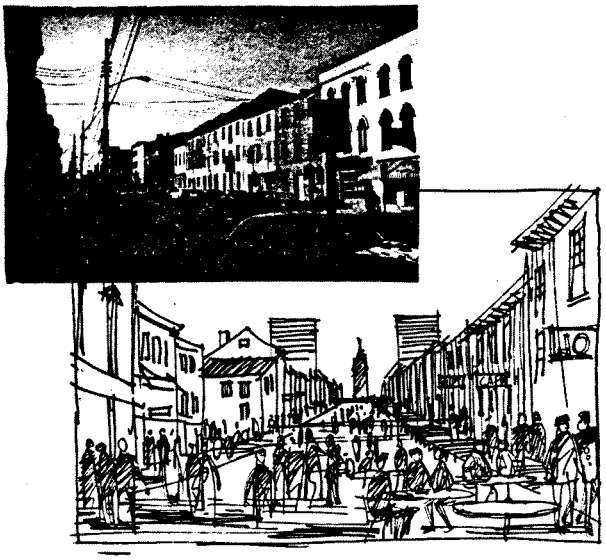
VIEW OF CITY FROM MASONIC MEMORIAL 9

Access to the Waterfront will require special roads, or existing streets will become congested. Duke Street is rather unkempt and should be regarded for long range modification, phasing out its present character. Patrick and Henry Streets with their volume of through and feeder traffic do severe damage to the neighborhoods they traverse. South Van Dorn is somewhat confusing, particularly in the area of Edsall Road.

King and Washington Streets - Two Main Axes

The two main intersecting streets that divide downtown Alexandria into four quarters forms one of its potential assets. This configuration of urban design is one of the oldest in history. A grid pattern gives a strong feeling of order and together with axial streets and urban plazas, is most serviceable for a city of Alexandria's size. It is urged that these streets be made more amenable to pedestrian circulation. They should have distinct entrance portals (places of beginning) and a strong feature at the main intersection to mark the center of downtown. Subsidiary axes and small plazas tied to these, should also be developed. Much of this depends on how traffic is handled. Downtown's future lies not in opening it to the ravages of traffic, but in maintaining a lower-key grace and repose. The businesses that further this climate will flourish here, mainly specialty stores and shops.

Portions of various streets should be made into pedestrian streets, on an experimental basis during specified periods, and should be shaded by low trees. Washington Street presently defers more to cars than people but could be made more agreeable to pedestrians, while still carrying much traffic. King Street east of South Peyton could be improved with sidewalks, trees, removal of overhead wires, relocation of signs and lights, and restoration of some of the older buildings. Washington Street could be changed to resemble Monument Avenue in Richmond with the addition of some visible landmark, either at the ends or somewhere along its length.



100 BLOCK KING STREET 10

Pedestrian circulation could stand some careful attention. Some positive steps have been made, but further improvement could help on King, Washington and other streets. Through-the-block pedestrian circulation is an excellent idea - as exemplified in Christ Church, the Old Presbyterian Meeting House, and the Tavern Square redevelopment. The size of the City Hall Plaza is appropriate in scale and is as large a civic plaza-space as Alexandria needs.

CITY HALL PLAZA 11

Portals

Knowledge or sensation of entering a city reinforces the sense of place so helpful to the sense of orientation. The function of clear portals into a city is to aid the unfamiliar visitor. The importance of clear and comprehensible routes is to aid the visitor and the resident in finding his or her way around more readily. This in turn aids traffic flow and the general operability of a city's parts. The criteria for evaluating portals are: quality of view; sequence of approach from afar, near, and upon entry; importance of where one arrives in town, and how it relates to the general street network; absence or presence of distracting clutter; gradual speed reduction keyed to arrival events; and signs and traffic controls.

Alexandria has approximately fourteen portals or entry points. To an approaching driver some of these are very clear as entry points. The Beltway approach to the future Duke-Beltway developments has great promise. The approach westward across the Wilson Bridge (E-1) is excellent because it affords a view of Alexandria's eastern profile. These are shown on Map 24.

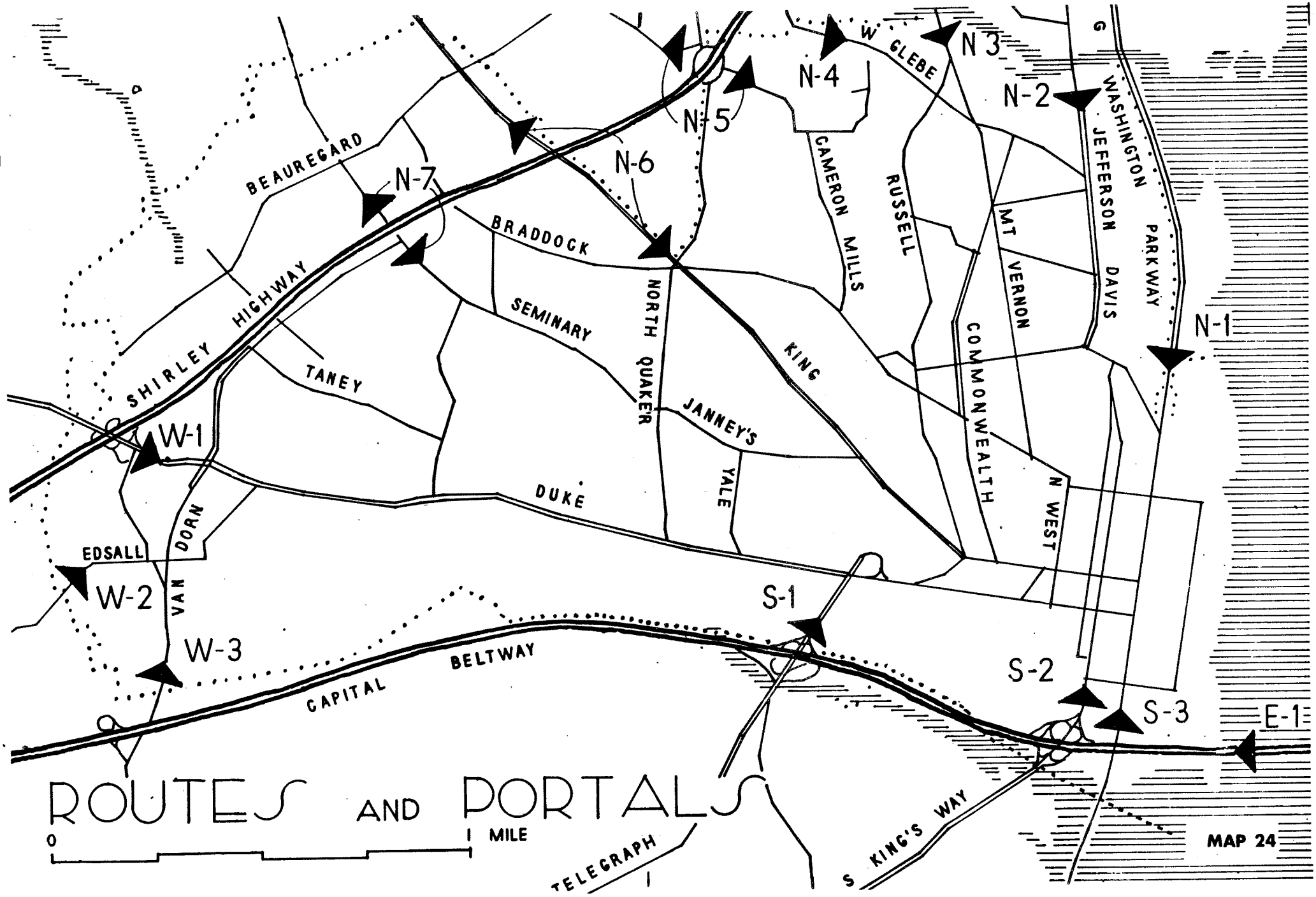
There are, however, some problem areas. The entrances into Alexandria along Shirley Highway, via Duke (W-1) Seminary (N-7), and King (N-5) give little indication of the fact that they are entries. Eastward along King Street, near Shirley Highway (N-5) there is little or no sense of being in Alexandria, and the skyline is cluttered with signs and signals. West Glebe (N-4) and Mt. Vernon (N-3) are quite chaotic. The Mount Vernon Avenue portal is relatively minor; it would be helpful to have a distinct entry portal here plus a stronger sense of crossing Four Mile Run. Glebe Road is quite minor vis-a-vis the whole city and could be handled like the Mt. Vernon Avenue portal.

Route 1 from the south (S-2) and Jefferson Davis from the north (N-2) are unsightly entries. The Route 1 or Jefferson Davis portal (N-2) is extremely poor. Four Mile Run, seldom observed, could keynote entry to Alexandria. The solution here will have to be part of a later overall development.

Washington Street (S-3 and N-1) is fine at both ends, but when the Parkway property ends, the sights of welcome (service facilities and signs) are very poor (photos 12 and 13).

GEORGE WASHINGTON PKWY.
APPROACHING ALEXANDRIA 12

GEORGE WASHINGTON PKWY.
VIEW OF MONTGOMERY ST. 13


ROUTES AND PORTALS
0
1 MILE
N-1
N-2
N 3
N-4
N-5
N-6
N-7
W-1
W-2
W-3
S-1
S-2
S-3
E-1
MAP 24
W GLEBE
G
WASHINGTON
JEFFERSON
DAVIS
PARKWAY
MT VERNON
RUSSELL
CAMERON MILLS
KING
COMMONWEALTH
N WEST
BRADDOCK
NORTH QUAKER
SEMINARY
JANNEY'S
YALE
DUKE
BEAUREGARD
SHIRLEY HIGHWAY
TANEY
EDSALL
VAN DORN
CAPITAL BELTWAY
TELEGRAPH
S KING'S WAY

Southwestward along Shirley Highway, near Shirlington, there is no visual landmark identifying Alexandria, and the signs are so numerous as to be confusing. Farther down Shirley Highway the profile of Landmark Shopping Center can be seen. It has a relatively distinct profile, but the bulk of nearby apartment buildings tend to overshadow and confuse it. If, however, two slender towers were added to the scene, the visual identity of the place would be much stronger. It is in this sort of situation that high-intensity building is visually and functionally appropriate.

Landscaping is a major element of design for the portals. Southward along Washington Street from the airport, some additional trees would enhance this already fine approach. A cooperative effort between the city and the businesses is necessary. Low hedges could be installed on both sides of the street, between vehicular lanes and sidewalks, as well as even rows of medium sized trees. Hedges could be used to screen parked cars. The tops of the hedges should be kept below the driver's eye level, so that he can see the business establishments between hedges and trees. The business owners should re-examine the design of their premises, particularly signs. A more distinguished and genteel entry to Alexandria would benefit their businesses.

An additional portal along the southern edge of the city - the approach along Telegraph Road (S-1) has a great future, when further development occurs here.

The western portals are Shirley/Duke intersection (W-1), Edsall Road (W-2) and Van Dorn Street (W-3). Entrance into Alexandria via these portals is hardly perceived. Orientation and sense of the city are difficult.

It is recommended that a special program of design for the City's portals be undertaken.

Duke Street and King Street need design attention to give them identity and to aid safety. Duke Street is often traversed with the early rising or late setting sun squarely in the eyes of a driver, which is dangerous. When King is traversed in the early morning or summer evening it has a similar problem. A tree planting program for these streets utilizing a distinct type or types of trees could give identity plus aid safety.

Landmarks

Prominent features of Alexandria, the various things people are likely to notice and remember, aid the sense of orientation. Landmarks include shopping centers, towers, churches, schools, open space, certain stores, types of architecture, types of characteristic areas, bridges and slopes. A survey of Alexandria's landmarks is shown on Map 25 .

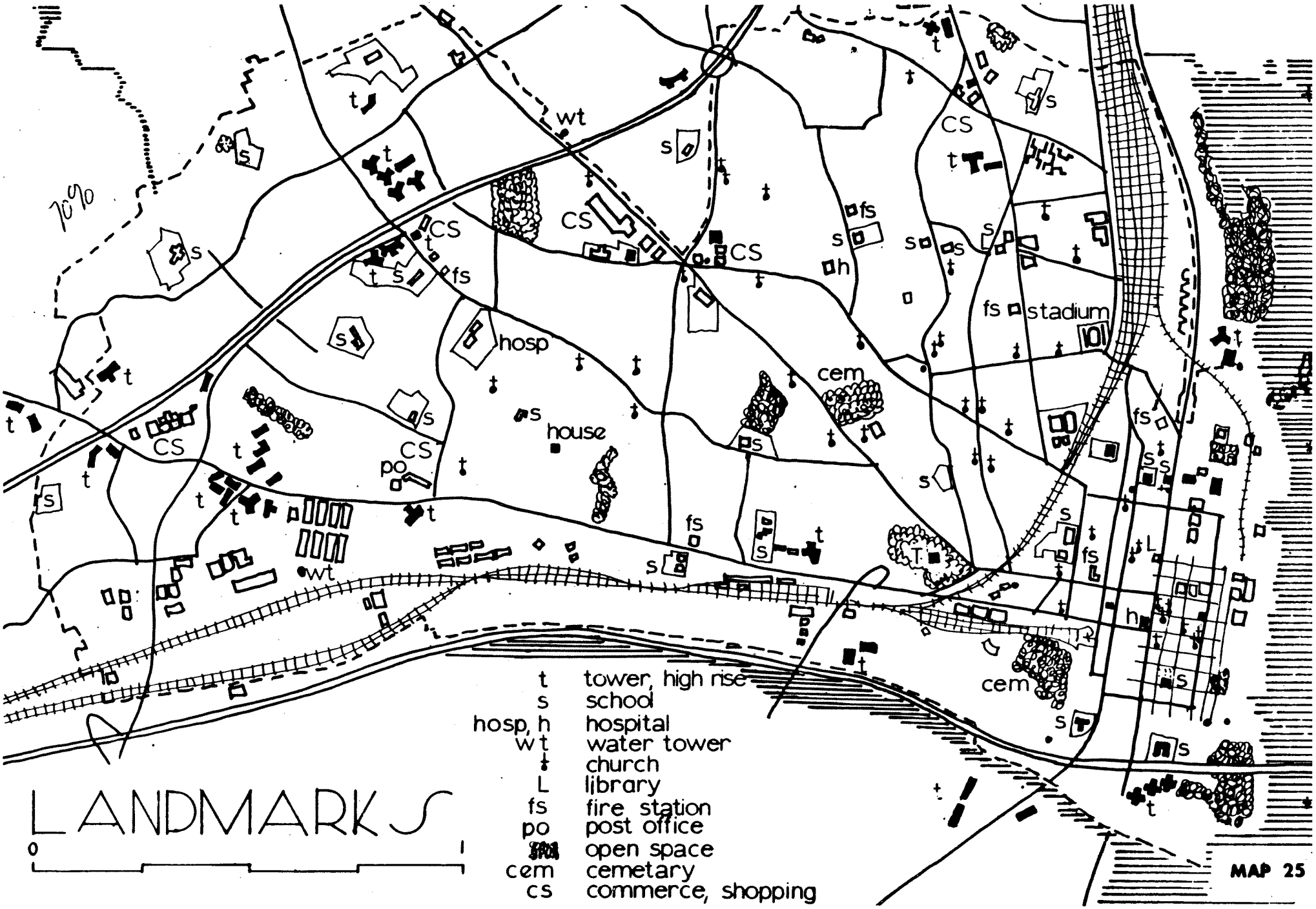
There seems to be a correspondence between the number and frequency of landmarks in a particular place and the sense of place. Landmark Shopping Center for example is an area with a high degree of identifiability which, however, could be strengthened by careful placement of tower forms.

Landmarks exist at various scales. At long viewing distances, such as one has of Alexandria coming across the Wilson Bridge, land-form or topography is important. Approaching Alexandria eastward along the Beltway, the valley and hills are important landmarks.

At closer scale the silhouette of large buildings or structural masses is important. This is true of the white stone office tower at Seminary Road as well as the large brick apartment group across Shirley Highway. The George Washington Memorial also is often seen as a silhouetted form.

At still closer scale the detail features of structures become important, such as the arch roof of the skating rink, the tower of Christ Church, the grey structure of the Federal Records Center, the Duncan Branch Library, the signs in the auto sales area, and the particulars of certain shopping centers. The old tower of the Virginia Theological Seminary is a very important landmark, although quite small in size for the visual role it plays.

VIRGINIA THEOLOGICAL SEMINARY 14



70%
wt
CS
hosp
house
po
cem
stadium
101
t tower, high rise
s school
hosp, h hospital
wt water tower
church
L library
fs fire station
po post office
open space
cem cemetary
cs commerce, shopping
LANDMARKS
0
1

MAP 25

Structures in prominent places, whether big or small, should be designed with a careful eye as to how they will look from important vantage points. They are their own best signs because they register firmly on the mind.

Large structures are landmark-features of the city, and lend clarity of form. Clarity of form enables greater variety and degree of development. The massing and form of landmarks are subjects of public responsibility, such as the future development in the Van Dorn-Shirley Highway area. Large building masses should not be allowed to be deployed helter-skelter on the landscape, but examined from the point of view of how they suit their natural city-scape setting. This aspect of design desires attention early in the process of development.

Night lighting of historic monuments and landmarks is recommended. Such features as the Masonic Memorial and the steeple of Christ Church, are examples of the kinds of landmarks that should be illuminated. A good illustration is the Virginia Theological Seminary tower which has been recently lighted.

There is also a great deal of unnecessary skyline clutter in Alexandria including odd assortments of poles, wires, signs and lamps which should be eliminated in part and carefully designed where necessary.

Vistas

Vistas are an important part of a city's character. One of the best vistas from Alexandria is the view of the Maryland shore along the Potomac River. All opportunities for seeing those vistas, from bluffs, or from east-west waterfront streets, should be exploited.

Another area is the southward vista of Fairfax County along the entire Cameron Valley. Fairfax County and Alexandria have responsibilities to each other in this matter.

An interesting accidental outward vista is the view of the Washington Monument as seen on the axis of Fayette Street. This view should never be blocked.

There are several important inward vistas of Alexandria which should be controlled. First is the profile of Alexandria from the Potomac River. Second is the entire Cameron Valley side of Alexandria, which will be much altered by future developments on the valley axis. Third is the Shirley Highway corridor, a major system, particularly between Seminary Road and Landmark. Future developments at Van Dorn and Landmark should strengthen the identity of this vista interval. Fourth is the Holmes Run Valley, which is rather dismaying; a vast sea of house-tops gives one the sense of a barracks rather than residential neighborhoods having individuality and scale. Future changes in this area should try to break up this sense of uniformity.

Urban Design Aspects of Land Use

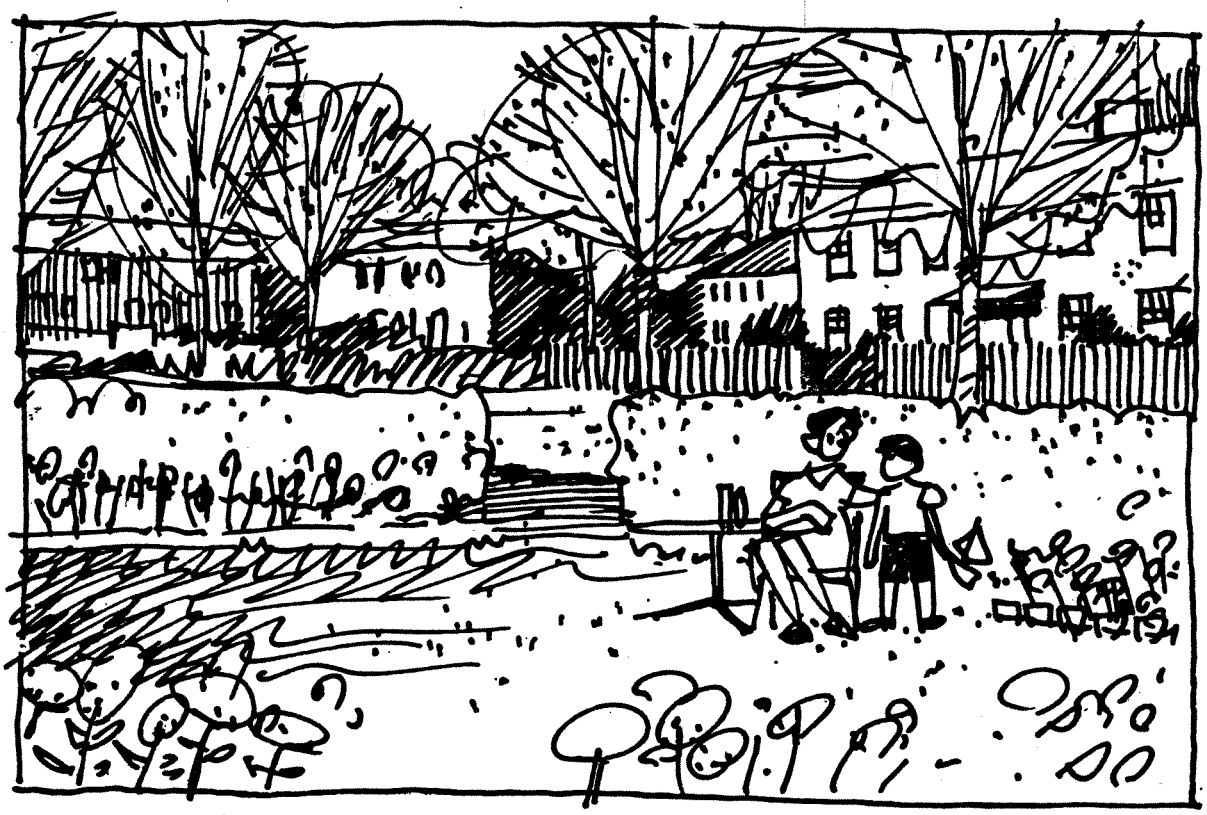
Residential Neighborhoods

One of Alexandria's greatest assets is the number and variety of its neighborhoods. There are many physical qualities that constitute a healthful and amenable neighborhood: physical size and comprehensibility, freedom from inharmonious land uses, clean air and quiet. Many of these qualities are derived from original site planning.

Today's site planning is largely regulated by road design specifications, but these pay more attention to moving cars than to accommodating people and their dwellings. Alexandria should re-examine its site planning standards in order to achieve the following qualities: intimacy of scale, relation of buildings and building groupings to land form, use of natural greenery, service roads that prevent excess speed and through traffic, and orientation for sunlight and breezes. The City has observed many of these principles in its existing neighborhoods but further improvements or corrections could be made such as street realignment, better handling of parking, planting, and creation of private exterior garden spaces. Reducing asphalt will reduce the speed and amount of surface drainage water. Streams are more able to carry reduced loads, erosion is reduced, stream silting is reduced, summer heat build-up is lessened.

Lower-income neighborhoods might also benefit from some careful site refinement. These neighborhoods should be studied to see if some streets could be closed to traffic, thus giving the people more open space. For example, the photograph on the next page shows one of the courts in the public housing group to the north of Old Town, and the sketch shows the same area with small private gardens in front of each house, these opening onto the common open space.

PUBLIC HOUSING COURTYARD 15

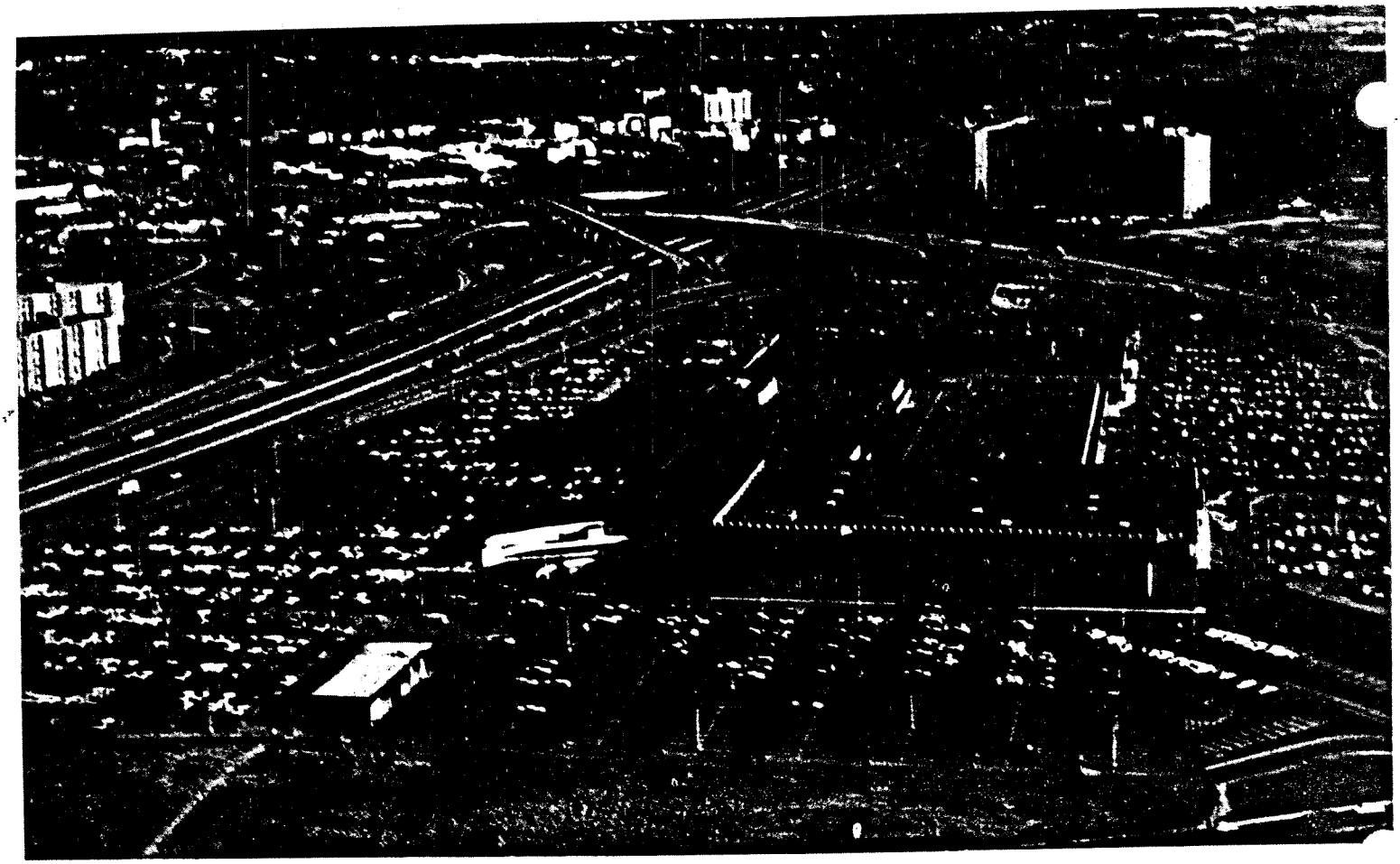


Commercial Districts

Alexandria has considerable variety in its commercial districts, ranging from regional shopping centers to local neighborhood shopping areas. American shopping centers are one of our most original urban forms. Shopping centers should support a great variety of activities and should be integrated with their surroundings.

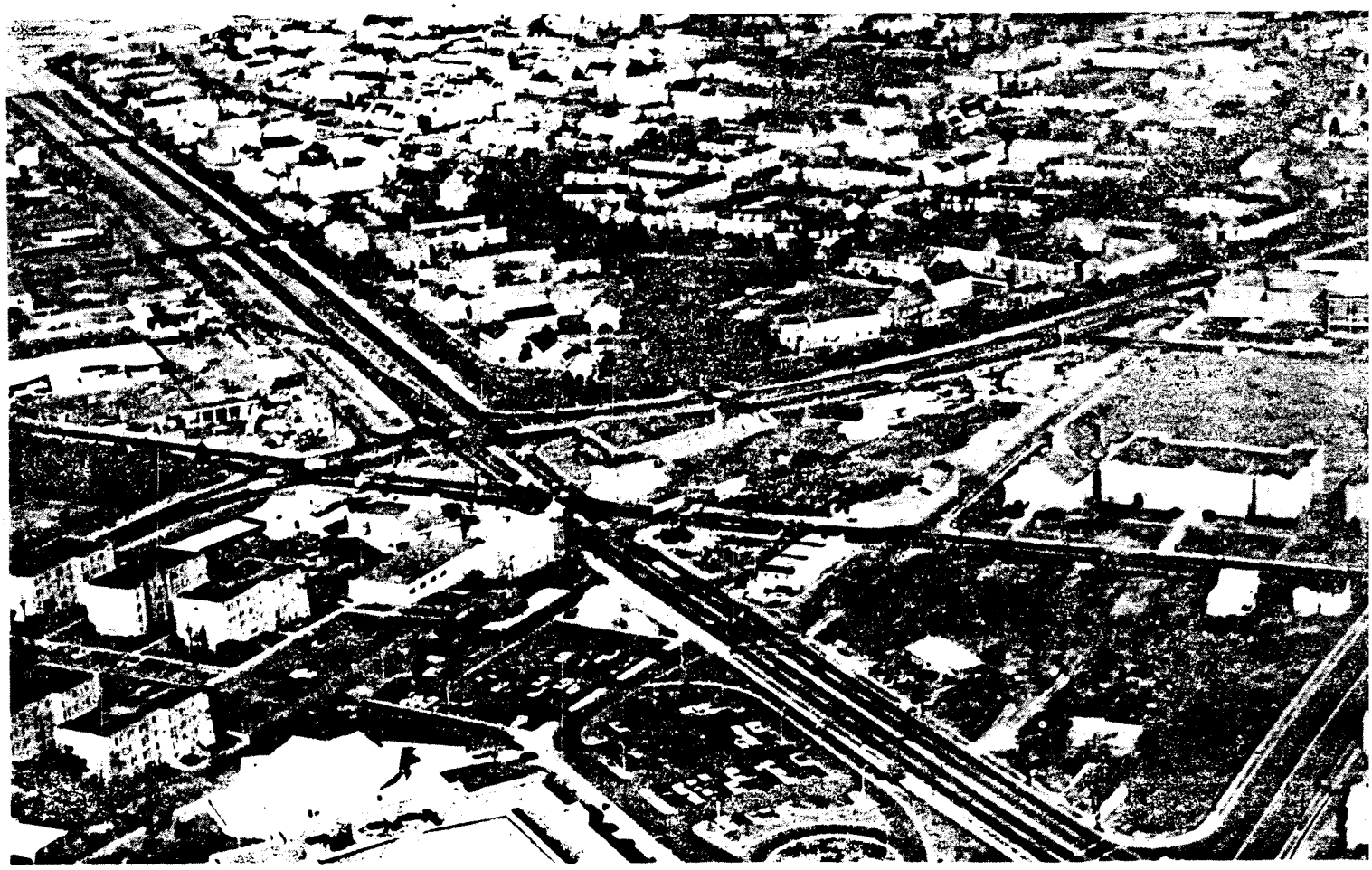
Regional shopping centers should function as urban "subcenters," or "miniature downtowns" for social, commercial, and cultural activities. They also should be related by foot access to surrounding developments and contain or be physically related to churches, schools, libraries, medical centers, movies, theaters, parks and highrise residences and hotels.

For example, the Landmark Regional Shopping Center, shown in the following photograph, could become a new town subcenter by adding highrise residences, and by creating some pedestrian connections to peripheral residential development. A deck could be built over the large parking area, containing more parking, shops, and noncommercial cultural facilities.



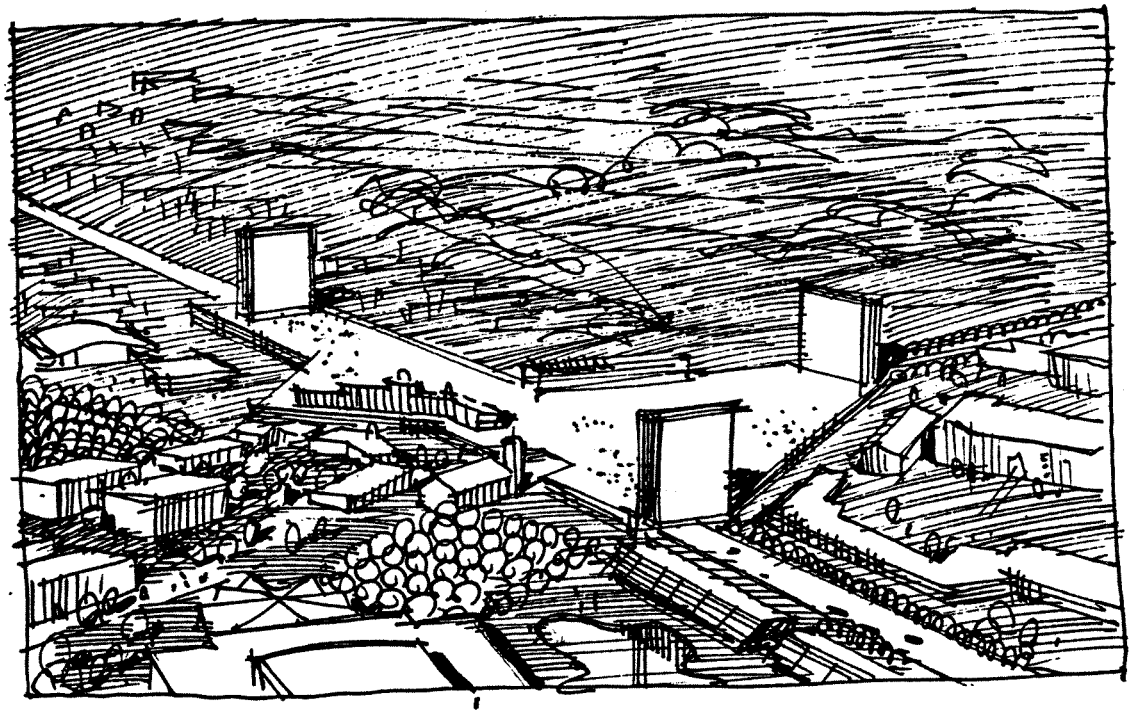
LANDMARK SHOPPING CENTER 16

A local neighborhood shopping area is represented by Bradlee and Oakcrest, at the intersection of King Street and Quaker Lane shown in the following photograph. This center is a series of disconnected pieces, and is bisected by traffic routes. The area contains schools, churches, shops, offices and restaurants, each functioning independently while at the same time being geographically interrelated.



INTERSECTION OF KING, BRADDOCK AND QUAKER LANE 17

Creating a pedestrian plaza above the highway would create an opportunity to add many more public facilities, thus creating an environment for pedestrians, and transforming the whole area into a social and cultural as well as a commercial focus. This is shown conceptually on the following sketch.

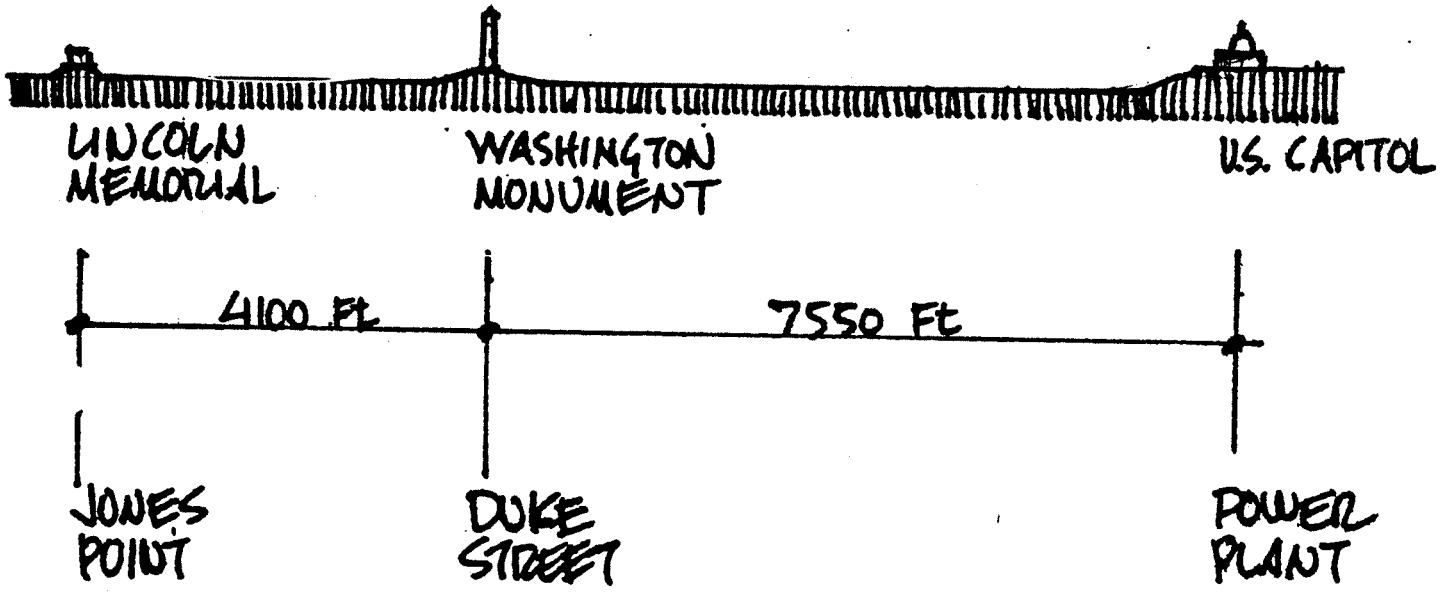


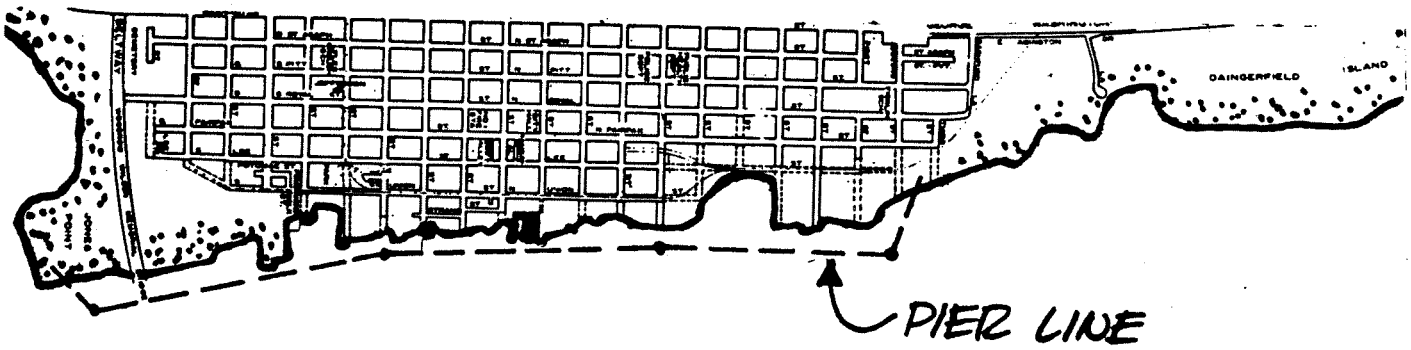
An alternative solution is to construct an upper deck for parking, with shops below. Small light courts could provide daylight for the shops and more cars could be parked more efficiently on the deck.

The hope for small shops on streets like Mt. Vernon Avenue lies in their ability to provide service facilities for the neighboring area. Part of the problem is through traffic; if such traffic were diverted, the street would provide better pedestrian access to the commercial facilities improving the position of the shops. For example, Mt. Vernon Avenue with some consolidation could become more of a local neighborhood shopping street, with ready access for pedestrians while maintaining its current linear form.

Alexandria's Waterfront

Alexandria's waterfront has great potential. Unlike many waterfronts, connections with the areas immediately behind it are very strong. Due to the slight rise in topography, the river is visible from almost every east-west street. This view should never be cut off. The distance from Daingerfield Island to Jones Point is over two miles which allows room for all types of development. The length of the waterfront approximates the distance of the Washington Mall, from the U. S. Capitol to the Lincoln Memorial.





NOTE POINTS OF BENDING OF PIER LINE AT DUKE AND ORONOCO STREETS

ALEXANDRIA'S WATERFRONT

MAP 26

Before the full potentials of the waterfront can be realized, the City and private land owners will have to find some way of combining their resources on a mutually cooperative basis. A great deal of coordination will be needed. Among the areas of mutual concern are the following: a traffic handling system, a continuous pedestrian promenade, development intensity, connections between private developments, relations between new development and the existing neighborhoods behind them, and the appearance, bulk, profile, spaces, scale, etc. of new developments in relation to old.

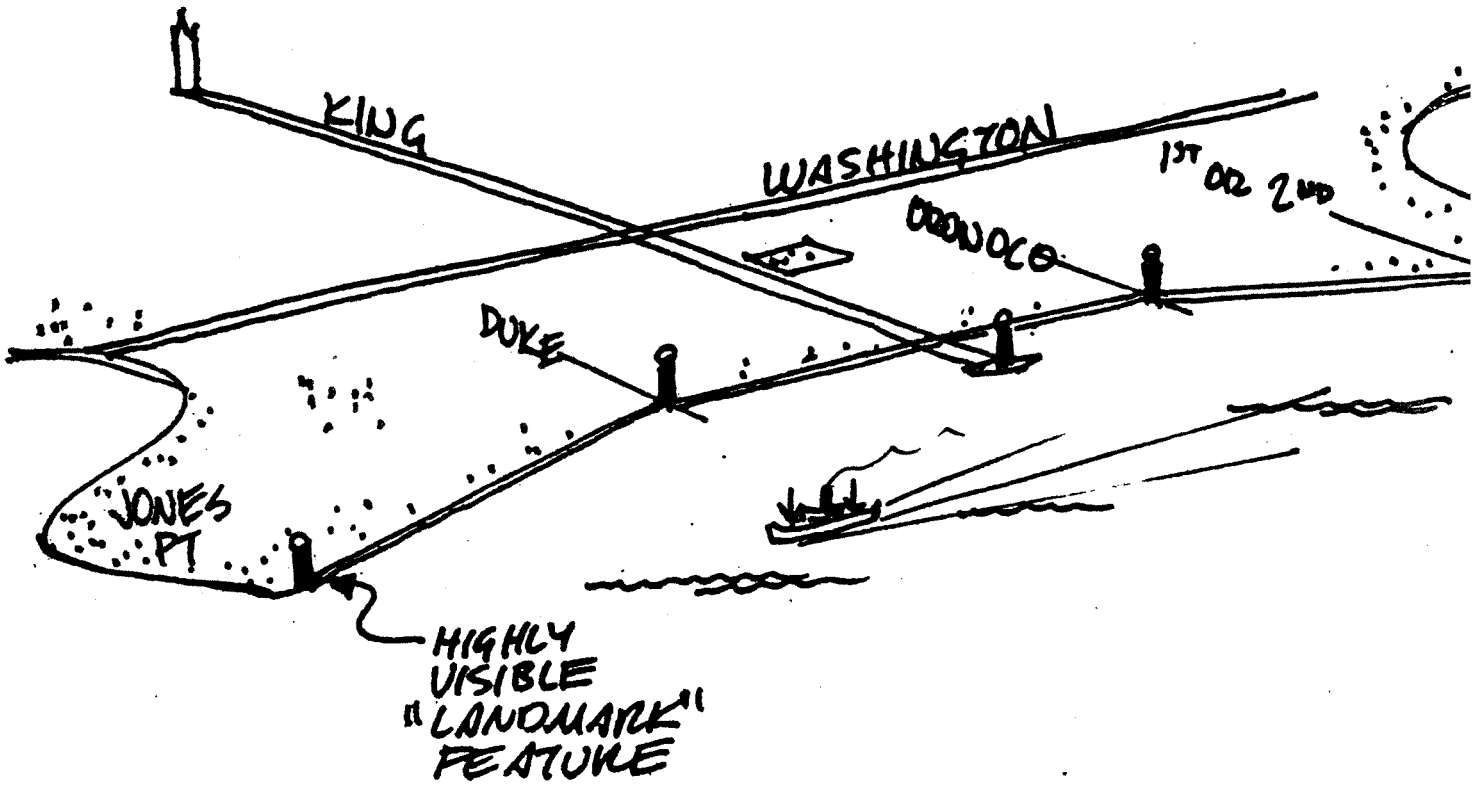
The question of the scale and intensity of development along the waterfront is intimately tied to the magnitude of the traffic it will generate. High intensity development of the waterfront will result in considerable traffic flow. Because the waterfront does not presently accommodate through traffic, some innovation is necessary. This would suggest a waterfront highway, which is highly undesirable. The next alternative is more subtle, but equally undesirable, namely, the overloading of the east-west streets near the waterfront, impairing their residential character. Some provision for service access, however, must be provided. Two major parking interceptors at the extreme ends of the waterfront in connection with a special type of transportation device should be installed to convey people quickly and pleasantly along the extent of the waterfront. This could be an antique restored trolley, a special kind of bus, or a monorail. This type of facility would provide both novelty and convenience.

A continuous pedestrian promenade is vital to complete the waterfront circulation system. People will leave their cars and walk where walking is a pleasure. The promenade can vary in size, but must be continuous and connect to east-west streets. It can pass through buildings, behind them, and go up and down. The pedestrian promenade should be regarded as the basic circulation system that serves and connects the whole waterfront.

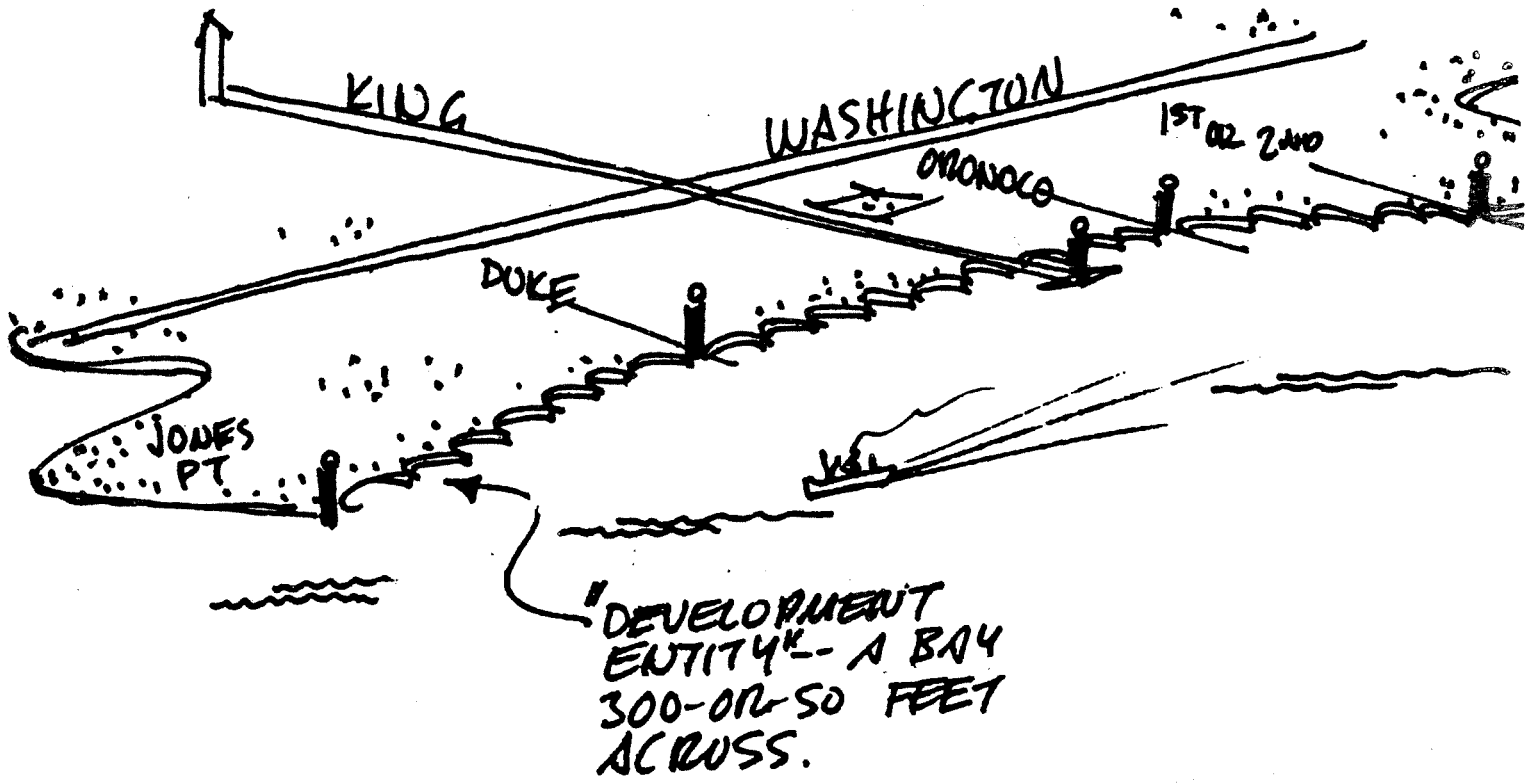
Development intensity is a subject which will affect the character of the waterfront. The high property values along the waterfront indicate high rise development; this, however, is not the right character for a waterfront in total. It should be intimate, interesting, containing a mixture of building forms, and a place to walk and linger. The waterfront is quite large and is capable of accommodating a large amount and wide range of developments.

Alexandrians have a right to insist on a high quality of urban design for the waterfront. The clue to design may be to work with and around existing buildings and places; in more open places, entirely new developments could be constructed. The mixture of old and new, of remade and restored, will give great variety to the area. In this respect the developments begun at the foot of King Street area a very good start. There are a number of hidden design assets along the waterfront; the questions of relationship between new development and existing neighborhoods near the waterfront can only be resolved through design studies and careful scrutiny by citizens with professional help.

Due to its length and configuration the critical design issue for the waterfront is to make its extent visible and comprehensible to the eye. Actually the design problem is not difficult to solve. Between 1st Street and Jones Point the pier line is slightly concave, bending in toward the City, with the point of bends at about Wolfe Street and Oronoco Street. If some distinct landmarks are placed on a pier at 1st Street and Jones Point, and if a similar visible structure is placed out in the water at King Street, the extent of the waterfront will be clear. This is illustrated in the following sketch.



The best way to work with the scale of Alexandria's waterfront is by developing a series of intervals, each being a part of the whole. These intervals should be about 300 feet across which is an appropriate and proven human scale, because within that distance one readily sees people and human activity. The size of the intervals desirable from a design standpoint is also the size desirable from a development standpoint.



The Carlyle House and Federal Record Center

One of the most exciting portions of Alexandria's waterfront which offers application of many principles of Urban Design is the area roughly in the vicinity of lower King Street. This area contains a mixture of existing structures, some of which are historical, and vacant land. Some of the existing structures while not historical in themselves are in fact history by their existence and are curious enough to offer exciting possibilities in creating an attraction for pedestrians and possibly even tourists. Two of the existing structures, the Carlyle Apartments and the Records Center have been slated for demolition because on the surface they do not fit the preconception of the historical setting or economic attachments. Both sites located in an area of extreme economic potential for the City have heretofore been conceived of as parks.

The Carlyle House and apartments are presently owned by the Northern Virginia Park Authority. The physical relationship between these buildings is quite odd, but also quite fascinating. If the Carlyle Apartments were razed, the old house could find itself in an odd and overly spacious setting and the number and appearance of competing surrounding buildings might be visually harmful. The original setting cannot be regained and to open a space around the Carlyle House would impair the effectiveness of the City Hall Plaza.

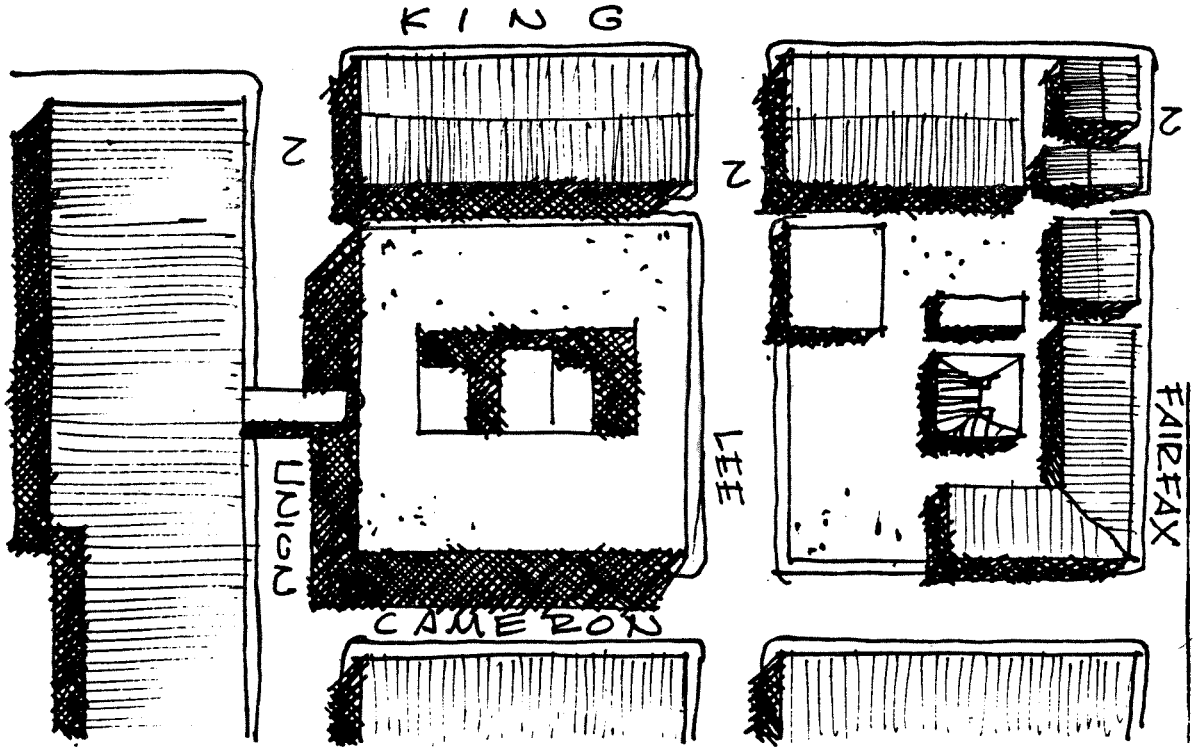
The Federal Records Center was purchased in March of 1970, however, the Federal Government has right of use until March of 1975. Demolishing a stable structure and then replacing it with a duplicate or open space without design does not appear logical. These two existing structures lie in a key position for physically, visually and functionally tying the waterfront with its hotel motel and convention facilities on the north and the current and future development along King Street into a total network of user spaces. With the advent of the pedestrian promenade, the special mode of transportation, and parking terminators a total concept of urban design can readily be imagined.

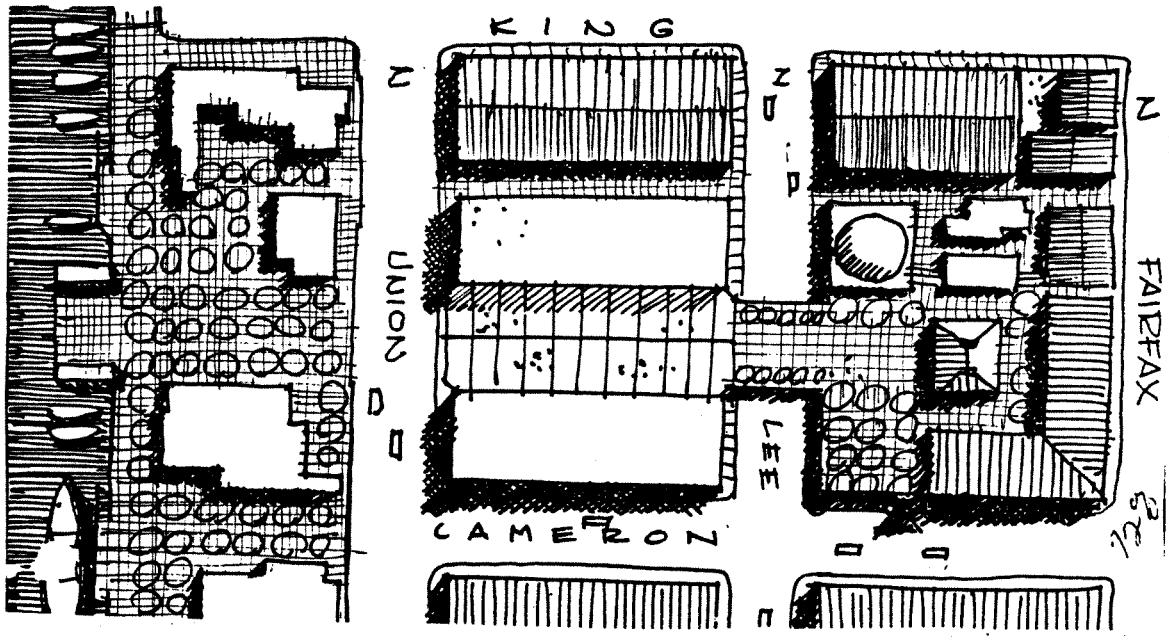
The best answer to the future of these buildings lies not just in a physical design idea, but in a concept that combines physical design with activity and use-design. With the approach of the National Bicentennial there will be a need for exhibition halls and facilities to accommodate tourists. In all this an extraordinary possibility lies dormant. For example, temporary use might be made of the Federal Records Center buildings, during the forthcoming National Bicentennial, for theme centers, restaurants and shops.

Alexandria is in a position to offer its attractions as a major focal point of the Bicentennial if there are facilities to accommodate the exhibitions, the automobiles and the tourists. The success of tourism is measured not in the numbers of tourists which might pass through but in the ability of retaining him for a number of days. The ability of an attraction to cause the tourist to leave his automobile and become a pedestrian or a user of a mode of transportation such as that suggested for the waterfront, is a prerequisite to success.

Taken in context with the total approach for use of the waterfront and King Street and interweaving of the exhibit facilities and surrounding historical sites the following concept for the use of the Carlyle Apartment, the Carlyle House, and the Federal Records Center offers more for the tourist than a casual stop between the Nation's Capital and its attractions and Mt. Vernon.

The following sketch shows the plan of the Carlyle Apartments, the Carlyle House and the Federal Records Center as it now is. The relationship between buildings is awkward, and important vistas are blocked. The sketch on the next page shows how it could be corrected, working with existing structures.





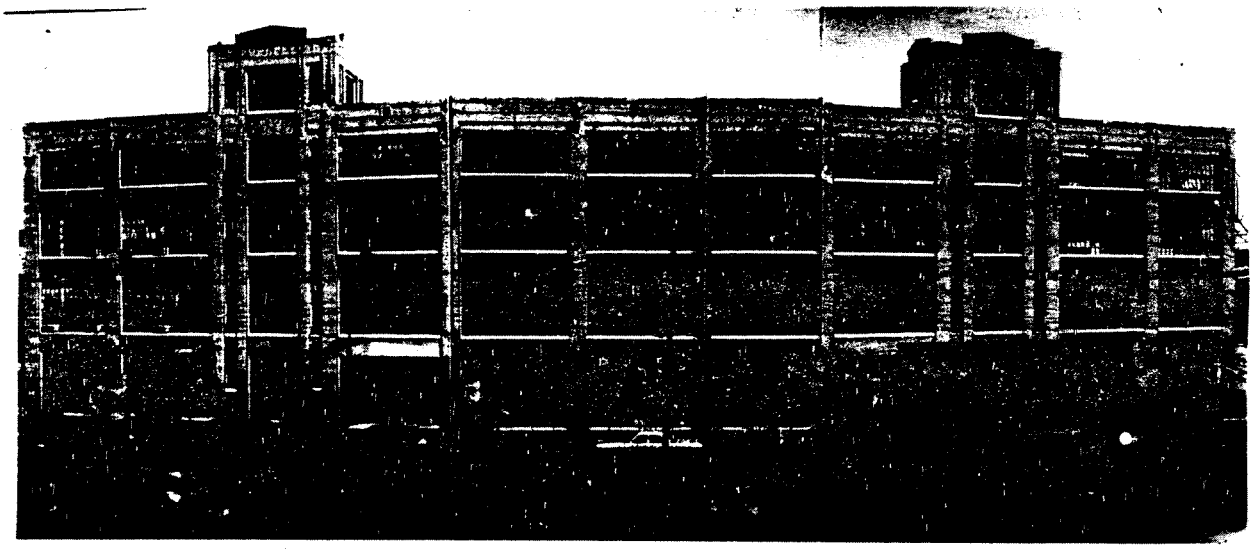
The Federal Records Center is retained, in part, but is cut through with a grand axis starting at the Carlyle House through both buildings to the water. The western portion of the Records Center is converted to a hotel and the Carlyle Apartments could be an annex to it. Cameron Street is cut through to the water and the vista regained. The eastern or waterfront portion of the Records Center is used for meeting and display facilities in connection with the hotel. Part of the structure of the Federal Warehouse is kept including the present rowing facilities. The gray paint is cleaned away, and new walls and windows are installed.

The land below the eastern porch of the Carlyle House is made into a raised terrace garden and bridges across Lee Street to become the grand concourse of the hotel and is enclosed by a high glass roof. Below the Carlyle terrace garden is covered parking for the hotel and for Carlyle House visitors. The main hotel entrance is also under the terrace.

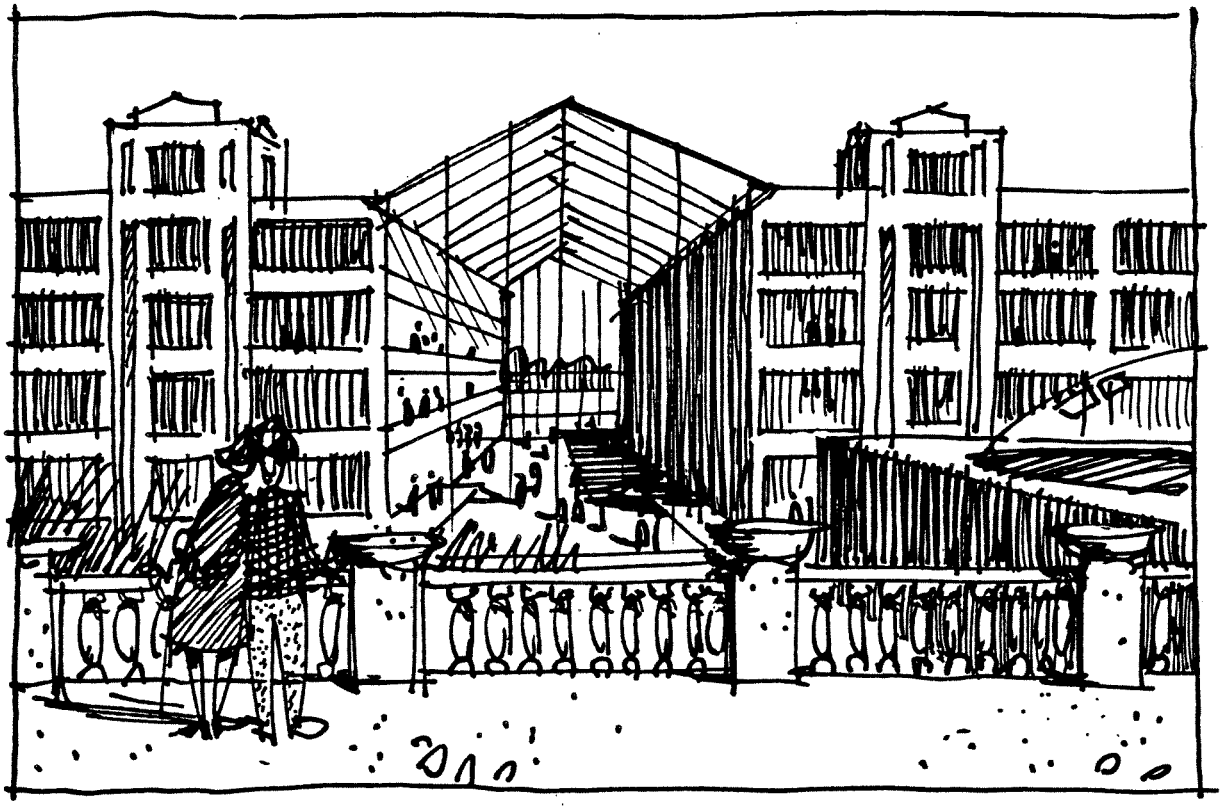
A restaurant is located to the southeast of the Carlyle House utilizing the existing one-story buildings. The restaurant opens onto the Carlyle House Terrace for outdoor serving.

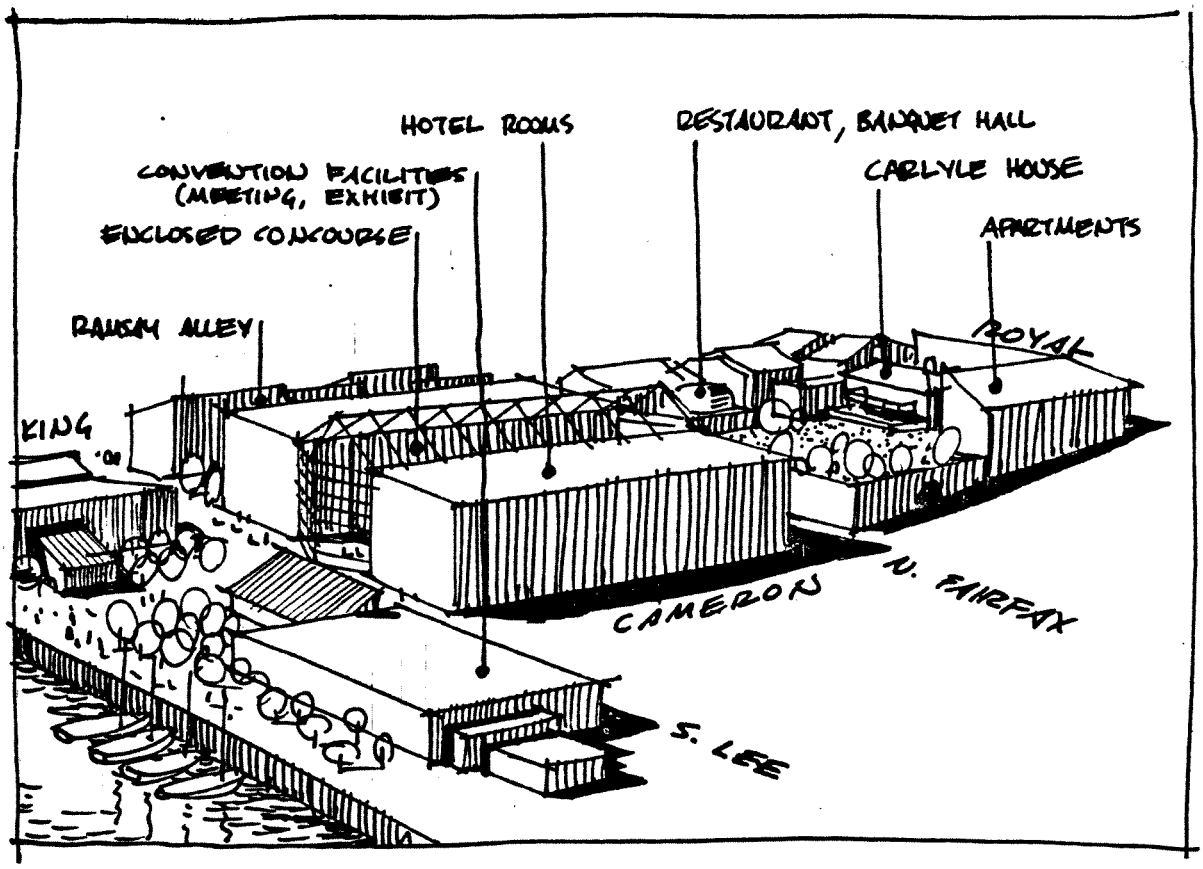
Ramsay Alley becomes a pedestrian space with rear entrances to retail shops. It is illuminated with gas lights and leads into the City Hall Plaza.

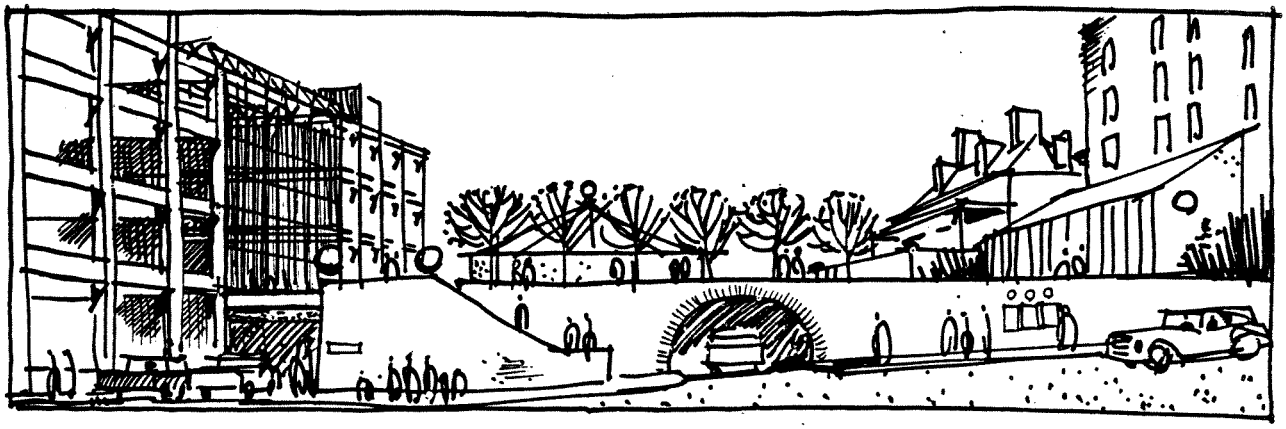
The following photograph shows a panoramic view from the porch of the Carlyle House eastward to the river which is currently being blocked by the Federal Records Building. The following sketch shows the future hotel with a glass-enclosed concourse and the terrace garden projecting into it. The view is opened up. To the right is the converted restaurant.



FEDERAL RECORDS CENTER 18




HOTEL ROOMS
RESTAURANT, BANQUET HALL
CONVENTION FACILITIES (MEETING, EXHIBIT)
CARLYLE HOUSE
ENCLOSED CONCOURSE
APARTMENTS
RAMSAY ALLEY
ROYAL
KING
CAMERON
N. FAIRFAX
S. LEE



The main points of this design idea are:

- To make use of what exists blending the old with the new.
- To retain an intimate scale.
- To open vistas.
- To mix activities.
- To consider vehicular entry and pedestrian circulation.
- To tie into King Street, to the waterfront and to the City Hall Plaza.
- To improve the view from the private houses along Cameron Street.

Future uses for the Record Center such as professional offices, boutiques, theaters, community facilities and places could be considered after the Bicentennial creating an eastern equivalent to San Francisco's Cannery Square. To realize this opportunity, a type of public-private development instrumentality is needed. If proven effective here, this instrumentality could undertake other tasks on the waterfront and furnish other valuable development lessons for the City.

Alexandria's Development Potential Areas

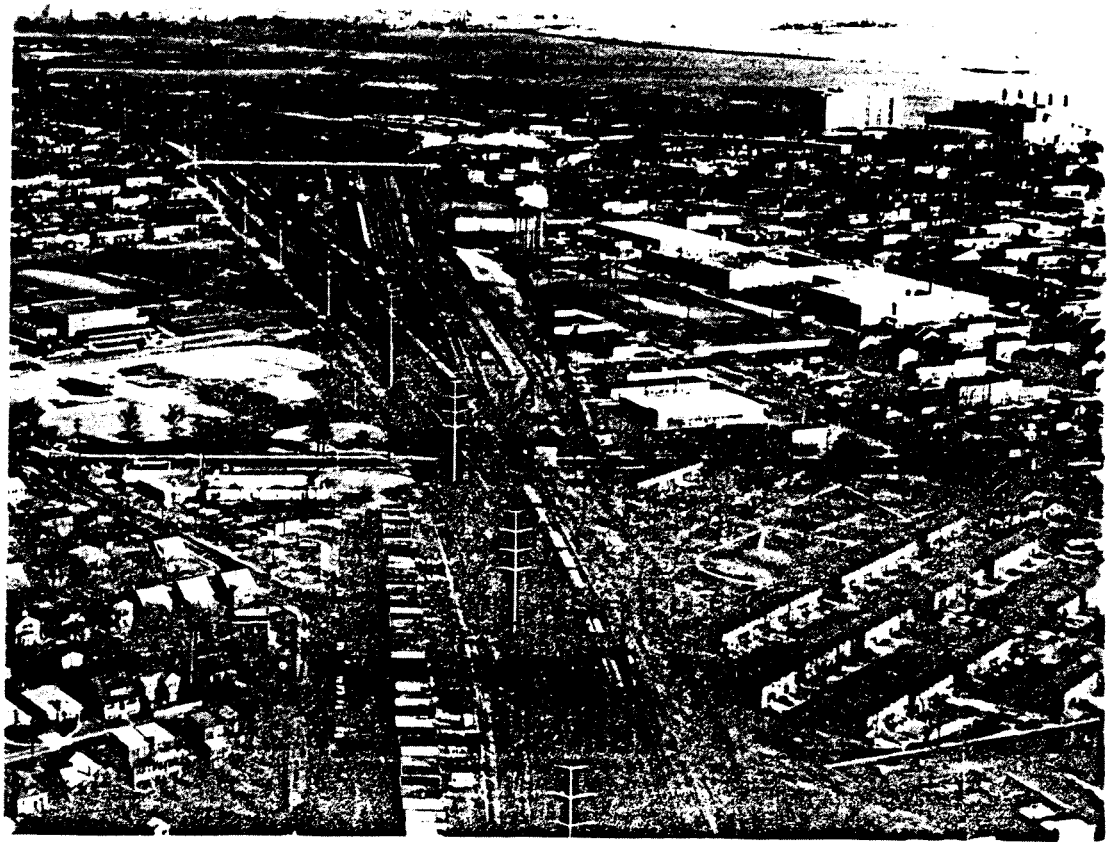
The Comprehensive Plan for Alexandria identifies nineteen major development or redevelopment areas. Of these, twelve are related to the rail corridor and the future Metro line, two are related to the Shirley Highway Corridor, and major intersections, two are related to Four Mile Run, and one is related to the waterfront. Certain of the development areas appear to have important potential relations with each other and with nearby areas, as well as proposed future facilities.

Remarks and recommendations in this section are limited since all of these areas deserve full urban design studies in themselves. The purposes of such studies are to investigate the physical reasonability of a statistically and functionally expressed development concept; to discern aspects of design otherwise not revealed; to reveal standards that the public should require; to point out potentials of the site that the

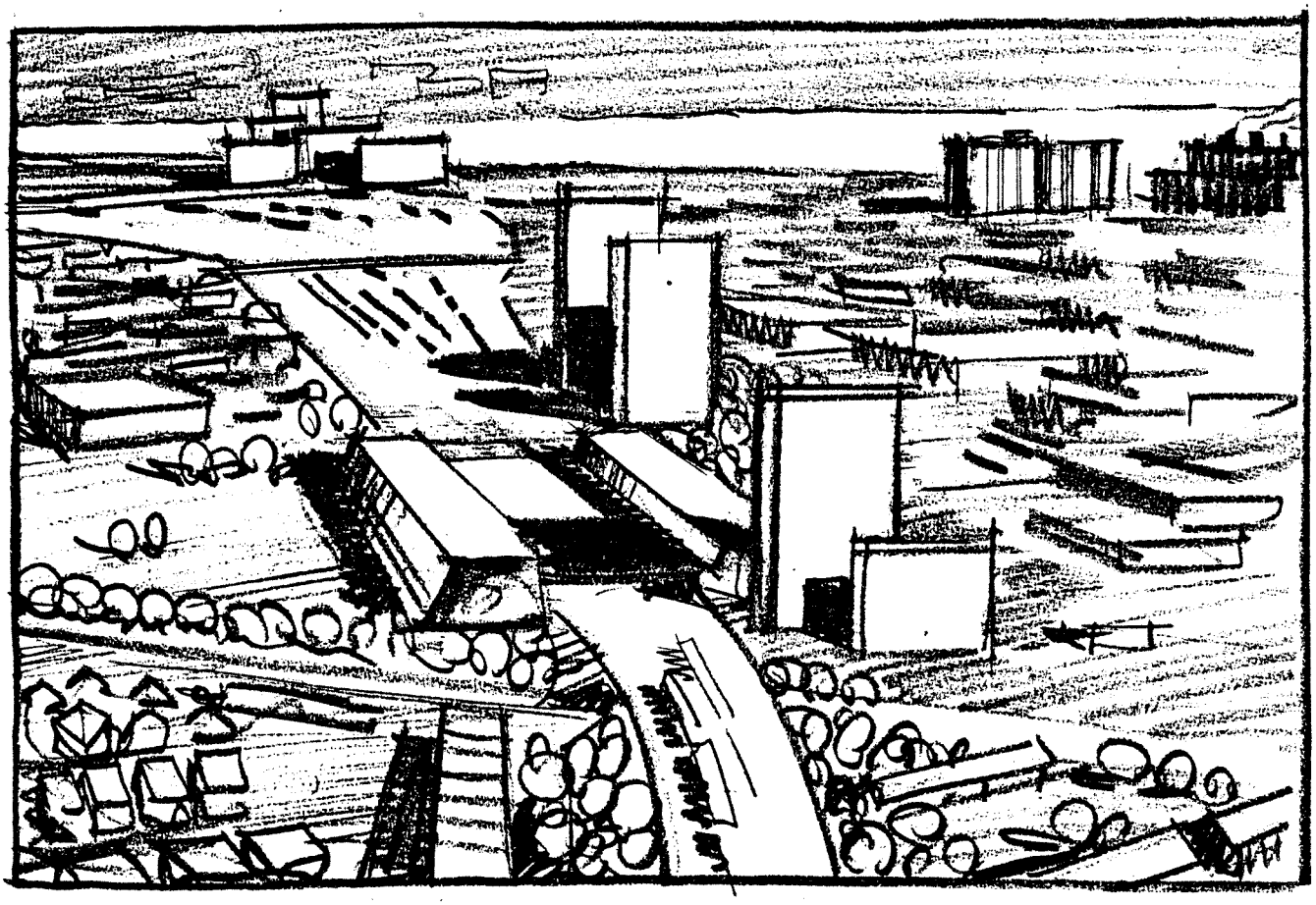
developer should utilize, to discern links between the new development and its neighbors; and to illustrate the design concept for public understanding.

The North Waterfront should be related to a concept for the entire waterfront area as previously discussed.

Each of the proposed development sites along the rail corridor should be conceived of as a related series of entities; not all areas along the corridor should be treated alike. Potomac Center should link to the waterfront. There should be a linkage across the rail lines to the west, providing Metro access. Madison Street Station is a mixed-use area, with the wrong mixes and a great investment in public service facilities (schools). This area is shown in the following photograph. This area could be developed with high intensity buildings, and the rail line spanned, as illustrated in the following sketch, creating visual unity of these parts of the City by the use of air rights.



MADISON STREET TRANSIT STATION AREA 19



The King Street Station area could benefit from change and should be a portal point into the older historic sections of Alexandria, with pedestrian access both east and west of the elevated rail corridor.

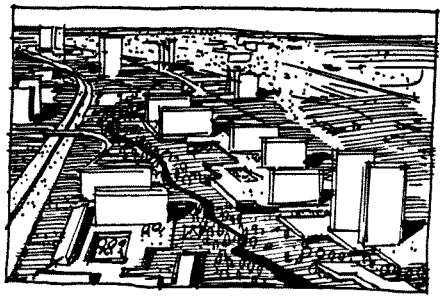
Hooff's Run, Telegraph Road East and West, Beltway West, Eisenhower Avenue and S. Van Dorn Street constitute a series of opportunities which should be handled as a related group. They constitute the Eisenhower Avenue development corridor. It is suggested that a stream park weave through all of them as one form of linkage. In addition, they should be linked by a local shuttle system that operates continuously. Points of high access should also be points of high intensity development.

Since the jurisdiction line between Alexandria and Fairfax does not correspond well with the developable open space in the corridor, cooperative ventures are needed between the two jurisdictions to assure diversity and intensity of use and to fully utilize the potentials of the area. The triangle of land in Fairfax County between the Beltway, Shirley Highway, and Van Dorn Street is a natural extension of the corridor and this is all the more reason why cooperative effort is in order. The visual Urban Design aspects are important along this corridor.

Route 95/Seminary Road and Route 95/King Street would seem to lend themselves to a "new-town-in-town" concept. Both could be developed with a careful regard for topography and sun angle.

Seminary Road could have a large central open space, with buildings grouped around and service from the periphery. The central space could contain public facilities and meeting places (cafes, restaurants). It could also be landscaped with a branch of the stream park system as a central landscape feature. Presently heavily forested, this site should be developed preserving as many trees as possible - particularly around the periphery.

Arlandria East and West should be developed as an integral part of a Four Mile Run stream park system.



STREAM VALLEY PARK CONCEPT

Urban Design Aspects of Transportation

Automobile Circulation

It is not possible to deal with urban design without identifying certain aspects of traffic. One of the problems with cities that grow in radiocentric fashion (outward from a center) is that congestion occurs where the radials converge. The old center, once a place of arrival, becomes a place for passing through. The normal response is to widen streets to increase traffic flow and to try to bypass through traffic. Another type of problem is also apt to occur on certain radials; they become strip-commercial streets and their safety and capacity are lessened as a result. Few cities are in a position to do much more than try to solve the most outstanding difficulties of such traffic problems. The trouble is that this approach transfers rather than solves the problem.

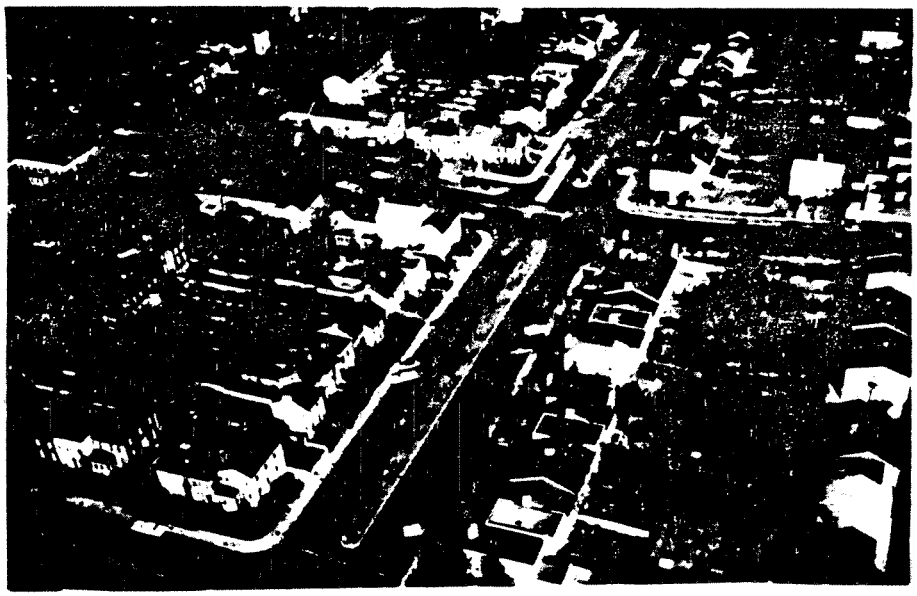
Substantial increases in traffic capacity in the older parts of the City will be self-defeating. The rehabilitation of Old Town is effectively barred to the west by Patrick and Henry Streets. A remedy to reduce through traffic in that part of town should be sought. Whatever benefits the Patrick-Henry traffic affords are more than lost by the environmental damage they render west of Washington Street. The linear auto-oriented developments along Jefferson Davis Highway, Mt. Vernon Avenue, and Duke Street enjoy neither good traffic access nor good appearance. The Washington Street portals into Old Town have more the character of rear entries to town rather than "front doors." Older shopping areas like Bradlee-Oakcrest and the one at Mt. Vernon and Glebe Road are bisected by through traffic. They should be arrival places, not pass-throughs.

The best solution is to develop a truly comprehensive planning and urban design concept, which addresses all traffic problems with full consideration of all side effects. Concentration on the objectives identified in the Land Use Section of the Comprehensive Plan creating living-working activity centers thus reducing traffic is necessary.

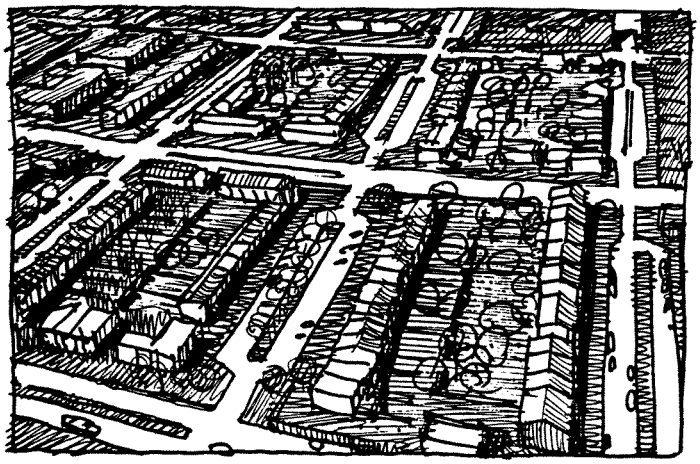
Selective Street Closings

Some streets in Alexandria could be modified so as to slow down and reduce through traffic. In some cases, streets could be closed entirely. This has to be studied in relation to overall traffic patterns and the maintenance of emergency access.

Certain streets in Old Town could be improved by making them entrance courts, serving the rows of townhouses. This could be done by making the ends of the streets single-point entries with cars parallel parked and with no resulting blockage to through travel where needed for emergency vehicles.



VIEW OF OLD TOWN STREETS 20



Urban Design Aspects of Community Facilities

Stream Parks

Potentially one of Alexandria's finest features is its stream parks as shown on Map 27 . This consists of Holmes Run, Backlick Run, Cameron Run, Taylor Run, Timber Branch, Lucky Run, Four Mile Run, Hunting Creek, and smaller branches of these streams. Stream parks are among the most useful open spaces in a modern city. As Alexandria's population increases from 110,000 to 200,000, the opportunity for a restful interlude in a nearby park will become more prized.

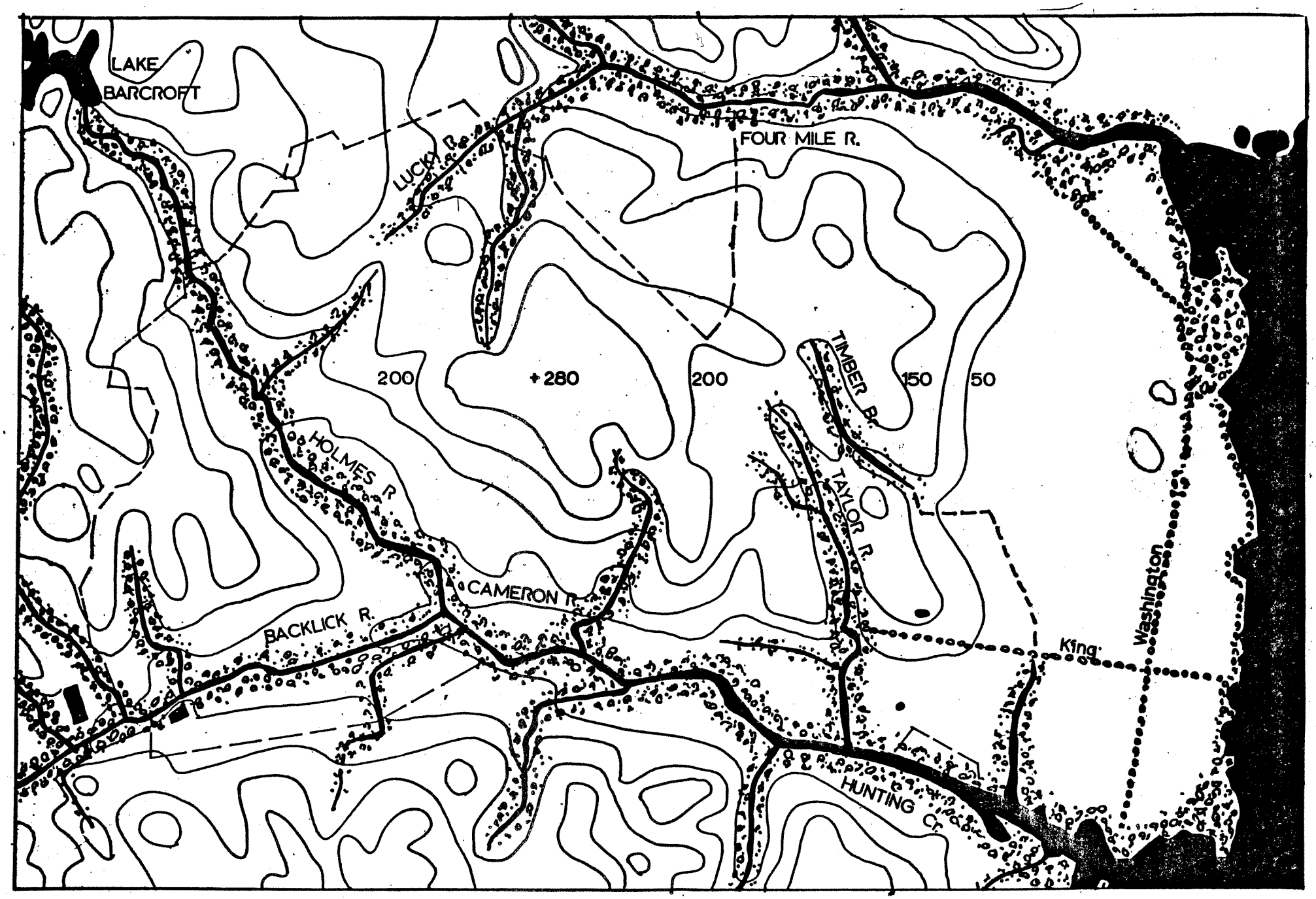
The Washington Metropolitan area has many examples of streams which function both as drainage and recreational open space systems. These give visible structure to large extents of landscape. Rock Creek Park is, perhaps, best known. The point is that natural drainage systems should be regarded as recreational assets, not merely drainage ways. For recreational use, the streams should be developed as natural trails, for walking, cycling, and riding. A major threat to some streams is that surface run-off water is so excessive and rapid that the streams cannot carry it. All site planning should take account of the speed of surface run-off, assuring that it is not so excessive as to overload the streams over short periods. As elements of structure or identity, Holmes Run, Cameron Run, and Taylor Run are fairly strong. Four Mile Run (photo 21) and Lucky Run are, in comparison, rather weak. It is unfortunate that Timber Branch has no visible surface connection to Hooff's Run (photo 22). The connection is underground.

FOUR MILE RUN 21

HOOFF'S RUN 22

The stream park system should weave through the entire city and its width could vary from a few feet to a few hundred feet and should provide continuous access along its entire edge. The open space along Four Mile Run in Arlandria should be made into a recreational park, which could also serve as a flood basin. The drainage ditch along Beauregard Street should not have been placed in the center of the roadway as a highway divider, but rather on one side to provide a more ample width for a park. It can, however, be improved by selective planting.

Perhaps the most spectacular stream park opportunity is in the Holmes Run-Backlick Run-Cameron Run Section. The area is still largely open and on the ground one can see the effects of unchecked and sporadic water flow. It is important not to regard the stream as a drainage problem but rather as a major component of the Beltway-Duke Street development opportunity. A stream park could be created which weaves through the various future developments and would be a unique asset. The stream park open space system would tie the various development elements together for pedestrian circulation.



0 1 2 Miles

STREAM PARKS

MAP 27

A Tree Planting Program

Alexandria takes pride in its trees, but there is evidence that more effort and attention are needed. It is cheaper to maintain trees than to let them deteriorate and then have to remove them when they die. Tree care is cheaper than tree removal.

Trees have ecological associations related to soil, water, sunlight, and exposure. They also have aesthetic or formalistic roles. Canopy trees are the principal shade trees; smaller understory trees are excellent decorative trees; shrubs are useful in adding finishing touches to architecture and site design. Trees can also be used to great advantage to ameliorate extreme conditions of oppressive summer heat by providing shade as well as inducing small local air movements.

The general principle to follow is not to allow heat to accumulate in paving surfaces or buildings, and the easiest way to do this is to use trees as shade ... but with some care. A tree is a big heat absorber. As it stores heat it causes up-drafts of warm air. This warm air is replaced by cool air from below ... flows of ground air at pedestrian level. If the ground surface is cool and absorbs water -- like grass -- the air that moves over it will be cooled. The worst condition is the one of shadeless, treeless areas, solely consisting of brick and mortar. They heat up quickly and have no air movement.

The following sketches show some possible implications of these factors. "A" represents a typical shadeless city street where heat is absorbed and reflected, and where discomfort builds up. With shade trees "B" the sidewalk is made comfortable, and some breezes are induced. "C" shows a house and greenery arrangement typical of Old Town Alexandria. The ground surface in front of the house, in the shade, is loose light gravel. In the open, ground surface should consist of a low and moist ground cover. The trees shade the house and cause an up-draft, which causes cool air to move towards the house and over it. "D" shows a similar principle for a waterfront. Of course, it would be varied, with open and closed areas. "E" shows an urban plaza, where the main principles are to shade the walking paths but to vary the absorbent and reflective areas in close proximity, so as to cause miniature breezes.

In general, trees on city streets should not be allowed to grow too large, and their foliage balls should be kept compact. However, where there are sufficient open spaces in the central city, trees can be allowed to grow to large size. Washington Street has some large trees located at open spaces. A lower row of shrubs and a wider sidewalk would help the visual unity of this street. Other linear and formal city streets can be unified by regular rows of compact trees, particularly in those areas with a variety of small buildings.

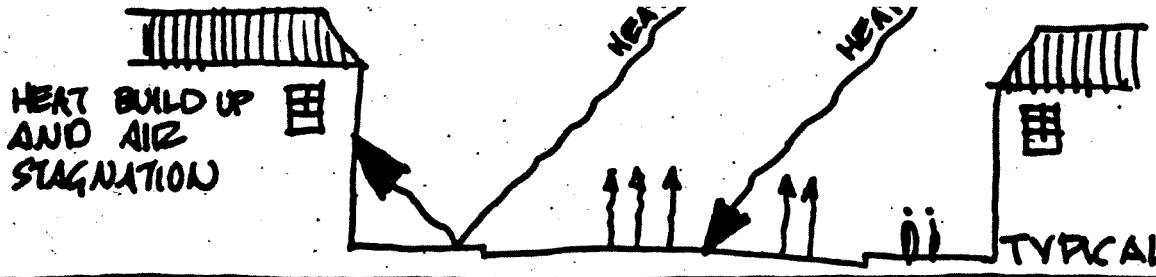
The residential areas of Alexandria present an example of good tree usage. Commonwealth Avenue is a beautiful street because the trees give it unity and visual richness. The trees, even in winter, partially conceal the architecture, making it more interesting and unified. The streets in the Beverly Hills area are more modest versions of the same principle. The forward view of the streets is not very long, which gives personality and intimacy to this scene. Likewise, in the Clover and George Washington areas there is good tree screening of the houses and a short forward view.

Landscaping programs are unique in the relationship between effort and benefit. No other program results in as much pleasure with nature doing most of the work. A small amount of greenery can do a great deal for a building; buildings of modest quality can be improved by well placed greenery.

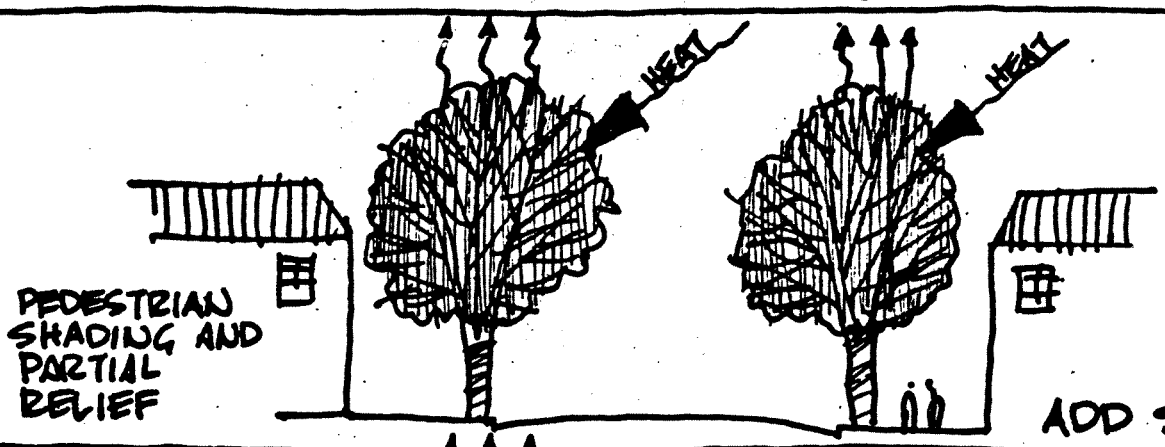
Pedestrian Circulation

The major pedestrian circulation plan for Alexandria should be the stream park system. The streams can be crossed by small bridges and where they pass under roads, the pedestrian can pass either under or over on a pedestrian crossing. The stream park pedestrian circulation system should connect to as many schools and other public institutions as possible. It should also connect shopping areas and, if possible, housing groups and be kept away from automobile routes.

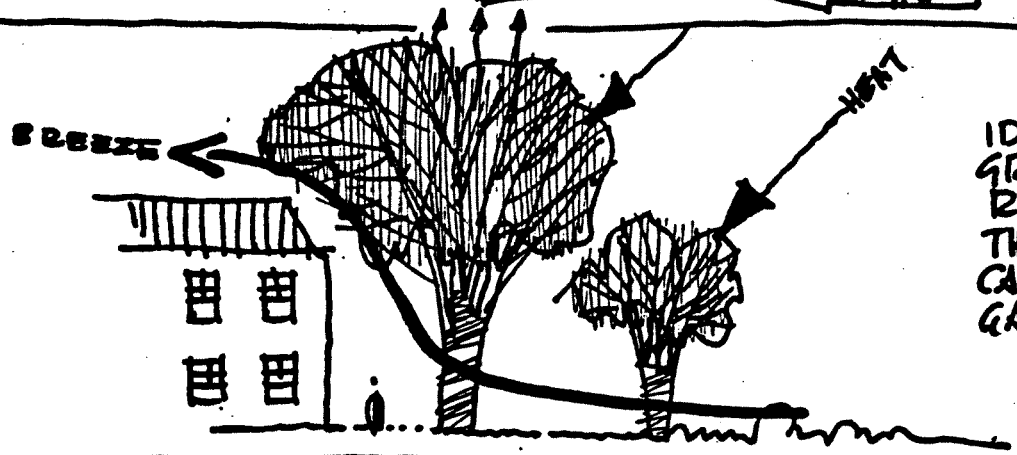
In downtown areas the main pedestrian circulation system is the sidewalk. Seldom, however, are our sidewalks thoughtfully designed for walking. They are usually treated as left-over spaces for locating odd poles, signs, hydrants, and only incidentally for pedestrian use.



TYPICAL CITY STREE

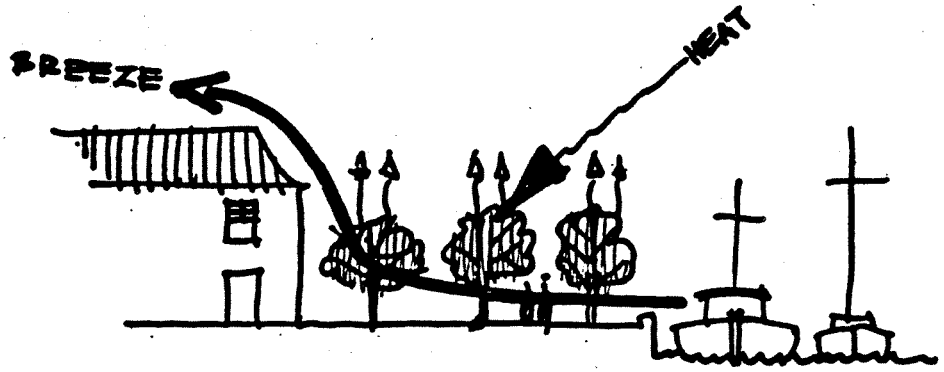


ADD SHADE TREE



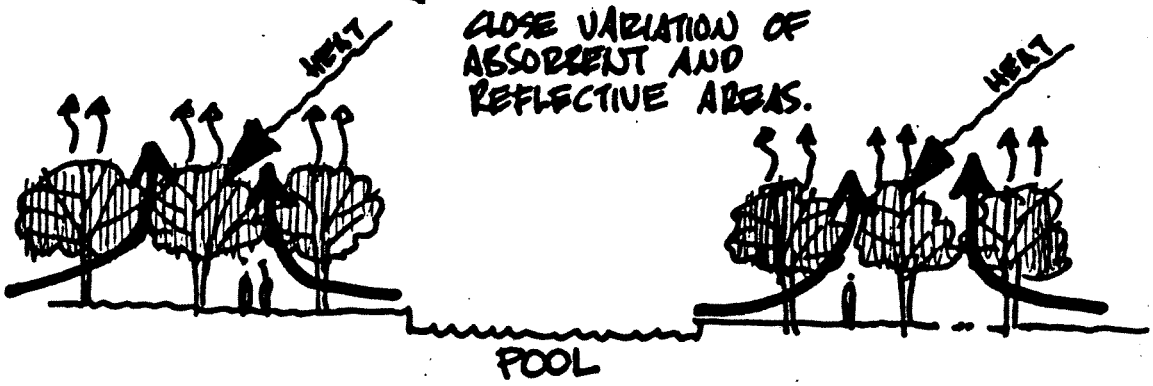
IDEAL HOUSE TO GREENERY RELATIONSHIP. THE GREEN AREA CAN BE A SMALL GARDEN.

HOUSE & GARDEN



THE SHADED PEDESTRIAN AREA ADDS TO THE COMFORT OF THE OFF WATER BREEZE.

WATERFRONT

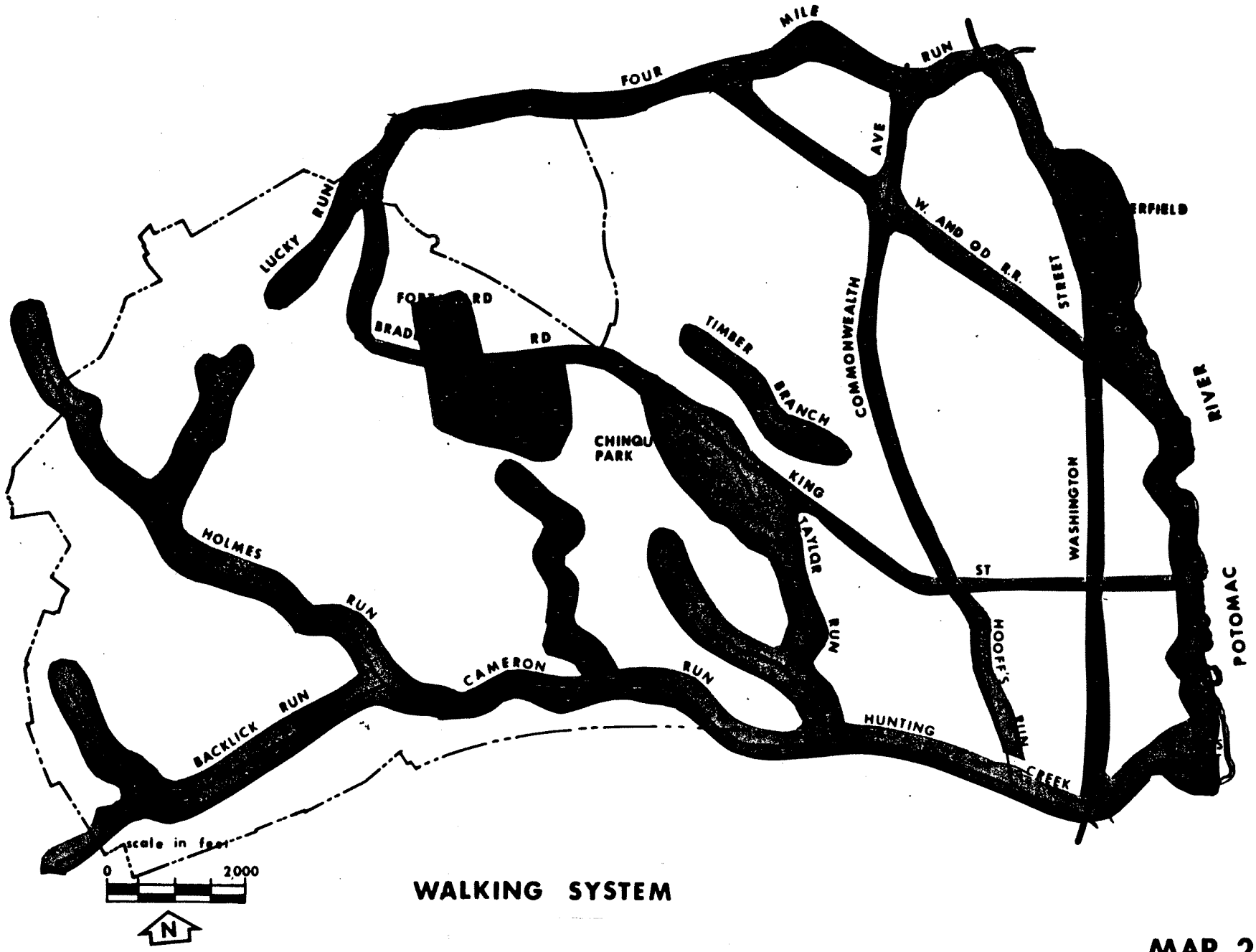


CLOSE VARIATION OF ABSORBENT AND REFLECTIVE AREAS.

URBAN PLAZA

Protection via shade trees from extremes of sun and wind is important. Interruptions of the flow of pedestrian traffic should be reduced, which means giving the pedestrian the main right-of-way in downtown areas, just as he has in shopping centers. Shopper circulation involves ready access, ready parking and as important as anything else, walking. The pedestrian circulation plan should not ignore through-the-block passages, getting away from sidewalks. Rear alleys can be very useful walking routes. Added to this could be the old right-of-way of the Washington and Old Dominion Railroad. The following photograph shows this area as it exists and the sketch illustrates its potential use. Pedestrian circulation principles are applicable in the design of new housing developments and should be easy to achieve.

WASHINGTON AND OLD DOMINION RIGHT-OF-WAY 23



WALKING SYSTEM

MAP 28

Social Spaces and Places

A program of social spaces for young and old is recommended for Alexandria. As children become more agile and mechanically skilled, as well as more aggressive, a "junk playground" or "adventure playground" becomes very useful. Teenagers are a difficult group to provide for, because they tend to resist institutionalized programs. They want to express and exert themselves in their own way. The City has a subtle, secondary role to play in creating opportunities in which teen-oriented facilities and activities can occur. At the other end of the scale, the City ought to consider very carefully the needs of the elderly. Basically, they want to be part of the life of the town and be casual observers and participants in places of activity.

A more difficult but essential task is mixing people socially in public. It happens most readily when there is some activity to pursue. Ice skating is a very good one and Alexandria would do well to plan some artificial rinks for skating. Also suitable for year round activities are parks and restaurants. A fine opportunity exists at Chinquapin Park to build a structure which would take advantage of the view and could contain a restaurant on the upper level. The concession fees from the restaurant could help pay for landscaping the park.

Left-over Spaces - Potential Assets

There are many small unused open spaces in every city. Many of them are too small for conventional commercial development, but quite suited for public service use. At the same time, they are suitable locations for very small-scale commercial enterprises, like a modest restaurant or cafe. An old city like Alexandria is apt to have many such odd properties, which could be developed for public use and small-scale entrepreneurship. For example, an old shed type building might be converted to a use similar to the present small farmers market which operates in Market Square on Saturday mornings. When the old tunnel under Wilkes Street between S. Fairfax and S. Lee Streets is no longer used, it could be restored and turned into some useful function.

VIEW OF OLD TOWN TUNNEL [24]

Street Furniture

Cities, like houses, need to be furnished. A premise of this section is that Alexandria should be made more livable and that the provisions of more areas for casual strolling, social gathering, window shopping, and other urban pleasures are among the ways to achieve this aim. Accommodating these basic human pleasures also improves the attractiveness of Alexandria as a business place.

Street furniture consists of a number of items that make a city more amenable, and includes lighting, signs, mail boxes, trash barrels, seating, shelters, flower boxes, fences, etc. Alexandria should develop a street furniture program.

Since street furniture is a fairly broad subject, it is impossible to touch on everything; only a few examples will be given. A discussion of signs provides some insights into street furniture design. The quality to strive for is appropriateness for purpose and place; the quality to avoid is self-conscious gadgetry. Two main principles underlie good sign design; first is to avoid conditions which require complex signing, second is to employ artists and artisans in designing them.

The main problem with signs is their size and viewing condition. It is where different modes of transportation mix that the trouble occurs. When signs have to be read by motorists and pedestrians alike, neither purpose is served very well, and the result is a chaotic visual scene.

Area maps with indexes should be developed for Alexandria. One could be for historic trails and buildings and another for shops and offices. These map signs could also be used in shopping centers, public transit stops and parking garages. Historic markers should be placed at important historic sites and routes in the city.

Benches should be placed frequently and in places of activity and quiet. Their basic purpose is to provide a place to pause and rest, and should also be placed where people wait for public transportation. On the waterfront, where the direction of interest shifts from water view to promenade view, reversible benches are appropriate.

Certain entrance streets might be improved by the use of specially designed horizontal portals containing all traffic signals and signs which would span the road and identify them as entry points to Alexandria.

Further Design Considerations

There are a number of actions, some relatively small that could do much to improve Alexandria. A few are mentioned below.

Overhead wires are unsightly and should be relocated underground. Alexandria has many buildings of interesting character which are spoiled by poles and wires; this is particularly true in Old Town. The street scene would be much improved if all overhead wires were removed.

Artists and sculptors should be brought into the service of the city for works of art, to embellish the city, as well as to help design public places, signs, garage entrances, etc. They should be commissioned to design works of art such as outdoor sculptures, fountains, murals, and reliefs.

Special design areas should be designated, in which encouragement is given to a special design theme. One of these are auto sales areas where special design treatment of supergraphics could be a major feature and yet well done.

Many busy areas of Alexandria border on neighboring jurisdictions and some form of joint cooperation should be encouraged to improve or correct design aspects in these locations.

Design Standards and Public Administration

A modern city cannot do without specific design standards to administer fairly and legally the many requests for approval for new developments. Standards are needed, but they are also a problem. Design standards, particularly for site design, can create some unhappy visual results. For example, obsolete standards often force us to build roads that are unnecessarily wide and straight. Such roads are expensive, require considerable topographic reshaping, build up heat accumulation on hot days, cause excessive surface water run-off, and are dangerous because they give a false sense of driver safety.

The scale of many future developments will be such that there should be an opportunity to explore innovative site design. Site standards alone are insufficient; more flexible performance and design standards are needed, and the public ought to have a greater voice -- an informed voice -- to maintain high quality in development, particularly in site details.

METHODS OF PLAN IMPLEMENTATION

The preceding pages of the proposed plan have discussed the projected rate growth the City will experience, its probable impact on Alexandria, and how to best deal with it during the next ten years. This section of the plan presents a brief outline summation of the legal, administrative and other techniques that are currently available within which to implement the proposed policy recommendations. This section is divided into two major elements - techniques to implement policy recommendations for public improvement projects and techniques to implement policy for those projects initiated within the private business community.

PUBLIC SECTOR IMPLEMENTATION

City Funded Programs

- Capital Improvement

Roads and Sewers	-	Phasing or concentration of capital improvements which would encourage type of development the City wants.
Community Facilities	-	Early acquisition of land to minimize cost when facilities are actually needed.

- Special Purpose Authorities

Housing	-	Ability to acquire and develop property and operate facilities.
Parking	-	Solve parking problem particularly in downtown area by providing facilities that cannot be expected to be provided by private market.
Industrial Development	-	Consolidate land. Construct buildings for sale or lease.

- Condemnation

Limited Scale	-	Makes it possible to eliminate minor problems at neighborhood level.
Major Scale	-	Makes it possible to implement major portions of plan.

Jointly Funded Programs

- Federally-assisted Programs

Urban Renewal and Open Space	-	Ability to implement programs that might otherwise be financially unfeasible.

- State-assisted Programs

Highways
Schools

- Regionally-assisted Programs

Environmental Controls
Transportation Authority
Housing
Potomac River Basin Commission Interstate Compact

PRIVATE SECTOR IMPLEMENTATION

Regulatory

- Codes and Ordinances

Zoning	-	Controls land use pattern.
Building	-	Controls structural characteristics.
Subdivision	-	Provides procedure for requiring dedication of land for public purposes and construction of roads, sewers, sidewalks.
Housing	-	Controls minimum standards for occupancy.
Health	-	Minimum Standards.
Environmental Pollution		

Assistance

- Financial

  Grants and Loans - Assistance in making housing improvements

  Tax incentives for property improvements

- Non-financial

  Help cut through red tape
  Advisory Service

- Incentives through Codes and Ordinances

Pressure

- Taxation

  Land tax vs. improvement tax.
  Higher tax assessment for deteriorating property.

- Code enforcement

Persuasion

- Public Relations

  Media information
  Personal persuasion
  Solicit Developers

PLANNING COMMISSION

ACTION AND TRANSMITTAL REPORT

S U P P L E M E N T

PROPOSED COMPREHENSIVE PLAN: ACTION AND TRANSMITTAL REPORT

BY PLANNING COMMISSION: SEPTEMBER 24, 1973

The Planning Commission recommends that City Council adopt with certain exceptions as noted the Proposed Comprehensive Plan submitted by the Planning Advisory Committee. The Commission wants to take this opportunity to also commend the Planning Advisory Committee for its efforts and accomplishments in preparing this proposed plan.

In recommending this Plan, the Planning Commission notes that this document is intended as a generalized future Plan. The fact that it is intended to be general in nature is especially true of the sections pertaining to housing and urban design as well as the general introductory information. The Long Range Land Use Map is also a generalized map.

The Commission considers these plans and recommendations in generalized form to be useful to the City as guides, and finds itself generally in accord with the recommendations except as noted on the following pages. The Planning Commission takes note of the fact that events have overtaken the Proposed Plan in various specific cases. This situation is inevitable in view of the time that must be involved in the preparation of such a large document by a citizen committee and the time that elapses during the compilation, editing, printing and presentation of the Proposed Comprehensive Plan; in addition, the time needed for general public information and public hearings by the Planning Commission and City Council add to the time that elapses.

The Planning Commission notes that the Planning Advisory Committee incorporated many of the newer approaches into its preparation of the proposed Plan; this included, for example, a statement of planning goals, and general guidelines in the realm of urban design and housing, and the Committee related its population projection and certain of its plans to those of the region.

While commending the Planning Advisory Committee for the breadth of its planned document, the Commission notes the increased citizen interest in the impact of various improvements. This may justify even further expansion of the long range planning process and the provision of information to the public.

The Commission recommends that the City undertake experimental kinds of planning documents which will update and enhance the Proposed Comprehensive Plan, and provide more kinds of information to public officials and interested citizens. Some specific examples are mentioned within this transmittal report.

Land Use:

Committee recommendations which may be expected to have the most immediate effect are the section on Transportation and the part of the Land Use Section which identifies the 19 development potential areas.

The Planning Commission finds that the concept of development potential areas is one of the most noteworthy new features of the Proposed Comprehensive Plan. The Commission urges support of the Committee proposals that present single family sections of Alexandria be retained for single family purposes, and that new development be channeled into specified development areas. The Commission recommends that City Council consider a commitment that any future zoning changes for intensive development take place only in those 19 development areas designated on the Plan; this does not mean that everyone of the 19 areas should be intensively developed. Further, the Commission proposes a series of detailed area studies to anticipate development problems, define alternative boundaries and optimeze development intensity. Various Citywide cost-benefit studies are desirable, and these should focus attention on alternative growth patterns in the 19 development potential areas.

The Planning Commission intends to start working with the staff on such studies, and will welcome any guidance from City Council on this matter and on priorities among the development potential areas.

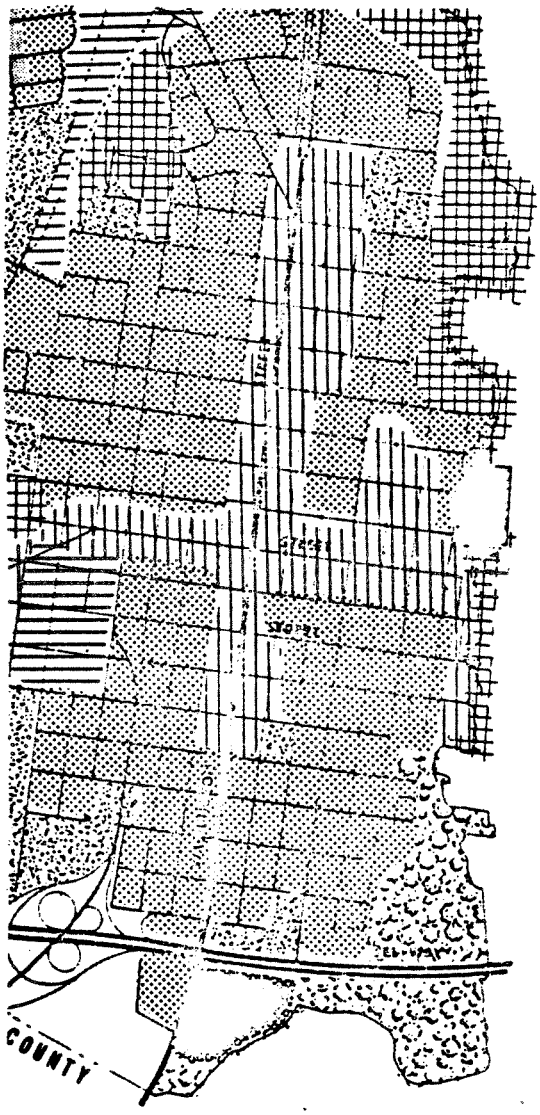
The adoption of the Proposed Comprehensive Plan should not be regarded as encouragement to intensive development near the future King Street and Braddock Road stations during the 1970-80 period; such development could have a serious impact on nearby residential areas.

Land Use - Older Sections:

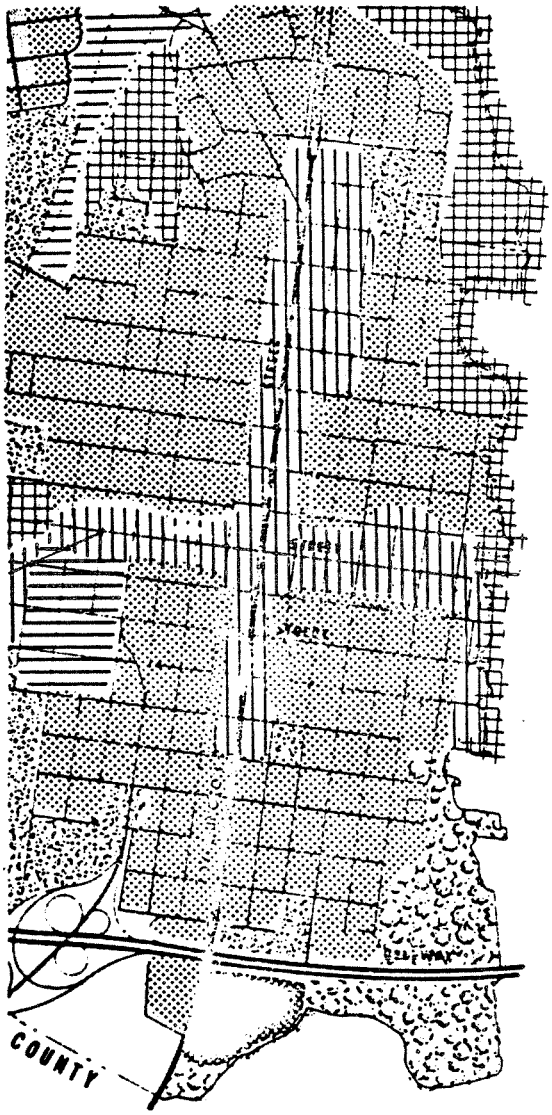
Some of the citizen comments at public hearings related to the land use map, and were based on misunderstandings regarding the long range land use plan. The purpose of this kind of plan is to show generally where the various land uses are expected to be located in the future, so as to be able to relate such general information to other planning such as transportation. The

Committee and staff drew this map in a manner which generally identified the dominant use of each block. In a built-up city such as Alexandria with the pattern of mixed uses in some of the older sections, it is inevitable that individual lots and uses will not all be reflected on a small map of the City.

There was, however, one place where inadvertently parts of seven blocks were shown as "commercial" where it had been intended that they be shown as "residential medium". This is in the area immediately north of City Hall. There is no record of the Planning Advisory Committee or the staff intending that the map be drawn this way, and this is therefore believed to be a drafting error. The Planning Commission recommends that when accepting map no. 7 the City Council consider it to be drawn as shown below:



AREA IN QUESTION



MAP AS PUBLISHED

MAP WITH CORRECTION

Land Use - Tract 16:

The Planning Commission takes note of certain special problems in the residential sections of Census Tract 16, as noted on page 47 of the Proposed Comprehensive Plan. One of the problems relates to housing units that are within sections zoned for industrial purposes. This has the unfortunate effect under City regulations of preventing these homes from being substantially upgraded or improved.

A review of Zoning maps indicates that many such parcels of land were not separately rezoned but the general area was rezoned Industrial to conform with a proposed rezoning plan for the area, not taking into account the fact that this area was being used for housing certain citizens of Alexandria who could not find housing elsewhere in the City.

The Planning Commission recommends that City Council refer back a study of the possibility of amending the Zoning Code and/or other City regulations to permit remodeling, upgrading and repair of dwelling units already occupying land zoned industrial.

Transportation:

The Planning Commission concurs with the major transportation recommendations of the Committee. It urges that efforts be made to obtain maximum utilization of the rapid transit system including the use of feeder bus lines.

The Commission also recommends that express buses be retained to serve those sections of Alexandria that will find this means of commuting more convenient than the use of rapid transit.

The Commission concurs with two major conclusions of the Committee that no additional north-south expressways should be built in Alexandria and that improvement to the existing highway system should be undertaken to route traffic away from established residential areas. The Commission notes that since the submission of the proposed Plan by the Planning Advisory Committee, the matter of the relocation of the existing portion of Route One which lies south of the Monroe Street Bridge has been considered by the City. The Commission supports study of this relocation, and recommends consideration of all aspects including not only the facilitation of major traffic, but relocation housing needs, impact on the environment and cost.

Regarding transportation, recent decisions and events have overtaken the proposals of the Planning Advisory Committee. Now that the relocation of Route One is being studied by the City, the Commission recommends that City Council defer until an appropriate later time those changes in the Major Thoroughfare Plan which are closely related to the

future alignment of Route One. These changes are listed below, and pertain to the arterials proposed on page 111 of the Proposed Comprehensive Plan.

Franklin Street between Patrick Street and Washington Street has been included in the arterial system and deleted from the collector system. This street is currently under study for possible improvements.

King Street between Commonwealth Avenue and Patrick Street has been included in the arterial system and deleted from the collector system. This section of King Street carries heavy traffic volumes serving Route One, Washington Street and the downtown area of the City. The proposed rapid transit station will further increase the need for development to arterial standards.

The Planning Commission recommends that City Council accept the Proposed Major Thoroughfare Plan as the best thinking at the time it was prepared. Except as otherwise noted in this transmittal report, the Commission recommends approval of all the specific proposed changes.

While concurring with the Planning Advisory Committee proposals, the Commission notes the increasing awareness of the problems associated with air pollution and the need for greater protection of the environment generally. This necessitates more civic attention to the provision of alternatives to the increasing dependence on the private automobile.

The alternatives have been frequently mentioned, but new means of planning for these alternatives need to be developed in order to assure citizens that these alternatives are not being overlooked.

Many of these alternative public actions such as public subsidies of and better routing of buses, encouragement of pedestrians and bicyclists do not lend themselves to the kinds of mapping that is part of a traditional comprehensive plan.

The Commission intends to make recommendations from time to time in these realms, and to begin studying ways of reporting and mapping the City's needs and accomplishments in these kinds of transportation. Such reporting and mapping may become a component or supplement to comprehensive plans of the future.

In Alexandria the Major Thoroughfare Plan has combined more than one public purpose. The Planning Commission proposes to study the feasibility of preparing a separate set of maps which will show anticipated future widths of major

streets; the purpose of preparing a separate set of maps which show anticipated future widths of major streets; the purpose of preparing such separate maps is to allow the Major Thoroughfare Plan to serve as a guide for other planning purposes. Other alternative kinds of maps need to be examined in the interest of clarifying the City's planning program for the benefit of its interested citizens.

While endorsing the Major Thoroughfare Plan recommendations of the Planning Advisory Committee, the Commission notes the citizen questions and objections regarding certain proposed arterials. In endorsing the proposals, the Commission recommends that the following, which are listed on page 111 of the Proposed Comprehensive Plan not be changed at this time:

> Church Street between the access ramp from the Capital Beltway and Washington Street has been included in the arterial system and deleted from the collector system. This section is part of the access ramp from the Beltway.
>
> Powhatan Street has been included in the arterial system and deleted from the collector system. This arterial provides a direct connection between the two primary north-south routes in the eastern section of Alexandria.

The Commission recommends deletion of the connection of Eisenhower Avenue with Duke Street. This is proposed in order to make the Major Thoroughfare Plan consistent with the City Council action in September, 1972, at which time all connections to Duke Street or connections in an easterly direction were rejected by City Council.

Community Facilities:

It is desirable that the long range planning of the various community facilities be carried out in connection with the planning of land use and of major transportation. The proposed Comprehensive Plan includes this kind of planning information and recommendation.

The Planning Commission concurs with the recommendations of the Planning Advisory Committee, and at the same time does not want to superimpose its judgment on the several citizen boards and commissions who are helping City Council to guide policy on the specific facilities.

The Commission notes that in a mature city such as Alexandria, land planning principles need to be supplemented by the maximum amount of citizen participation.

In addition, the Planning staff can play a major role by continuing to provide information to decision makers on population characteristics and the trends in population growth within the various parts of Alexandria.

PLANNING COMMISSION ACTION SEPTEMBER 24, 1973

On a recorded roll call vote of 5-0, the Commission passed a resolution which recommended to City Council approval of the "Proposed Comprehensive Plan for Alexandria, Virginia, 1970-1980", and the additions and amendments dated September 24, 1973, entitled "Proposed Comprehensive Plan: Action and Transmittal Report by Planning Commission", said resolution to be forwarded to City Council.

Messrs. Braswell and Bishop were absent from the meeting.

Reason: The Planning Commission, in general, agreed with the Proposed Comprehensive Plan as recommended by the Planning Advisory Committee and thought that the Proposed Plan would be a good general plan and guide to Alexandria's future.

MINORITY REPORTS

Recommendations of Mr. Alexander A. Beiro

Additional modifications to the Major Thoroughfare Plan as presented by the Planning Advisory Committee.

1. Change Prince Street west of Patrick Street from arterial to collector. (It seems that both Prince Street and Cameron Street are improperly shown as arterial on the Major Thoroughfare Plan since they were amended to the collector system in February of 1962.)

2. Change Commerce Street from arterial to collector. (Commerce Street is drawn as arterial on the Plan but is not listed in Appendix VIII as arterial or collector.)

3. Change Diagonal Road from arterial to collector.

4. Change Daingerfield Road from arterial to collector. (Daingerfield Road is drawn as arterial on the Plan but is not listed in Appendix VIII as arterial or collector.) The maze of arterials previously shown in the downtown area gave the impression that we might be willing to accept extensive street widening.

5. Change Braddock Road between West Street and Commonwealth Avenue from arterial to collector. Leaving this street as an arterial gives the impression that we are planning to extend another arterial through our residential areas. The Committee's plan to remove the remainder of Braddock Road from the arterial designation was a good one but it should include the portion between Commonwealth Avenue and West Streets.

6. We should not give approval to Pickwickian proposals for the relocation of Route 1 south of the Monroe Street Bridge without first having reviewed specific plans for such a relocation. Any relocation of Route 1 in this area except over the air rights through Potomac Yards would be absolutely intolerable. The citizens in this neighborhood have already expressed concern about the loss of housing and noise caused by the Rapid Transit Line and the elevated structure required for the relocation of Route 1 would at least compound the problem.

Recommendations of Mrs. Alice Morgan

1. While supporting the Planning Commission and Planning Advisory Committee recommendations to designate Pendleton Street between West and N. Washington Streets as a collector rather than an arterial, I want to go on record as being strongly opposed to Pendleton and Oronoco Streets being part of any present or future one-way street pattern as designated on page 112 of the PAC report.

2. While supporting the Planning Commission and PAC recommendations to designate Mt. Vernon Ave. east of Commonwealth as a collector street and deleted from the arterial system, I want to go on record as being opposed to any designation or treatment of Mt. Vernon Ave., at any time, which would make it a major traffic carrier as indicated on page 112 of the PAC report suggesting Mt. Vernon Ave. as having the potential of becoming a major north/south route.

3. While I am in agreement with the recreation program objective to "provide open space and recreation facilities in older, intensively developed neighborhoods" (p. 76 PAC report), I wish to focus attention on planning and implementation of community facilities in the southwest quadrant area.

4. I recognize that there may be city plans for recreation facilities in this area at the present time. However, I wish to go on record as having encouraged the development and/or continuation of such plans for the southwest quadrant area.

5. The Waterfront Plan (1967) should not be repealed because the Proposed Comprehensive Plan for Alexandria, Virginia, 1970-1980 does not adequately address itself to the waterfront development.

6. The Comprehensive Plan should make recommendations that address the issues in regard to development around the Metro Stations.

RESOLUTION

WHEREAS, under the provisions of Section 9.04 of the Charter of the City of Alexandria, Virginia, it is the duty of the City Planning Commission to make and adopt a Master Plan for the City which, with accompanying maps, plats, charts and descriptive matter, shall show the Commission's recommendations for the development of the territory covered by the plan; and

WHEREAS, there has been in existence in the City of Alexandria a Master Plan adopted in successive parts by successive resolutions and ordinances which has been from time to time reviewed and amended by successive resolutions and ordinances; and

WHEREAS, changing conditions have made necessary a revision of the said Master Plan as it has been adopted, extended and amended from time to time; and

WHEREAS, after extensive study of the said existing Master Plan, there has been prepared by the Planning Advisory Committee a new and consolidated plan entitled "Proposed Comprehensive Plan for Alexandria, Virginia, 1970-1980", consisting of a Land Use Plan (including a long-range land use plan), a Community Facilities Plan, a Transportation Plan (including a major thoroughfare plan), and recommendations pertaining to Housing and Urban Design; and

WHEREAS, public hearings on the said Proposed Comprehensive Plan were held on May 16, 1972, July 10, 1972, December 18, 1972, February 6, 1973, and September 24, 1973; and

WHEREAS, additions and amendments to the Proposed Comprehensive Plan for Alexandria, Virginia, 1970-1980 were recommended by the Planning Commission in a report entitled "Proposed Comprehensive Plan: Action and Transmittal Report by Planning Commission", dated September 24, 1973; and

WHEREAS, the Proposed Comprehensive Plan for Alexandria, Virginia, 1970-1980, with the aforesaid additions and amendments is intended to be a Master Plan for the City which supersedes and replaces all elements of the Master Plan for the City of Alexandria, Virginia, which have been previously adopted either by the Planning Commission or the City Council; and

WHEREAS, it is the opinion of the Commission that the adoption of the Proposed Comprehensive Plan for Alexandria, Virginia, 1970-1980, with the aforesaid additions and amendments, as the Master Plan for the City, and the repeal of all previously adopted elements of the Master Plan is necessary for the proper and orderly development of the City of Alexandria, and that such adoption and repeal will promote

the health, safety, morals, comfort, prosperity and general welfare of the City, therefore

BE IT RESOLVED BY THE CITY PLANNING COMMISSION OF ALEXANDRIA, VIRGINIA:

1. That the "PROPOSED COMPREHENSIVE PLAN FOR ALEXANDRIA, VIRGINIA, 1970-1980", bearing the date of January 1972, together with the maps, plats, charts and tables therein, and with the amendments and additions thereto contained in PROPOSED COMPREHENSIVE PLAN: ACTION AND TRANSMITTAL REPORT BY THE PLANNING COMMISSION", dated September 24, 1973, be and the same hereby is adopted as the Master Plan of the City of Alexandria, Virginia.

2. That said plan be and it hereby is adopted in accordance with the provisions of Section 9.05 of the Charter of the City of Alexandria and is hereby certified to the City Council of Alexandri for appropriate action.

3. That said plan supersedes all elements of the Master Pla previously adopted and appropriate action is recommended to effect the repeal of:

a. Generalized Land Use Plan Map (1962)

b. Generalized Land Use Plan (1962)

c. Cameron Station Study Area amendments to the Generalized Land Use Plan (1963)

d. "To Serve 165,000 Community Facilities Plan, Alexandria, Virginia" (1963)

e. Duke Street/Edsall Road Study Area amendment to the Generalized Land Use Plan (1964)

f. Long Range Plan for Libraries (1965)
Ordinance #1341 (1965)

g. Waterfront Plan (1967)

h. The Major Thoroughfare Plan
1. Ordinance #674 (1951)
2. Ordinance #768 (1953)
3. Ordinance #1173 (1962)
4. Ordinance #1231 (1963)
5. Ordinance #1255 (1964)
6. Ordinance #1490 (1968)

i. Preliminary Park and School Plan (1962) (Adopted by resolution of the Planning Commission only.)

j. Amendment of Generalized Land Use Plan Map by addition of a legend relating to Mixed Use Development Plans (1971)

k. Amendment of Generalized Land Use Plan by adding Criteria for Mixed Use Development Plan Areas (1971)

4. That this resolution shall be signed by the Chairman of the Commission and attested by its Secretary and an attested copy of this resolution accompanied by a copy of the "PROPOSED COMPREHENSIVE PLAN FOR ALEXANDRIA, VIRGINIA, 1970-1980", and the additions and amendments dated September 24, 1973, entitled "PROPOSED COMPREHENSIVE PLAN: ACTION AND TRANSMITTAL REPORT BY PLANNING COMMISSION" shall be forwarded and certified to the Council.

ADOPTED BY THE CITY PLANNING COMMISSION OF THE CITY OF ALEXANDRIA, VIRGINIA, AND CERTIFIED TO THE CITY COUNCIL OF THE CITY OF ALEXANDRIA, VIRGINIA.

J. Edward Brasie
Chairman

Attest:

Richard C. Maxwell
Secretary

APPENDICES

APPENDIX I

Regional Agencies in Which the City of Alexandria Participates

The Metropolitan Washington Council of Governments

The Metropolitan Washington Council of Governments (COG) established in 1957 draws its membership from the elected officials of the local jurisdictions within the Metropolitan Region. It coordinates all programs which are regional in character and which require joint action and consensus to serve the best interest of the local jurisdictions concerned and the region as a whole. It reviews applications from the member jurisdictions on community renewal programs, regional planning grants, hospital facilities, sewage and waste disposal works and regional recreation. It is assisted by various policy committees dealing with such matters as health and environmental issues, transportation planning, public safety and community resources. These committees are assisted by staff technical committees in developing policy recommendations. The staff also makes basic studies on regional problems for the COG.

Northern Virginia Planning District Commission

The NVPDC created in 1969 succeeded the Northern Virginia Regional Planning Commission that had existed since 1947.. Member jurisdictions include the Counties of Arlington, Fairfax and Prince William; the cities of Alexandria, Fairfax and Falls Church; as well as the towns of Herndon, Leesburg, Manassas, Manassas Park and Vienna. Though not a member of the Commission at this time, Loudoun County is considered a member as part of the statewide system. The Commission draws its membership from the nominated representatives of the above jurisdictions. The NVPDC coordinates criminal justice, community shelter and other planning projects.

Northern Virginia Transportation Commission

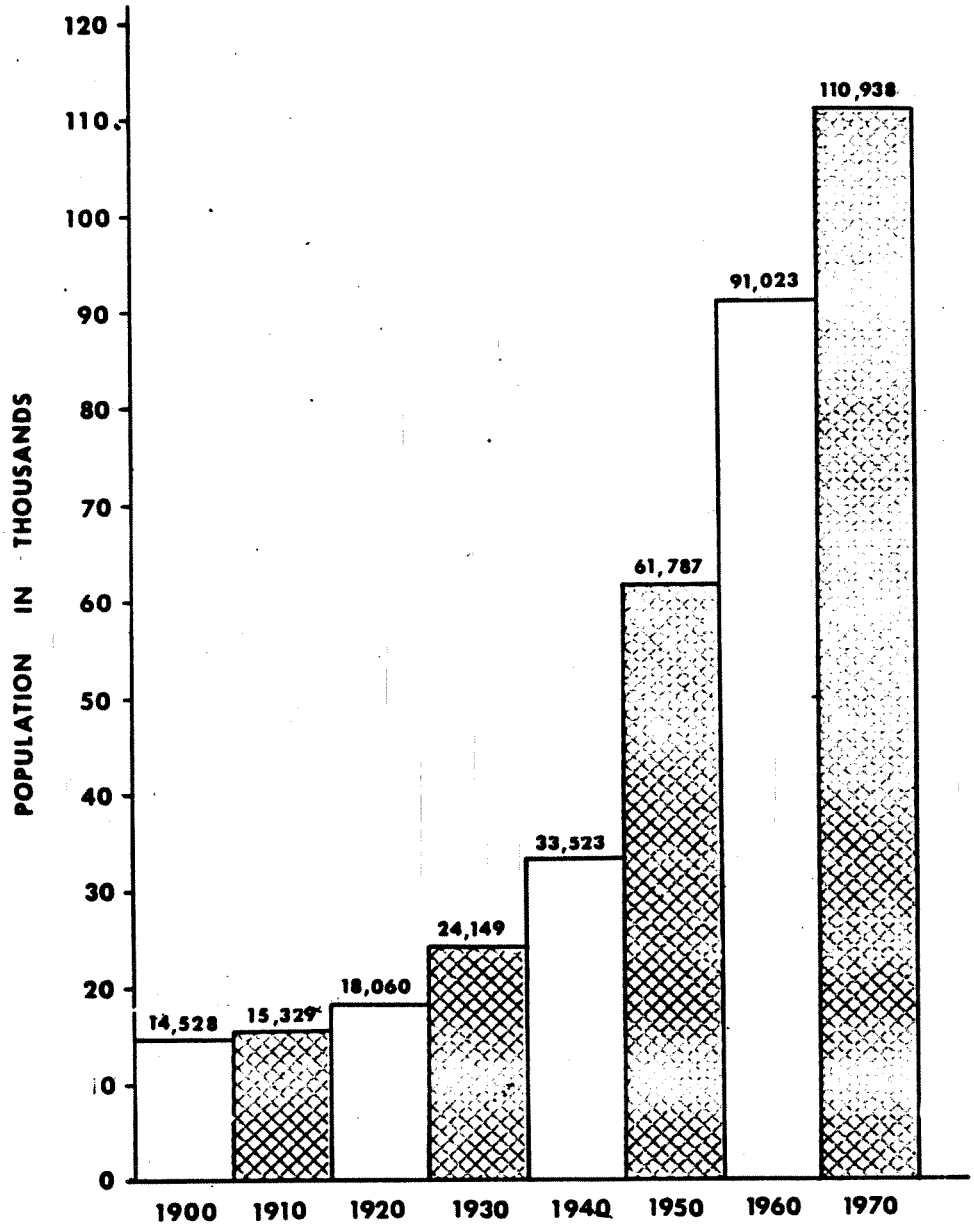
The Commission is primarily responsible for planning and development of an efficient transportation system for Northern Virginia and to represent the suburban jurisdictions on the Washington Metropolitan Area Transit Authority and the National Capital Regional Transportation Planning Board. The Commission draws its membership from among Arlington and Fairfax Counties, the cities of Alexandria, Fairfax and Falls Church and the Virginia Department of Highways.

Washington Metropolitan Area Transit Authority

This Regional Authority was created by Congress in 1966 for the establishment of a Metro System in the Metropolitan Region. Its statutory members represent the following jurisdictions/agencies - District of Columbia, the Washington Suburban Transit Commission, composed of Montgomery and Prince Georges Counties in Maryland, and the Northern Virginia Transportation Commission. The local jurisdictions, including Alexandria, contribute towards capital cost of establishment of the Metro System.

Northern Virginia Regional Park Authority

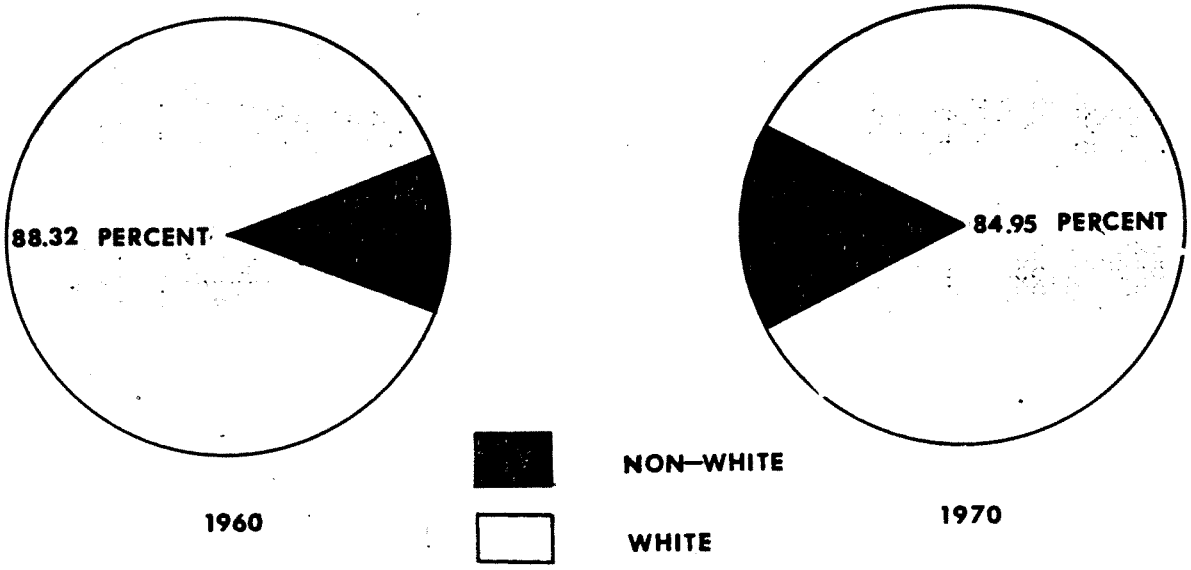
This Authority created by state law in 1959 is responsible for the acquisition, development, maintenance and operation of regional parks co-owned by it with its members - Arlington and Fairfax Counties and the Cities of Falls Church, Fairfax and Alexandria.



POPULATION 1900 - 1970

ALEXANDRIA, VIRGINIA

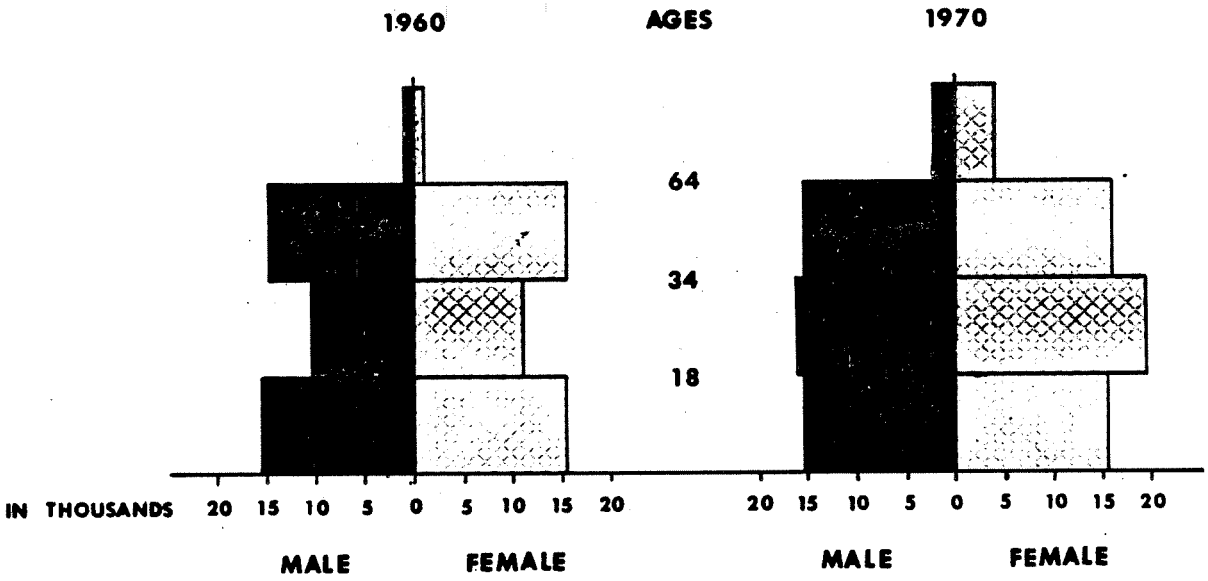
APPENDIX II



POPULATION BY RACE

ALEXANDRIA , VIRGINIA

APPENDIX III



POPULATION BY AGE AND SEX

ALEXANDRIA , VIRGINIA

APPENDIX IV

APPENDIX V

Federally Assisted Housing Projects

Units	Project Name	Program	Date Completed
111	George Parker Homes	Public Housing	Pre-1960
130	John Roberts Homes	Public Housing	Pre-1960
166	Samuel Madden Homes	Public Housing	Pre-1960
15	Ramsay Homes	Public Housing	Pre-1960
194	James Bland Homes	Public Housing	Pre-1960
328	Cameron Valley Homes	Public Housing	Pre-1960
29	Mudtown	Urban Renewal	1965
69	Jefferson Village	FHA 221(d) (3)	1967
90	Andrew W. Adkins Homes	Public Housing	1967
24	Payne Street Site	FHA 236	1970
25	First Street Site	FHA 235	1970-71
40	Stevenson Site	FHA 235	1971
85	Dip Urban Renewal	FHA 236	1971-72
180	Dip Urban Renewal	FHA 235	1971-72
1,486			

APPENDIX VI

Circulation of Books for Alexandria Library System for Fiscal Year 1968-69

	Queen St.	Burke	Bookmobile	Total
Adult nonfiction (pamphlets, maps, periodicals and newspapers)	111,422	27,604	12,001	151,027
Adult Fiction	57,603	57,379	21,713	136,695
Total Adult	169,025	84,983	33,714	287,722
Juvenile	84,845	42,919	18,611	146,375
Grand Total	253,870	127,902	52,235	434,097

Non-Book Materials at All Locations

	Holdings	Circulation
Films	760	15,184
Phonorecords	5,591	29,597*
Pamphlets	15,666	
Talking books	1,074	1,222
TOTAL		16,406
Grand Total Circulation (book and non-book)		450,503

*Included in book circulation

Source: Alexandria Library Annual Report 1968-69.

SUMMARY OF

CAPITAL IMPROVEMENT PROGRAM

AND

CAPITAL IMPROVEMENT BUDGET

230

1971-72 BUDGET SUMMARY OF CAPITAL IMPROVEMENT PROGRAM

	CATEGORY	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
00	SCHOOLS	$ 5,684,830		$ 5,684,830	$ 3,589,230
05	LIBRARIES	19,100		19,100	
10	HOUSING & COMMUNITY DEVELOPMENT	19,271,290	10,684,655	8,586,635	2,395,294
15	RECREATION & CULTURAL ACTIVITIES	4,827,189	525,000	4,302,189	1,000,659
20	PUBLIC BUILDINGS	1,038,628	541,491	497,137	259,987
21	HEALTH	8,067,500		8,067,500	111,166
25	FIRE DEPARTMENT	659,950		659,950	6,000
30	POLICE DEPARTMENT	652,430		652,430	16,848
35	TRAFFIC	41,500		41,500	20,000
40	RAPID TRANSIT	30,374,974		30,374,974	8,505,974
45	PUBLIC WORKS-STREETS & BRIDGES	47,964,158	33,056,500	14,907,658	2,999,746
50	PUBLIC WORKS-STORM SEWERS	21,245,641	16,720,000	4,525,641	426,247
55	PUBLIC WORKS-SANITARY SEWERS	5,489,864		5,489,864	313,298
	TOTAL	$145,337,054	$61,527,646	$83,809,408	$19,644,449

BR FORM 72-2

LESS: ADDIT. SCHED. THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
$ 441,000	$ 1,654,600	$500,000	$ 50,000	$725,600	$379,000		
19,100							
405,341	5,786,000	1,300,000	1,336,000	1,500,000	1,650,000		
28,999	3,272,531	810,499	479,016	484,016	514,000	500,000	485,000
23,150	214,000	117,000	97,000				
	7,956,334	4,183,834	3,772,500				
633,450	20,500	20,500					
135,582	500,000			500,000			
	21,500	21,500					
	21,869,000	5,180,000	4,802,000	3,614,000	2,489,000	1,874,000	3,910,000
695,112	11,212,800	2,109,800	1,614,750	1,713,250	2,315,000	1,135,000	2,325,000
138,330	3,961,064	189,064	1,552,000	470,000	1,400,000	300,000	50,000
213,566	4,963,000	300,000	1,240,000	980,000	1,013,000	1,330,000	100,000
$2,733,630	$61,431,329	$14,732,197	$14,943,266	$9,986,866	$9,760,000	$5,139,000	$ 6,870,000

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1971-72 BUDGET

	PROJECT TITLE	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
	SCHOOLS 00				
12	Jefferson-Houston Elementary School	$2,079,115		$2,079,115	$2,029,115
14	George Washington High School-Renovation	979,725		979,725	346,125
15	Maury Elementary School -Renovation	385,990		383,990	235,990
20	Mac Arthur Elementary -Renovation and Addition	988,000		988,000	963,000
22	Charles Houston School Building	100,000		100,000	
24	Cora Kelly Elementary School -Addition	648,000		648,000	15,000
25	T. C. Williams High School -Athletic Facilities	30,000		30,000	
26	John Adams Middle School	10,000		10,000	
30	Mount Vernon School Community Center	20,000		20,000	
33	Elementary School Addition -West End	421,000		421,000	
35	Robert E. Lee Elementary School-Renovation	23,000		23,000	
	TOTAL - SCHOOLS	$5,684,830		$5,684,830	$3,589,230

BR FORM 72-2

1971-72 BUDGET

LESS: ADDIT. SCHED THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
	$ 50,000	$ 50,000					
	633,600			633,600			
	150,000	50,000	50,000	50,000			
	25,000	25,000					
	100,000	100,000					
441,000	192,000	192,000					
	30,000	30,000					
	10,000	10,000					
	20,000	20,000					
	421,000			42,000	379,000		
	23,000	23,000					
441,000	$1,654,600	$500,000	$50,000	$725,600	$379,000		

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1971-72 BUDGET

	PROJECT TITLE	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
	LIBRARIES 05				
3	Main Library-Renovation	$ 19,100		$ 19,100	
	HOUSING & COMMUNITY DEVELOPMENT 10				
2	Gadsby Commercial Renewal -Phases I & II	7,959,560	5,784,655	2,174,905	2,174,905
3	The Dip Renewal Area	6,280,000	4,900,000	1,380,000	165,000
5	Housing Resources and Neighborhood Improvements	931,730		931,730	55,389
7	King Street Streetscape	100,000		100,000	
10	Central Business District-West	1,500,000		1,500,000	
12	Potomac-East and Potomac-West Neighborhood Improvement Program	2,500,000		2,500,000	
	TOTAL - URBAN RENEWAL	$19,271,290	$10,684,655	$8,586,635	$2,395,294
	RECREATION AND CULTURAL ACTIVITIES 15				
1	Chinquapin and Forest Park	659,699		659,699	475,699
8	Patrick Henry Field and Center	260,000		260,000	10,000
12	Pocket Parks and Recreation Areas	118,458		118,458	9,459

DR FORM 72-2

1971-72 BUDGET

LESS: ADDIT. SCHED. THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
$ 19,100							
129,000	1,086,000	100,000	136,000	350,000	500,000		
276,341	600,000	150,000	150,000	150,000	150,000		
	100,000	50,000	50,000				
	1,500,000	350,000	350,000	450,000	350,000		
	2,500,000	650,000	650,000	550,000	650,000		
$405,341	$5,786,000	$1,300,000	$1,336,000	$1,500,000	$1,650,000		
	184,000	65,000	35,000	40,000	29,000	15,000	
10,000	240,000	240,000					
18,999	90,000	15,000	15,000	15,000	15,000	15,000	15,000

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1971-72 BUDGET

	PROJECT TITLE	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
	RECREATION AND CULTURAL ACTIVITIES 15 (Cont'd)				
13	Northern Virginia Regional Parks	2,436,932		2,436,932	503,401
14	Park Acquisition and Development	302,100		302,100	2,100
15	Rolf Tract Acquisition, Stream Valley	1,050,000	525,000	525,000	
	TOTAL - RECREATION AND CULTURAL ACTIVITIES	$4,827,189	$ 525,000	$4,302,189	$1,000,659
	PUBLIC BUILDINGS 20				
1	City Shop and Central Services Building	97,500		97,500	10,350
3	Acquisition and Preservation of Historical Buildings	941,128	541,491	399,637	249,637
	TOTAL - PUBLIC BUILDINGS	$1,038,628	$ 541,491	$ 497,137	$ 259,987
	HEALTH 21				
3	Alexandria Hospital Expansion	$8,067,500		$8,067,500	$ 111,166
	FIRE DEPARTMENT 25				
2	Training and Research Center	249,750		249,750	6,000
3	Fire Station #8	389,700		389,700	

BR FORM 72-2

1971-72 BUDGET

LESS: ADDIT. SCHED. THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
	1,933,531	290,499	304,016	304,016	345,000	345,000	345,000
	300,000	50,000	50,000	50,000	50,000	50,000	50,000
	525,000	150,000	75,000	75,000	75,000	75,000	75,000
$28,999	$3,272,531	$810,499	$479,016	$484,016	$514,000	$500,000	$485,000
3,150	84,000	17,000	67,000				
20,000	130,000	100,000	30,000				
$23,150	$ 214,000	$117,000	$ 97,000				
	$7,956,334	$4,183,834	$3,772,500				
243,750							
389,700							

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1971-72 BUDGET

	PROJECT TITLE	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
	FIRE DEPARTMENT 25 (Cont'd)				
5	Air Conditioning Fire Stations	17,500		17,500	
8	Fire Alarm-Radio	3,000		3,000	
	TOTAL - FIRE DEPARTMENT	$ 659,950		$ 659,950	$ 6,000
	POLICE DEPARTMENT 30				
4	Police Communications System	152,430		152,430	16,848
6	Police Department Building Addition	500,000		500,000	
	TOTAL - POLICE DEPARTMENT	$ 652,430		$ 652,430	$ 16,848
	TRAFFIC DEPARTMENT 35				
4	Signal System-Duke Street	30,000		30,000	20,000
14	Duke and Van Dorn Streets	11,500		11,500	
	TOTAL - TRAFFIC DEPARTMENT	$ 41,500		$ 41,500	$ 20,000
	RAPID TRANSIT 40				
1	Metro Area Transit System	$30,374,974		$30,374,974	$8,505,974
	PUBLIC WORKS - STREETS AND BRIDGES 45				
3	Eisenhower Avenue, Route 236 to Van Dorn, South	6,238,735	4,670,000	1,568,735	368,735

BR FORM 72-2

1971-72 BUDGET

LESS: ADDIT. SCHED. THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
	17,500	17,500					
	3,000	3,000					
$633,450	$ 20,500	$ 20,500					
135,582							
	500,000			500,000			
$135,582	$ 500,000			$ 500,000			
	10,000	10,000					
	11,500	11,500					
	$ 21,500	$ 21,500					
	$21,869,000	$5,180,000	$4,802,000	$3,614,000	$2,489,000	$1,874,000	$3,910,000
	1,200,000	200,000	300,000		250,000	250,000	200,000

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240 **1971-72 BUDGET**

	PROJECT TITLE	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
	PUBLIC WORKS - STREETS AND BRIDGES 45 (Cont'd)				
6	Duke Street, Jordan to Shirley	2,937,338	2,448,000	489,338	414,338
11	Streets Reconstructions and Extensions	607,068		607,068	82,813
12	Sidewalk, Curb and Gutter	397,158		397,158	7,158
27	Edsall Road, Woodland Drive to City Limits	462,759		462,759	102,759
31	Beauregard, Lincolnia to King	3,444,000	1,500,000	1,944,000	744,000
32	U. S. Rte. 1, Bridge and Approaches to Monroe Avenue	8,060,000	6,545,000	1,515,000	144,688
33	Duke Street, Roberts Lane to Diagonal, Intersection of King, Russell, and Callahan Drive	3,844,500	3,182,500	662,000	44,500
34	Holmes Run Parkway, Van Dorn to Duke Street	305,000		305,000	125,000
38	Quaker Lane, Duke to King	746,300		746,300	226,300
39	Howard Street, Braddock to Imboden Street	235,000		235,000	30,000
42	Rte 1, Bellefonte to Arlington	4,650,000	3,916,500	733,500	
43	Union Street, Franklin to Oronoco	420,000		420,000	183,155
44	Wheeler Avenue, Duke to Holmes Run	500,000		500,000	165,000

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1971-72 BUDGET

LESS: ADDIT. SCHED. THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
	75,000	75,000					
34,255	490,000	75,000	75,000	80,000	80,000	90,000	90,000
30,000	360,000	60,000	60,000	60,000	60,000	60,000	60,000
	360,000				180,000	180,000	
	1,200,000	300,000					900,000
110,312	1,260,000	610,000	350,000	300,000			
	617,500		130,000	37,500	225,000	225,000	
	180,000	180,000					
93,700	426,300	101,300		75,000	250,000		
5,000	200,000	100,000		100,000			
	733,500	27,000	70,750	70,750	15,000		550,000
36,845	200,000		100,000	100,000			
10,000	325,000			100,000	150,000	75,000	

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242 **1971-72 BUDGET**

	PROJECT TITLE	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
	PUBLIC WORKS - STREETS AND BRIDGES 45 (Cont'd)				
45	Braddock Road, North Howard to Quaker Lane	275,000		275,000	
46	Glebe Road, Florence Drive to Shirlington	45,000		45,000	
47	Seminary Road, Quaker Lane to Jordan	291,300		291,300	181,300
49	Fillmore Avenue, Chambliss to Seminary	30,000		30,000	
51	Intersection, Van Dorn and Duke Street	2,000,000	1,700,000	300,000	
52	Mill Road, East of Telegraph Road	380,000		380,000	100,000
54	Duke Street, Diagonal to Alfred	3,100,000	2,600,000	500,000	
61	Prince Street, Daingerfield to Diagonal	260,000		260,000	
63	Slaters Lane, Portner Road Abington Road	100,000		100,000	
65	North Van Dorn, Holmes Run to Seminary Road	95,000		95,000	
66	Washington Street, North City Limits to Beltway	575,000	277,500	297,500	20,000
67	Fillmore, Seminary to Beauregard	160,000		160,000	

BR FORM 72-2

1971-72 BUDGET

LESS: ADDIT. SCHED. THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
60,000	215,000				215,000		
	45,000		45,000				
	110,000				110,000		
	30,000					30,000	
150,000	150,000			150,000			
40,000	240,000			140,000	100,000		
	500,000		50,000	150,000			300,000
	260,000		60,000	200,000			
	100,000		20,000		80,000		
	95,000	95,000					
105,000	172,500		172,500				
20,000	140,000	140,000					

BR FORM 72-2

1971-72 BUDGET

	PROJECT TITLE	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
	PUBLIC WORKS - STREETS AND BRIDGES 45 (Cont'd)				
68	Beauregard, Route 7 Grade Separation	3,100,000	2,550,000	550,000	
69	Fort Williams Parkway, Duke to Seminary	175,000		175,000	60,000
71	Duke Street, Longview to Jordan	4,350,000	3,570,000	780,000	
73	TOPICS Program-Various Locations	180,000	97,000	83,000	
	TOTAL - PUBLIC WORKS - STREETS AND BRIDGES	$47,964,158	$33,056,500	$14,907,658	$2,999,746
	PUBLIC WORKS - STORM SEWERS 50				
1	Holmes Run and Cameron Run Channel	4,333,365	3,250,000	1,083,365	33,365
3	Extensions and Reconstructions	363,076		363,076	19,746
5	Storm Sewer Separation-Gadsby Renewal	225,000		225,000	127,936
6	Four Mile Run Flood Control	15,915,600	13,470,000	2,445,600	93,600
7	Dowden Terrace Storm Drain	271,600		271,600	151,600
12	Braddock Road Sewer Separation	42,000		42,000	
13	Stevenson Avenue Storm Sewer	25,000		25,000	

BR FORM 72-2

1971-72 BUDGET

LESS: ADDIT. SCHED. THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
	550,000		100,000	150,000	300,000		
	115,000	115,000					
	780,000		30,000		300,000	225,000	225,000
	83,000	31,500	51,500				
$695,112	$11,212,800	$2,109,800	$1,614,750	$1,713,250	$2,315,000	$1,135,000	$2,325,000
	1,050,000		50,000		750,000	250,000	
43,330	300,000	50,000	50,000	50,000	50,000	50,000	50,000
	97,064	97,064					
	2,352,000		1,452,000	300,000	600,000		
	120,000			120,000			
	42,000	42,000					
25,000							

BR FORM 72-2

1971-72 BUDGET

	PROJECT TITLE	TOTAL COST	STATE FEDERAL & OTHERS	NET CITY COST	LESS: FUNDED THRU 4-1-71
	PUBLIC WORKS - STORM SEWERS 50 (Cont'd)				
15	Larchmont Storm Sewer Replacement	70,000		70,000	
	TOTAL - PUBLIC WORKS - STORM SEWERS	$21,245,641	$16,720,000	$4,525,641	$ 426,247
	PUBLIC WORKS - SANITARY SEWERS 55				
1	Tan Yard Ditch-Royal to Henry	574,800		574,800	181,800
5	Extensions and Reconstructions	678,064		678,064	36,164
6	Bragg Street-Sanitary Sewer	30,000		30,000	
7	Clyde Avenue Relief Sewer	110,000		110,000	
8	Stevenson Avenue-Sanitary Sewer	22,000		22,000	
9	Abington Drive-Sanitary Sewer	180,000		180,000	
10	Eastern Area-Sanitary Sewer Separation	3,015,000		3,015,000	95,334
11	Four Mile Run Interceptor Relief Lane	880.000		880,000	
	TOTAL - PUBLIC WORKS - SANITARY SEWERS	$5,489,864		$5,489,864	$ 313,298

BR FORM 72-2

1971-72 BUDGET

LESS: ADDIT. SCHED. THRU 6-30-71	REMAINING CITY COST	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
70,000							
$138,330	$3,961,064	$189,064	$1,552,000	$470,000	$1,400,000	$300,000	$ 50,000
	393,000		130,000	130,000	133,000		
41,900	600,000	100,000	100,000	100,000	100,000	100,000	100,000
30,000							
	110,000		110,000				
22,000							
	180,000					180,000	
119,666	2,800,000	150,000	400,000	750,000	750,000	750,000	
	880,000	50,000	500,000		30,000	300,000	
$213,566	$4,963,000	$300,000	$1,240,000	$980,000	$1,013,000	$1,330,000	$100,000

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Appendix VIII

DESIGNATED THOROUGHFARES

Expressways

a. Capital Beltway
b. Shirley Memorial Highway
c. Telegraph Road
d. Transportation Study Area, that area between the George Washington Parkway and the Potomac Rail Yards, north of Slaters Lane to the City Limits

Arterial Highways

a. Beauregard Street
b. Braddock Road between West Street and Commonwealth Avenue
c. Clermont Avenue between the Capital Beltway and Duke Street
d. Daingerfield Road between Prince Street and King Street
e. Duke Street west of Patrick Street
f. Eisenhower Avenue
g. Franklin Street between Washington Street and Patrick Street
h. Janney's Lane
i. King Street west of Commonwealth Avenue
j. Quantrell Avenue
k. Seminary Road
l. U.S. Route One
m. Van Dorn Street south of Duke Street
n. Washington Street and the George Washington Memorial Parkway
o. West Street between Braddock Road and Pendleton Street
p. Mount Vernon Avenue west of Commonwealth Avenue

Primary Collector Streets

a. Bashford Lane
b. Braddock Road west of Commonwealth Avenue
c. Callahan Drive
d. Church Street as it provides access from the Beltway
e. Commonwealth Avenue south of Reed Avenue
f. Diagonal Road between Prince Street and Duke Street
g. Edsall Road west of Pickett Street
h. Franklin Street east of Washington Street
i. Glebe Road
j. Gunston Road west of Valley Drive
k. Hampton Street, North
l. Howard Street north of Seminary Road
m. Jordan Street between Duke Street and Howard Street
n. Kenmore Avenue
o. King Street between Commonwealth Avenue and Union Street
p. Madison Street between Henry Street and Union Street

q. Mill Road
r. Monroe Avenue east of Russell Road
s. Mount Vernon Avenue between Braddock Road and Commonwealth
t. Montgomery Street, between Henry Street and Union Street
u. Old Wheeler Avenue
v. Pendleton Street between West Street and Union Street
w. Pershing Avenue
x. Powhatan Street
y. Russell Road north of Glebe Road
z. South Pickett Street between Duke Street and South Van Dorn Street
aa. Stevenson Road between Yoakum Street and South Van Dorn Street
bb. Stovall Street
cc. Sunset Drive
dd. Union Street north of King Street
ee. Valley Drive north of Allison Street
ff. Van Dorn Street north of Duke Street
gg. West Street between Duke Street and Pendleton
hh. Yoakum Street, South

Residential Collector Streets

a. Cameron Mills Road south of Summit Street
b. Cameron Street west of St. Asaph Street
c. Chambliss Street, North
d. Columbus Street north of Franklin Street
e. Crest Street
f. Fern Street west of Kenwood Avenue
g. Fillmore Street
h. First Street between St. Asaph Street and Washington Street
i. Fort William Parkway
j. Gordon Street south of Duke Street
k. High Street
l. Howard street between Seminary Road and Jordan Street
m. Hume Avenue, East
n. Jordan Street, between Seminary Road and Howard Street
o. Kenwood Avenue
p. Monticello Boulevard
q. Old Dominion Boulevard between Glebe Road and Monticello Boulevard
r. Pegram Street between Taney Avenue and Pickett Street
s. Pickett Street between Pegram Street and Braddock Road
t. Prince Street west of St. Asaph Street
u. Raymond Avenue
v. Reed Avenue
w. Russell Road south of West Glebe Road
x. St. Asaph Street between Franklin Street and First Street
y. Sanger Avenue
z. Summit Street
aa. Taney Avenue west of Jordan Street
bb. Taylor Run Parkway, West, south of Janney's Lane
cc. Union Street between King Street and Franklin Street
dd. Valley Drive south of Allison Street
ee. Windsor Avenue