FRANCONIA-SPRINGFIELD AREA

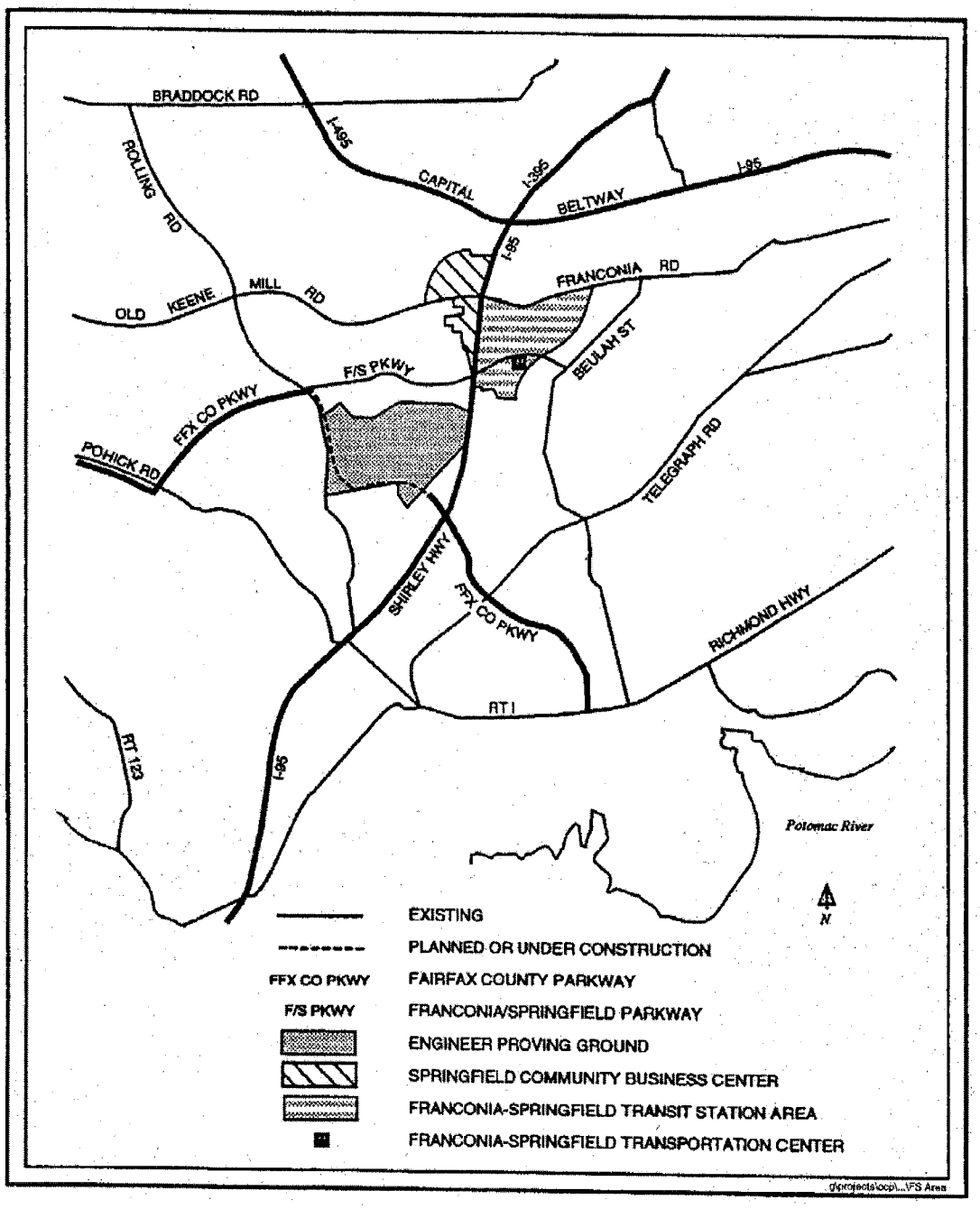
OVERVIEW

The Franconia-Springfield Area is located in the central portion of the Springfield Planning District, generally extending along I-95 from Commerce Street to the I-95/Newington interchange. It contains two established employment and retail centers: the Franconia-Springfield Transit Station Area, and the Springfield Community Business Center (See Figure 1). The Franconia-Springfield Area also contains the Fort Belvoir Engineer Proving Ground (EPG), which is proposed for redevelopment as a major mixed-use center.

The Engineer Proving Ground site is an approximately 805-acre military reservation located between I-95 and Rolling Road, south of Hooes Road. Through special federal legislation, the former military research and training facility may be converted to a mixed-use development comprised of office, research and development, conference center/hotel, neighborhood retail and residential uses. The development proposed for the Engineer Proving Ground will expand future employment and housing opportunities in the Franconia-Springfield Area.

The Franconia-Springfield Transit Station Area is located east of I-95 and south of Franconia Road. The Transit Station Area includes the Joe Alexander Transportation Center. The Joe Alexander Transportation Center features Metrorail and Virginia Rail Express service, with commuter parking and bus service. The Transit Station Area also includes Springfield Mall, which is one of the County's largest shopping centers.

The Springfield Community Business Center is located west of I-95, north and south of Old Keene Mill Road, and offers a variety of community-serving retail goods and services. The CBC contains some housing and has potential for additional mixed-use development. The Community Business Center is envisioned to function as the town center of the Franconia-Springfield Area.



FRANCONIA-SPRINGFIELD AREA **FIGURE 1**

FORT BELVOIR ENGINEER PROVING GROUND (EPG)

BACKGROUND

The development is organized into three distinct phases, as detailed in the "Engineer Proving Ground Land Unit Recommendations" section. The proposal for EPG is termed one of "conditional density" because development will be monitored by the County at pre-established points in the development process to ensure that any development impacts associated with the project have been successfully mitigated before additional development would be approved and/or initiated. Project monitoring should be established in relation to the three development phases with the review and approval of final development plans for the land units occurring as part of each phase.

Certain commitments with respect to the provision of infrastructure and public facilities that are designed to offset impacts and provide a public benefit to Fairfax County and the surrounding community are described herein and include such items as:

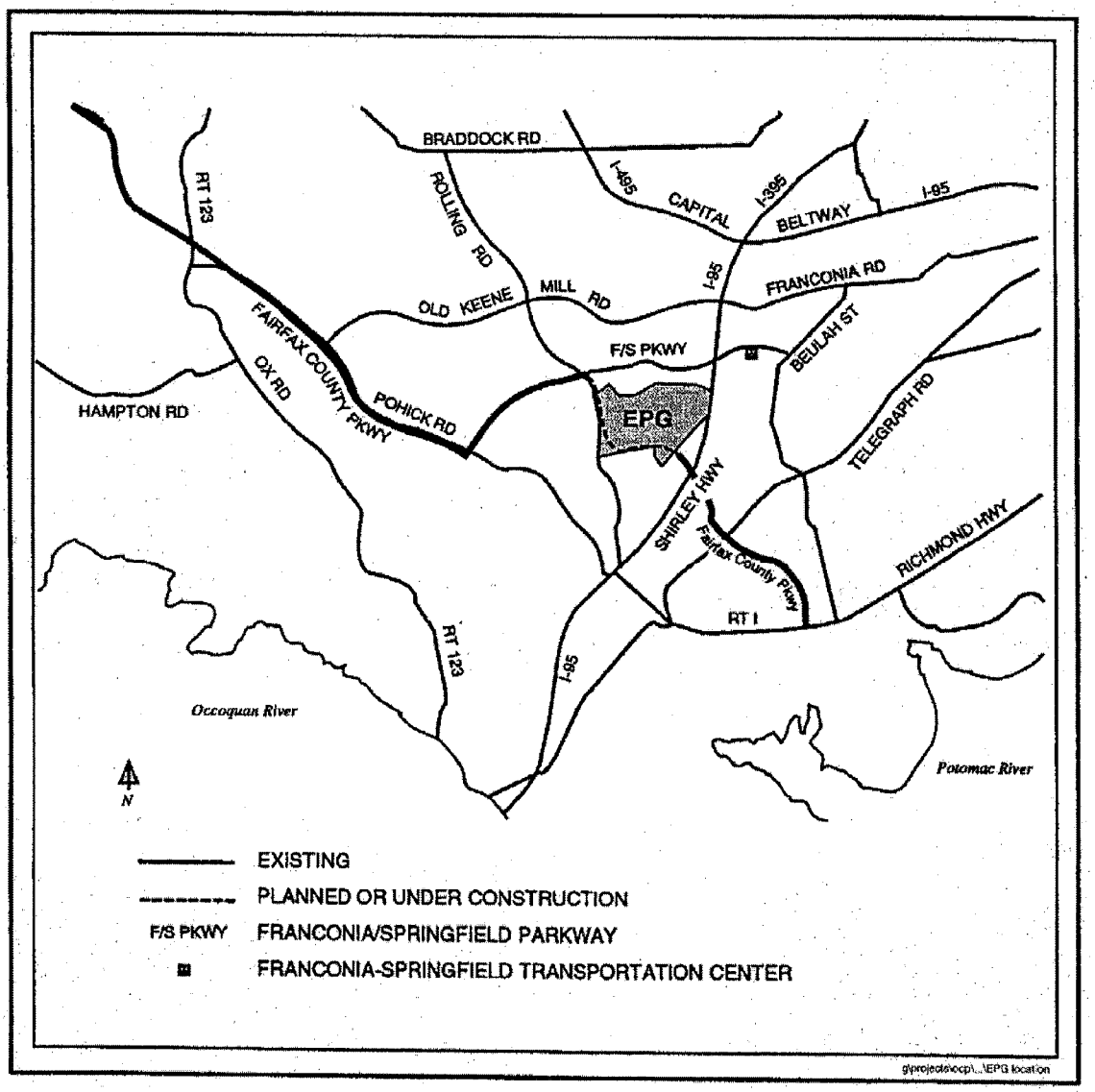
- Dedication of the entire Accotink Stream Environmental Quality Corridor, and other environmentally sensitive lands as may identified through appropriate environmental review to the Fairfax County Park Authority;
- Dedication of all land planned for public parks west of the Accotink Stream Environmental Quality Corridor to the Fairfax County Park Authority;
- Provision of Transportation Demand Management programs and strategies that will ultimately result in 15 percent of the employees at the EPG arriving by means other than the single occupant vehicle; and
- Dedication of sites within EPG for public facilities, including transit, school and fire and rescue station sites, and right-of-way for the Fairfax County Parkway.

These and other commitments for infrastructure to mitigate impacts and provide public benefit have been incorporated into the Area-wide and land unit recommendations sections of the Plan.

CHARACTER

The Fort Belvoir Engineer Proving Ground (EPG) is an approximately 805-acre site located between Rolling Road and Interstate 95, south of the Springfield Community Business Center. It is located approximately 10 miles northwest of Fort Belvoir Main Post. (See Figure 2) Since the EPG was formerly used by the Army Corps of Engineers as a research and testing site, the site is largely vacant with only a few, relatively small, existing structures.

The EPG is on high ground, generally between 200 and 300 feet above sea level. The Accotink Creek stream valley bisects the EPG from north to south, dividing it into two nearly equal parts. Broad level terraces are present on each half of the site. The majority of steep



ENGINEER PROVING GROUND LOCATION **FIGURE 2**

slopes are found along both sides of Accotink Creek. Other steep slopes are formed by secondary streams and swales that feed into Accotink Creek.

The EPG is bordered by low-density residential uses to the north and west and industrial development to the south and east. The residential development in the immediate area is predominantly single family detached in nature. Typical residential densities range from 3-4 dwelling units per acre. The industrial development to the south and east of the EPG is mostly warehousing and distribution.

The EPG is located west of I-95 (Shirley Highway) and south of the Franconia-Springfield Parkway, but does not have direct access from either of these facilities. Principal access to the existing military reservation is from Backlick Road. The planned Fairfax County Parkway will traverse the site along its western and southern boundaries, and provide future direct access into the property from a planned interchange of Rolling Road with the Fairfax County Parkway.

MAJOR OBJECTIVES

The following are the major planning objectives under the mixed-use development concept for the Engineer Proving Ground:

- Provide an opportunity for employment and housing, while ensuring that development is adequately supported by transportation and public facilities improvements to offset any potentially negative impacts.

- Provide sites for a school and a fire and rescue facility to serve the EPG and the surrounding community.

- Satisfy the demonstrated recreation needs deficiency in this portion of the County by acquiring parkland at the EPG site and developing a complex of active recreation uses.

- Create development that incorporates high-quality architecture and landscape design and clusters development within nodes to encourage transit use and enhance open space.

- Provide transitions to residential neighborhoods to the north and west, and within the development from mixed-use nodes to surrounding lower density areas by tapering building heights, and incorporating effective buffering and screening.

- Provide an opportunity for the Springfield Community Business Center to expand its market potential by providing goods and services to the residents and employees of EPG.

- Create a user-friendly pedestrian and non-motorized vehicle network of sidewalks and trails which provide ready access to employment, housing, parks and transit facilities.

- Achieve and maintain acceptable levels of roadway performance through a variety of mechanisms including roadway and/or transit improvements, and implementation of

an aggressive Transportation Demand Program to reduce single occupancy vehicle usage.

- Preserve the Accotink Stream Valley Environmental Quality Corridor and other natural features, such as environmentally sensitive land and heritage resources, and provide a trail system linking the Stream Valley to the countywide and regional trails network.

- Develop a regional stormwater management plan in coordination with Fairfax County, to alleviate the adverse effects of development on stream water quality and quantity.

ENGINEER PROVING GROUND AREA-WIDE RECOMMENDATIONS

LAND USE

In addition to the following recommendations, please refer to the recommendations provided in the Springfield District section of the Plan.

Baseline Recommendation

The Engineer Proving Ground is planned for public facilities, government and institutional, and public park uses until such time as the mixed-use option described below is exercised, either through an agreement between the County and the Army or a rezoning of the property. Any development or redevelopment plans by the Federal government under this baseline recommendation should be coordinated with Fairfax County and appropriate officials of the Commonwealth of Virginia and should be consistent with adopted County goals and the Fairfax County Comprehensive Plan.

Mixed-Use Development Option at the EPG

As an option, this approximately 805-acre site may be considered for mixed-use development under the following general conditions:

- Development is limited to an overall intensity of .17 FAR (calculated over the 805 acres of the site) to reflect a total of no more than 4.5 million gross square feet of non-residential development and 1,500 multifamily and 85 patio-style single family dwelling units conditioned upon achievement of performance standards specified in the Comprehensive Plan;

- Non-residential development will reflect the following mix of uses:

  - Office use, including research and development (in millions of square feet of gross floor area) — 3.60 MSF
  - Convenience and accessory retail use — 0.30 MSF
  - Hotel/conference center uses — 0.60 MSF

- Development is organized into three distinct phases, as detailed in the "Engineer Proving Ground Land Unit Recommendations" section.

- Residential use is inclusive of any "bonus" units allowed under the provisions of the County's Affordable Dwelling Unit Ordinance; and

- Development approval of each phase is contingent upon the provision of infrastructure, subject to monitoring and mitigation of any adverse impacts to the maximum extent possible, and adequate development plan detail to ensure conformance with the Comprehensive Plan. Transportation improvements shall be maintained at a minimum of Level of Service "D". Other infrastructure adequacy

shall be determined by the guidance contained in the Comprehensive Plan Policy volume and the standards contained in the Fairfax County Public Facilities Manual.

Development Concept

The Plan calls for the creation of a large active and passive public park to include the Accotink EQC and most of the land west of the EQC. To implement this recommendation, the entire Accotink Stream Valley Environmental Quality Corridor and all land west of the Accotink Stream Valley Environmental Quality Corridor that is not identified for other uses is planned to be dedicated to Fairfax County Park Authority. The park will provide a sylvan retreat and active recreation activities. Specific recommendations are located in the "Parks and Recreation" section.

The eastern portion of the site is planned to be developed with three high intensity, mixed-use nodes that will be surrounded by areas of lesser intensity (Figure 3). The recommendations for the land units describe the desired character of each area in terms of structure type, building heights, and design guidelines. For the purpose of understanding the recommendations for the eastern portion of the EPG, "low-rise" generally means buildings up to 4 stories in height, "mid-rise" generally means buildings 5-8 stories in height, and "high-rise" generally means buildings over 8 stories in height.

Each high intensity node is planned for a complementary mix of uses such as office, hotel, retail and residential uses up to a maximum 2.0 FAR. Development in the nodes is restricted primarily to mid- and high-rise buildings to create pedestrian oriented urban character. Where recommended, high-density residential use will be developed as an integral element.

Complementary land uses are planned for the site area located outside the nodes. Development in these non-nodal areas should be in low to mid-rise buildings and arranged to provide a transition between the high intensity nodes and open space/recreational areas and the residential communities located to the north and west of the EPG. Open space and active recreation facilities are important features to be incorporated in these areas. The Plan also recommends the dedication of land for a fire and rescue services station within the eastern portion of the site.

An area on the northern boundary of the EPG is specifically planned for patio-style single-family development. These residential units will provide a transition to the adjacent existing residential neighborhoods outside of the site. To enhance the transition to existing residential neighborhoods, a vegetated buffer at least 100 feet in width, supplemented with additional landscaping as needed, is to be provided along the northern and western boundaries of the EPG.

A well conceived pedestrian and non-motorized circulation network should be incorporated into the development of each high intensity node as a way to link uses within the node and to integrate these uses with amenities such as parks and urban plazas. The pedestrian and non-motorized circulation network should also link residential areas, employment centers and community facilities with planned transit facilities.

Within all mixed-use areas, both node and non-node, neighborhood retail uses may be appropriate. Usable open space and urban parks/plazas should be incorporated into the design scheme for development in all areas. Urban parks should be pedestrian oriented and provide space for lunchtime and after work events.

Project Monitoring and Phasing

The EPG development should be phased in such a way that public facilities and effective mitigation measures will be in place for completed or substantially completed phases, before proceeding to future development phases. Since the development will take place incrementally, the County is afforded the opportunity to monitor the EPG development and to link each phase of development to the satisfactory achievement of specified performance standards and/or development conditions. The ability to link future development to the provision of public facilities, particularly those related to transportation and schools, and the satisfactory fulfillment of certain specified conditions is a critical element of the Plan for the EPG.

Some specific transportation improvements are recommended with each phase and land unit. However, additional improvements may be required based on the findings of traffic study that is required at initial rezoning and with each final development plan. These improvements may be in addition to the transportation improvements currently cited in the adopted County Transportation Plan, or public facilities recommendations.

If it is determined by the County at the time of FDP review that adverse impacts have not or cannot be successfully mitigated, the amount of development within the respective land unit may be reduced to a level that can be adequately supported by public facility and roadway infrastructure. The total level of development within the land unit may be restored upon demonstrating that adequate infrastructure capacity is available.

The development phases are tied to specific land units. The amount and type of development for each phase and land unit is detailed in the "Engineer Proving Ground Land Unit Recommendations" section of the Plan. To facilitate overall project monitoring and phasing, the land units are to be developed in sequential order. Development of one land unit must be substantially complete before proceeding to the next land unit. For example, Phase I non-residential building construction should be at least 80 percent completed (as determined by the total square footage for which occupancy permits have been granted as a proportion of the total gross square footage approved for the land unit) and major infrastructure needed to serve the land unit should be 100 percent completed and operational prior to the approval of the Final Development Plan for Phase II. However, if at the end of Phase I, the need for additional infrastructure is identified through project monitoring, the additional improvements should be provided as part of Phase II development. Should subsequent development be delayed or halted, the developer will be responsible for providing the necessary improvements. These completion standards would apply to all subsequent development phases through project completion.

A Planned Development Commercial District, (PDC) zone would be appropriate to implement the mixed-use development concept. To ensure high quality site design and integration of uses, a Conceptual Development Plan (CDP) for the entire site should be developed. The CDP should meet all submission requirements detailed in the Zoning Ordinance and allow for the evaluation of the character and intensity of the development, and the ability of existing and proposed transportation, education and other public facilities to support the development. Final Development Plans (FDP) for each land unit and phase identified in the Plan should be submitted for approval at the beginning of each development phase and evaluated on the basis of conformance with the approved CDP and ability to meet the performance standards and conditions associated with each phase and other applicable standards. These FDPs should meet all submission requirements detailed in the Zoning Ordinance and provide a level of detail sufficient to evaluate the elements as excerpted below:

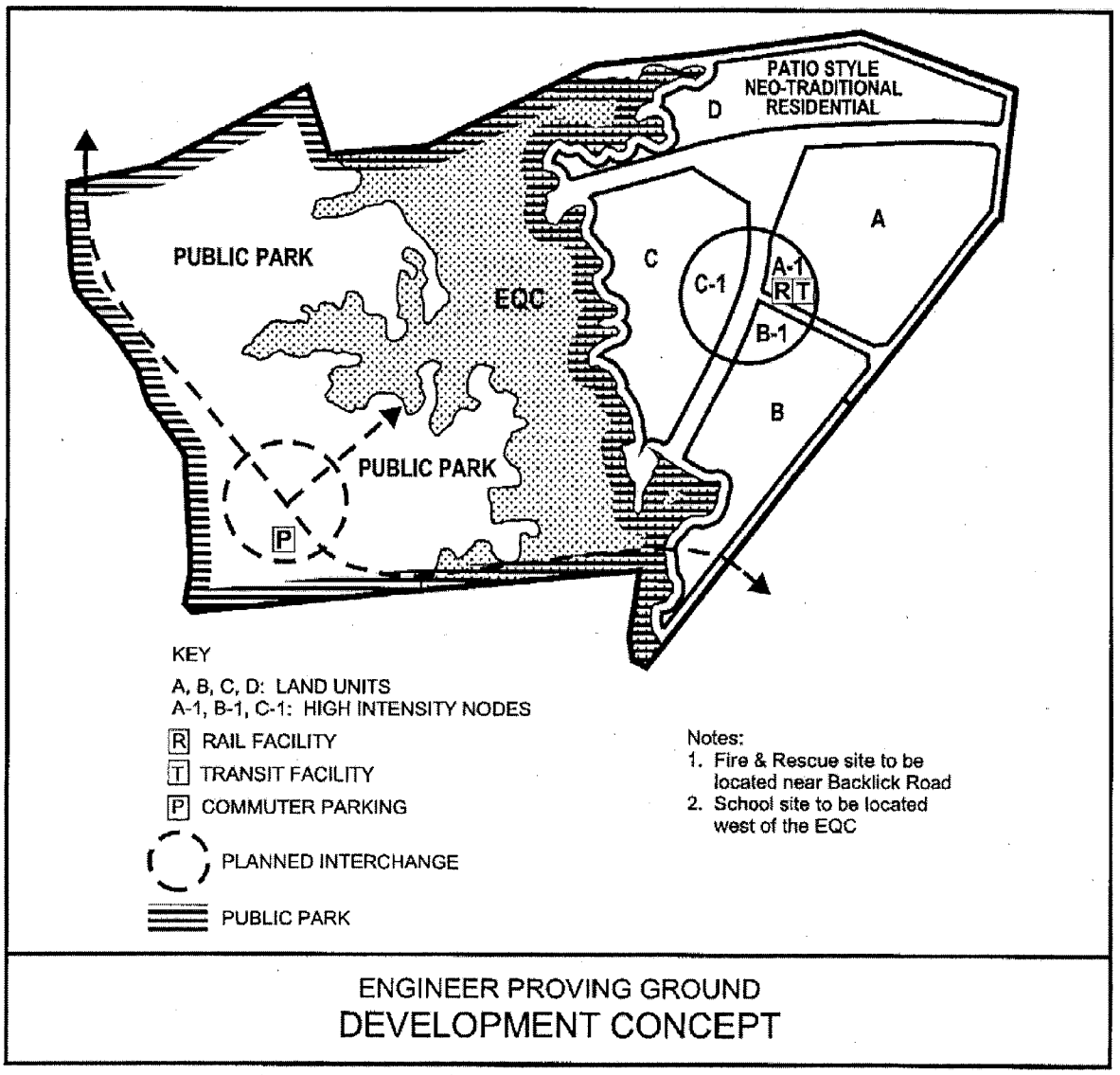
- Topography at five foot intervals, with delineation of environmental quality corridors, wetlands, hydric soils and stormwater management areas;
- Location and acreage of land unit(s);
- Location and description of all land uses, parking type and configuration, pedestrian and non-motorized circulation, and orientation and integration of land uses;
- Open space and landscaping treatment;
- Location and size of proposed active recreation areas to be provided with residential development;
- Location of public facilities sites, including a school and fire and rescue sites;
- Location of transit shuttle station(s) and depiction of how development will be oriented to encourage transit use; and
- Depiction of traffic circulation systems.

Project monitoring will consist of periodic project review and evaluation. This review will be conducted by County staff and will occur prior to each development phase at the time when Final Development Plans are submitted for approval. Each FDP will provide information on the design and physical layout of the uses proposed for the particular land unit and development phase under consideration. A detailed transportation study, which documents current traffic conditions, performance of intersections, roadway segments, and interchanges in the area, the degree to which non-Single Occupancy Vehicle (non-SOV) usage has occurred, and other relevant factors must be prepared by the developer and submitted with the FDP. This detailed transportation study is a critical element in determining the degree to which demand generated by EPG development will be (or has been) accommodated. In addition, FDP approval is linked to the satisfactory fulfillment of certain conditions specified in the Area-wide and Land Unit recommendations.

Urban Design Objectives

The urban design objectives are intended to achieve the goal of protecting the built environment adjacent to the EPG site and the natural environment, while promoting high-quality urban design for the future development that occurs at EPG. All development for the EPG should be responsive to the following design objectives which apply throughout the EPG site.

1. Provide high-quality development that is functionally integrated, orderly and attractive.
2. Create a positive and easily recognizable identity for the Engineer Proving Ground as a whole, and for the three individual development nodes. Establish a sense of place and assist in orienting people to find their way to the area's workplaces, stores, and other facilities.



ENGINEER PROVING GROUND
DEVELOPMENT CONCEPT

FIGURE 3

3. Design development to ensure pedestrian access among buildings, thus reducing reliance on the auto; provide open space for active and passive recreation, and visual relief; allow opportunities for shared parking; and generally promote the efficient use of land.

4. Create vehicular and pedestrian/non-motorized vehicle circulation systems that minimize conflicts between these different modes of travel, and that are clearly identified for easy use.

5. Protect adjacent residential neighborhoods from the impacts of new development by establishing vegetated buffers and complementary landscaping features, as well as maintaining high standards for architectural quality and minimize noise, glare and traffic and parking intrusions.

6. Protect and enhance environmental and heritage resources, integrating these features into development to the greatest extent possible.

7. Create an internal roadway system that functions well, is visually appealing, and provides effective circulation and linkages to the various uses developed on the site.

8. Promote a positive image for the Engineer Proving Ground in keeping with the high architectural, design and lighting standards associated with major mixed-use centers in the County.

9. Create a comprehensive sign system that establishes a distinctive identity and prevents visual clutter.

Three high intensity mixed use nodes (A-1, B-1 and C-1) planned for urban intensities up to 2.0 FAR are primary features of the EPG. The high intensity mixed use nodes are described in detail in the Land Unit Recommendations section. Given the intensity of these nodes and their central role in the overall development concept for EPG, it is important that uses within these nodes be integrated and complementary and contribute to creating a high-quality mixed-use environment. Therefore, in addition to satisfying the design objectives for the EPG, development plans for each of these nodes should be responsive to the following design guidelines:

- Create an urban development pattern by bringing buildings close to each other and to the road.

- Create a street-level mix of support service and retail uses that is visually attractive, and which will focus services for pedestrian convenience. The concept should encourage pedestrian activities and contribute to the vitality of the area.

- Create a comprehensive and well-marked system of safe and attractive sidewalks/trails that link adjoining buildings, plazas, shops, urban parks and recreation facilities.

- Develop the area adjacent to any future transit facility to take maximum advantage of the pedestrian access directly from the station to the workplace. The area adjacent to the transit facility should be attractive and inviting, with clear signage to make

movement easy and convenient between the station, the workplace and retail and service facilities.

- Integrate retail and service establishments within office and high-rise residential buildings, or on the routes commonly taken by transit users, in order to capture those shopping trips on the way to and from the office.

- Incorporate urban parks/plazas within convenient walking distance of office buildings in order to provide open space as a readily accessible amenity.

- Encourage shared parking between uses with different parking needs such as hotels and offices, to use valuable land more efficiently and to reduce the amount of impervious surface.

- Build public spaces such as pavilions, plazas, amphitheaters and terraces for seasonal celebrations, fairs and other community events, thus adding important vitality and evening activity.

- Incorporate parking into structures, either above- or underground where feasible, and limit surface parking to no more than 35 percent of the parking required for the site.

- Integrate parking decks and structures into the overall landscape to create a pleasing visual image. Perimeter plantings and spandrel planters on the decks/structures are encouraged to lend a softening effect to facades and add visual variety.

Environmental Analysis/Clean-up

Because the Engineer Proving Ground was previously used for research and testing by the military, the Army will be responsible for any environmental analysis and/or clean-up of any toxic or hazardous waste or other environmental hazard existing on the land prior to conveyance to the County.

The exact acreage and legal description of real property to be conveyed shall be determined by surveys satisfactory to the Secretary of the Army and Fairfax County. Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), the Clean Water Act (CWA), the Safe Water Drinking Act (SDWA) and any and all other pertinent environmental statutes and regulations, the Secretary shall retain liability for the environmental hazards on the site as of the date of transfer. At least ninety (90) days prior to any land disturbing activities, the Army should provide written notice to the County of proposed activities and the Army shall conduct or permit to be conducted a cultural resource survey and a natural resources survey. Sensitive cultural areas shall be identified and protected in accordance with the recommendations of the County Archaeologist. Natural resource areas shall be surveyed, identified, and protected in accordance with the recommendations of the Park Authority.

Dedication of Public Lands

Before or with conveyance of the EPG site to the County, the Plan recommends the dedication of land as described in the following paragraphs. Access to dedicated lands other than by trails of like means may not be available until either development occurs or the County provides access. The development levels associated with each phase have been incorporated into

the land unit recommendations; density associated with the lands to be dedicated is part of the development program. Since dedication to the County is recognized by the intensities planned and specified for each land unit, the potential or need for density credit is negated. It is important that dedication of these assets occurs prior to rezoning to maximize their benefit to the County and its citizens.

The dedication of the following lands is required:

1. All right-of-way for transportation facilities needed for full development, including dedication for the Fairfax County Parkway, recognizing that additional right-of-way may be identified during the monitoring and evaluation process required for subsequent phases of development and that such rights-of-way will be dedicated as needed;

2. The Accotink Stream Valley Environmental Quality Corridor to the Fairfax County Park Authority;

3. Approximately 20 acres of useable land west of the Accotink Stream Valley Environmental Quality Corridor for a school site;

4. Up to 8 acres southeast of the Rolling Road and the Fairfax County Parkway interchange for a commuter parking lot;

5. The remaining portion of the land west of the Accotink Stream Valley Environmental Quality Corridor to the Fairfax County Park Authority for park purposes.

6. Approximately 5 acres for a fire and rescue station in the eastern portion of the site near Backlick Road; and

7. A transit facility site of at least 5 acres within the high-intensity core area constituted by subunits A-1, B-1 and C-1.

Transitions and Buffers to Residential Areas

To foster compatibility between EPG development and existing residential communities located to the north, the following recommendations apply to all development on the site:

1. Building heights are tapered down from higher to lower intensity land uses. Building height will be determined by a plan on topographic base indicating a 14° line of sight from points at 200 foot intervals along the northern boundary, as may be further limited by a maximum building height of three stories for patio homes planned to be located along the northern boundary;

2. Buffering and screening is established to satisfactorily transition from the new development to existing development in surrounding areas. A vegetated buffer not less than 100 feet in width, supplemented with additional landscaping as needed, should be provided along the northern boundary;

3. Residential areas adjacent to park facilities are buffered from activity noise and facility lighting through landscape treatment such as vegetated buffers, screening and/or berming.

Type and Configuration of Retail Uses

Retail development at EPG is limited to no more than 300,000 square feet of gross floor area, however some retail be may be developed as office use. Most, if not all, retail use should be located within office, hotel and/or residential structures as a means of promoting mixed-use projects. Given the 1,585 dwelling units planned for the site, there may be a need for a community shopping center to serve residents and employees of the area. To ensure that the center is oriented to the EPG residential and employment communities, the size of the shopping center is limited to a maximum of 50,000 square feet, with no individual use in the center larger than 1/3 of the total gross floor area. Uses requiring special permit or special exception approval will be reviewed on a case-by-case basis and should be permitted only when the use is of a size and scale that will not adversely affect the character of the area.

TRANSPORTATION

Baseline Plan Requirements

The adopted County Transportation Plan identified the following roadway and public transportation improvements in the vicinity of the EPG (See Figure 4):

- Construct the Franconia-Springfield Parkway to an 8 lane section, including HOV lanes and interchanges at Rolling Road, Neuman Street, and I-95
- Construct the Fairfax County Parkway to a 6 lane section, including interchanges with the Franconia-Springfield Parkway, Rolling Road, and I-95 (Newington Interchange);
- Widen Fullerton Road to 4 lanes between Backlick Road and the Fairfax County Parkway;
- Widen I-95 (Shirley Highway) to 11 lanes, including the extension of the existing HOV lanes south to Prince William County;
- Dedicate a site of at least 5 acres for a Transit Facility within the high-intensity core area of the EPG site; and
- Transportation issues associated with the possible extension of the Metro rapid rail transit line from the Joe Alexander Transportation Center (Franconia-Springfield Metro Station) to the Engineering Proving Ground (EPG) should be studied. The area subject to the Metro rail extension should be designated as an "Enhanced Public Transportation Corridor." The extension of the Metro rail should be such that there is no impact upon the existing Loisdale residential subdivision.

These baseline Transportation Plan requirements were developed independent of a detailed analysis and identification of the transportation impacts associated with development on the site of the Engineer Proving Ground.

ENGINEER PROVING GROUND TRANSPORTATION RECOMMENDATIONS

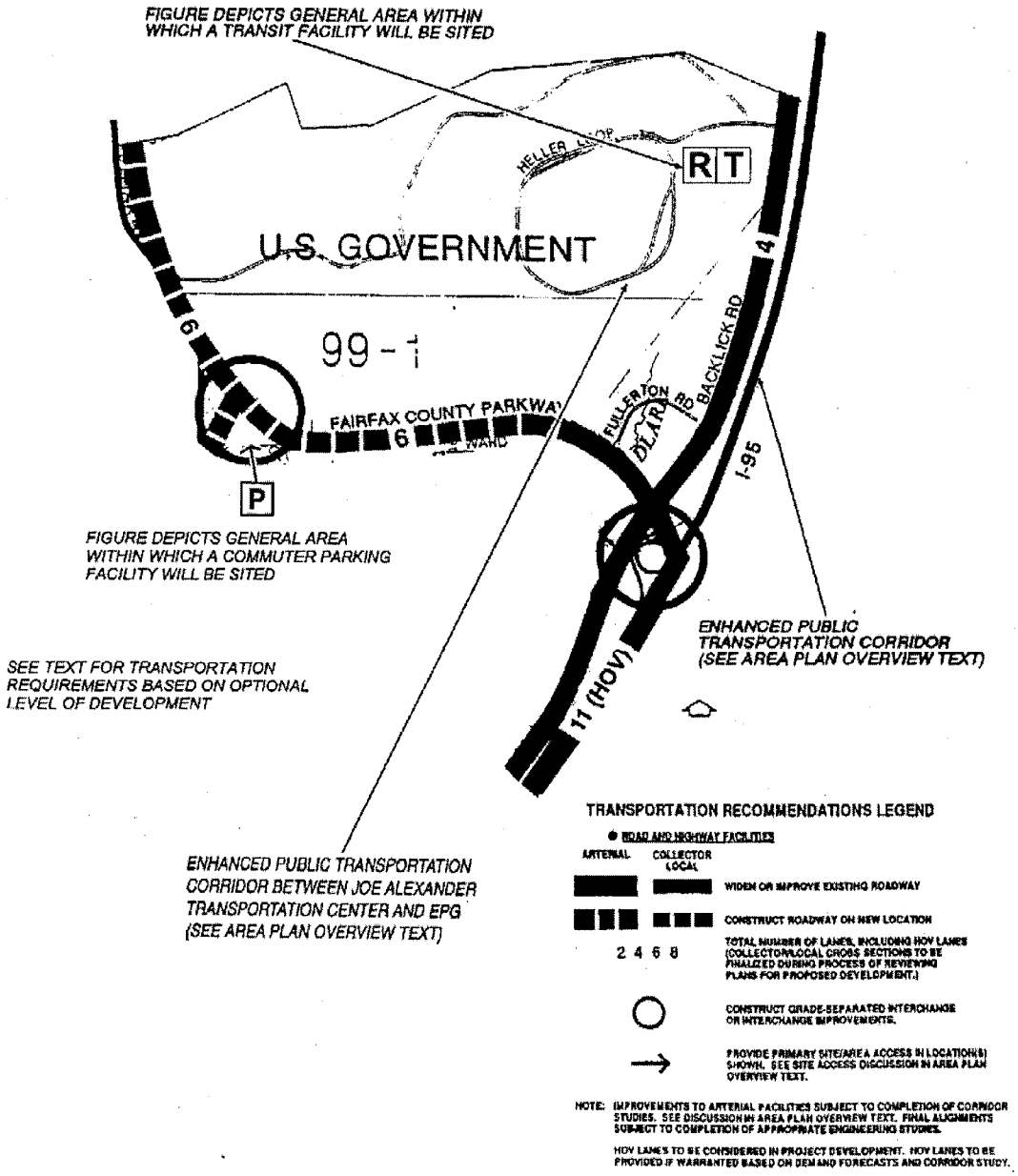


FIGURE 4

Optional Plan Requirements

The land use concept is predicated on the implementation of transportation demand programs (TDM) designed to substantially affect the commuting behavior of those who work at the EPG. The goal of the TDM programs is to achieve an overall mode split of 15 percent or greater for non-single occupant vehicle (SOV) trips - i.e., 15 percent or greater person trips to/from the employment center shall be by transit, carpool, and walking/bicycle. This reflects future expectations of non-SOV usage in mixed-use employment centers.

To ensure the transportation impacts of the proposed mixed-use development at EPG are satisfactorily addressed, the Plan is based on the satisfactory fulfillment of the following elements:

- Preparation by the developer of an overall transportation study as part of the initial rezoning application, to include alignment and phasing of an internal circulation system and submission of detailed transportation studies prior to each phase of development. The initial transportation study should evaluate existing transportation conditions and analyze the impacts of the traffic associated with the overall development. The recommendations of this study will be taken into consideration by the County in determining the timing of construction of improvements and may include acceleration of implementation in advance of that indicated in the land unit recommendations of the Plan. Detailed studies of development proposed for each subsequent phase should be provided with each FDP and should evaluate existing transportation conditions and analyze the impacts of the traffic associated with the respective phase. The transportation studies will be approved by the County and VDOT prior to the approval of the initial rezoning and Final Development Plans for each development phase;

- Provision of assurances that the transportation facilities and services assumed to be operational in the Study will in fact be provided prior to the initial occupancy of each phase;

- Implementation of a transportation monitoring and evaluation program that will be conducted at the conclusion of each development phase. The monitoring and evaluation program will include, at a minimum, an assessment of the performance of:

  - Site entrances and signalized intersections along Backlick Road between the Franconia-Springfield Parkway and the Fairfax County Parkway;

  - All interchanges and intersections on the Fairfax County Parkway and Backlick Road from the Franconia-Springfield Parkway south to I-95 (Newington interchange);

- Implementation of an aggressive transportation demand management program;

- Correction of any problem observed during each monitoring/evaluation phase, or commitment that the problem will be corrected during the subsequent development phase prior to approval of Final Development Plans. Additional access may need to be studied to accommodate the ultimate level of development. Should subsequent development be delayed or halted, the developer will be responsible for providing the necessary transportation improvements. A problem is defined by Level of Service E

or worse performance, and/or other operational problems such as intersection/ entrance blockages by traffic queues, safety problems, etc.; and

- Completion of all necessary engineering, environmental, and other studies relating to modification of access to the interstate system.

ENVIRONMENT

The principal environmental feature of the Engineer Proving Ground is the Accotink Stream Valley Environmental Quality Corridor. The EQC traverses the site from north to south and includes some wetlands located outside the stream valley. These areas should be preserved and protected from development. Protection and support should include the development of Biodiversity Conservation Area practices, monitoring of water quality, stabilization of stream valley erosion, reduction of watershed siltation, removal of invasive species, and mitigation of site contaminants. Protection and enhancement of the watershed should include interpretation and public education about such efforts and their results. The EQC should be made publicly accessible through dedication.

A 15 percent or greater non-SOV mode split is the target for the full buildout of the project. Achieving the specified non-SOV targets and reducing single occupant vehicle usage to EPG will contribute to the County's efforts to improve air quality in the region.

EDUCATION

Analysis of the development potential of EPG and the vicinity indicates that a school site will be needed. In accordance with Policy Plan guidance that the provision of public facilities should be balanced with growth and development, approximately 20 acres of developable land on the western portion of the site should be dedicated to Fairfax County Public Schools. The site should be located in an area that maximizes the potential for students to walk to school and provides safe and convenient access to pedestrian and road networks.

PUBLIC FACILITIES

The level and type of development proposed will generate the need for public facilities sites or improvements including 5-acre site for a fire and rescue station to serve the EPG and the surrounding area. This facility should be located near Backlick Road.

In order to accommodate the EPG development, off-site sewer lines may need to be enlarged. As the EPG develops, the County will monitor the capacity of the lines. If the County judges that the sewer lines need to be enlarged, funding the replacement of the lines (in a manner consistent with standard County policies) will be the responsibility of the developer. Additionally, in conjunction with the development of a regional stormwater management plan, stormwater management sites should be identified at the EPG site.

PARKS AND RECREATION

The following recommendations are intended to ensure that adequate parks and recreation services will be available to offset the need created by the development and help address unmet demand in surrounding communities. The location and type of park and recreational uses should be identified through the Parks Master Planning process so that adequate park and recreation services will be available for residents, employees of and visitors to the Engineer Proving Ground and the surrounding area. The approximately 225-acre Accotink Steam Valley EQC is planned as a "Stream Valley/Greenway Park." Most of the approximately 245 acres west of the EQC will be considered a "Countywide" park and will be planned in subunits that will have different classifications. Other units, as shown on Figure 5, are planned as "Multiple Resource" and "Special Purpose" Parks. If parks are developed within the mixed-use area, it is anticipated that these would function as "Neighborhood Urban" parks. The following recommendations should be considered for the Park Master Planning process:

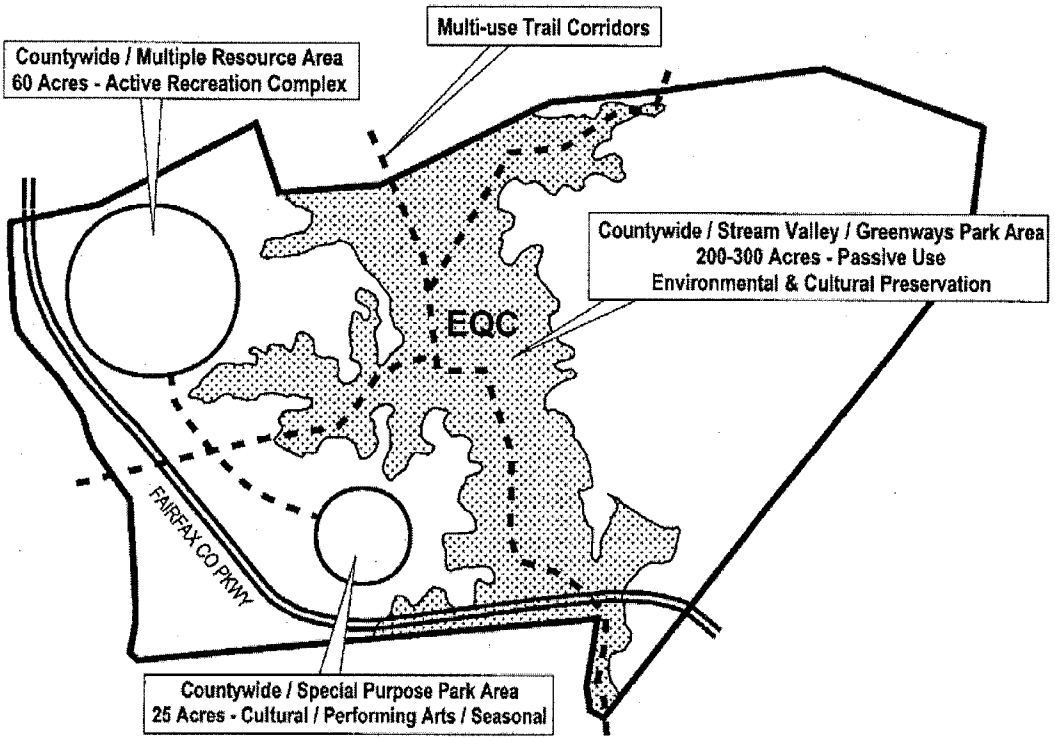
- A 60-acre portion of the park site to be developed as a complex of lighted active recreation fields for use as a sports complex to support community and regional sports interests.

- A 25-acre portion of the park to be developed as a multi-use activity center that should include indoor/outdoor facilities for cultural and seasonal events including performing arts entertainment. Such a facility could be an urban park with improvements such as an amphitheater, a market area, restrooms, concessions and similar support improvements.

Additional Parks and Recreation recommendations for the Engineer Proving Ground are provided on Figure 29 in the Belvoir Community Planning Sector (S5).

TRAILS

Trails planned for the Engineer Proving Ground are delineated on Figure 30 in the Belvoir Community Planning Sector (S5) as part of the Countywide Trails Plan. It is anticipated that pedestrian and bicycle travel will be important modes of transportation at the EPG. A comprehensive network of trails and sidewalks, is essential to providing access to employment, residences, and community uses at EPG. An extensive network of trails and pathways for non-motorized transportation should be developed to connect all public features. The network should also connect to adjacent parkland at the EPG perimeter including such as the Accotink Stream Valley and Hooes Road parks. The trail system should also provide connections to planned or existing trails serving area neighborhoods, the Joseph Alexander Transportation Center, the Springfield Business District on Backlick Road and the Springfield Mall. These connections will be extension provide connections to existing and planned regional trails such as the Franconia-Springfield Parkway trail, the Fairfax County Parkway trail, the Cross County trail via the Accotink Stream Valley, the Lorton/Laurel Hill trails, the Potomac Heritage National Scenic Trail and the Route #1 National Bicycle Trail.



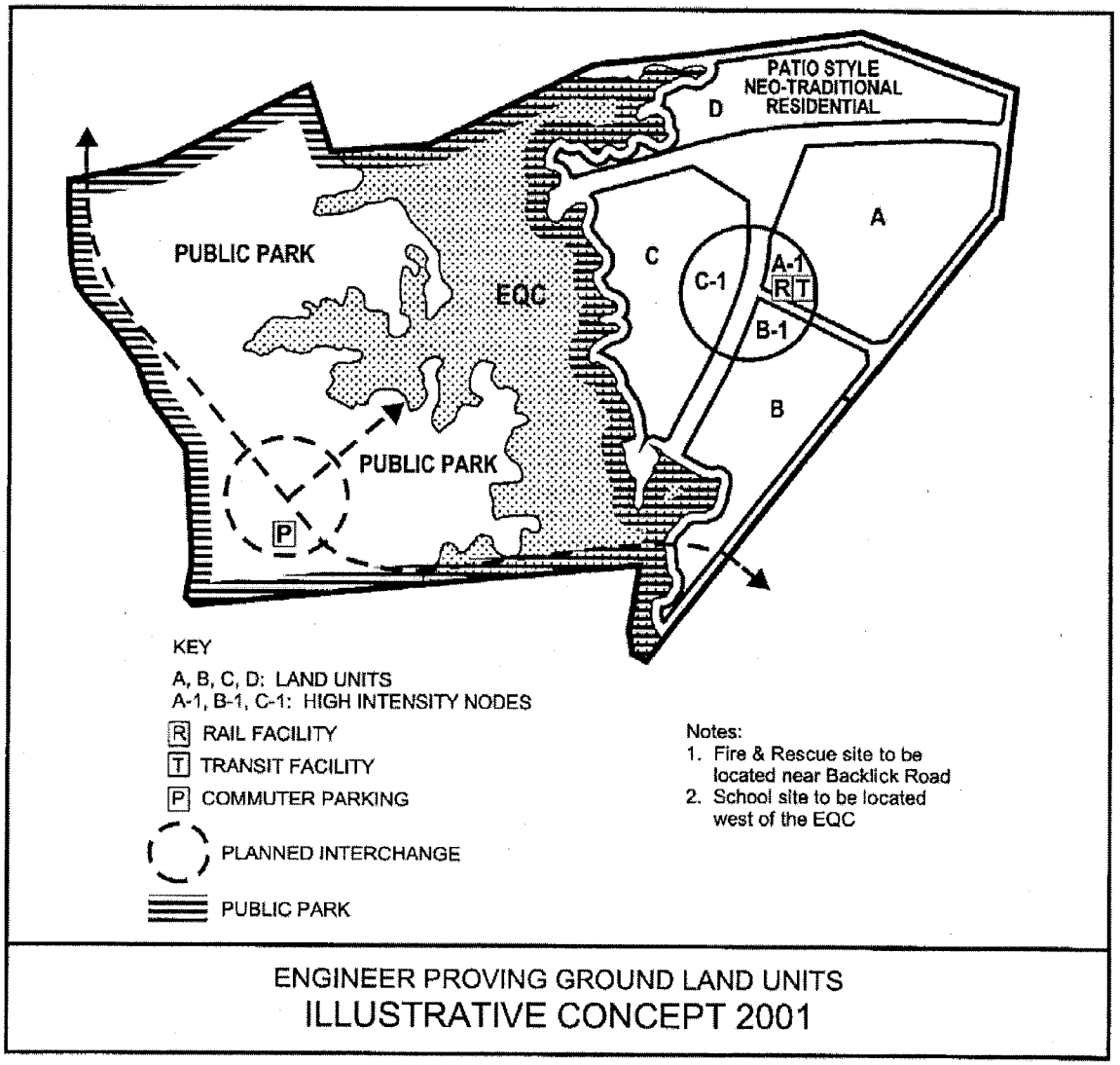
ENGINEER PROVING GROUND
PARKS

FIGURE 5

ENGINEER PROVING GROUND LAND UNIT RECOMMENDATIONS

The recommendations, which follow, provide additional site-specific guidance for development of the Engineer Proving Ground

For the purpose of organizing land use and other site-specific recommendations, the Engineer Proving Ground has been divided into four land units, lettered as shown below on Figure 6. Individual land unit maps included with the text for each land unit show the approximate boundaries of each development phase and a generalized depiction of each land use.



ENGINEER PROVING GROUND LAND UNITS
ILLUSTRATIVE CONCEPT 2001

FIGURE 6

PHASE I
Land Unit A

CHARACTER

Land Unit A is located in the northeast portion of the EPG site and contains approximately 69 acres. Under the option for mixed-use development, this land unit is planned to contain a high-density mixed-use node of approximately 10 acres developed with mid- and high-rise office buildings at an intensity up to 2.0 FAR. The node is planned to be surrounded by low-rise non-residential uses. See Figure 7.

DEVELOPMENT PROGRAM

Land Unit A represents the first phase of development. It consists of a maximum of approximately 1.3 million square feet square feet of non-residential gross floor area as follows:

Office use	1,200,000 square feet
Support retail use	100,000 square feet

Given the magnitude of development planned in the land unit, it is essential that development occur according to an overall plan that demonstrates functional and attractive integration of all land uses and circulation systems, as detailed in the recommendations for urban design. Accordingly, the development plan for this land unit must address the entire land unit. Final Development Plans lacking sufficient detail or addressing only a portion of the land unit will be deemed to be inconsistent with this recommendation.

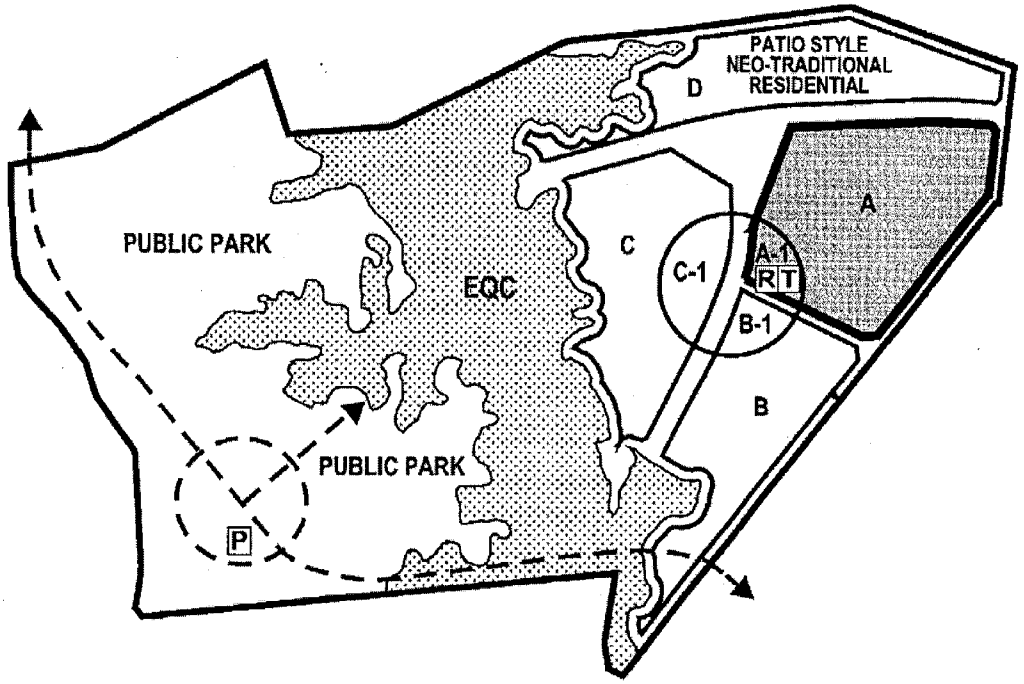
RECOMMENDATIONS

Development proposals and development plans for this land unit will be evaluated based on their conformance with both the Area-wide Recommendations and the Land Unit Recommendations outlined below.

Development outside the node is planned as low-rise non-residential uses. The low-rise, non-residential uses include office and support retail uses in campus style settings. Buffering, screening and other landscape features must be provided to mitigate visual and noise impacts where residential and non-residential uses are to be adjacent to each other. Land uses outside the node are intended to create a distinct visual break from the urban environment created in the node.

Transportation

The transportation facilities and/or services needed to serve Land Unit A of the project, as determined pursuant to the results of the transportation study which is submitted in conjunction with the initial zoning application, shall be provided prior to the initial occupancy of the land unit (See Area-wide Recommendations). In addition to the aggressive TDM program described under Area-wide Recommendations, high frequency transit shuttle service should be provided to and from the Joe Alexander Transportation Center to help achieve a non-SOV mode split target



KEY
A, B, C, D: LAND UNITS
A-1, B-1, C-1: HIGH INTENSITY NODES
R RAIL FACILITY
T TRANSIT FACILITY
P COMMUTER PARKING
PLANNED INTERCHANGE

Notes:
1. Fire & Rescue site to be located near Backlick Road
2. School site to be located west of the EQC

ENGINEER PROVING GROUND
LAND UNIT A - PHASE I

FIGURE 7

of 10 percent or higher during peak periods - i.e., 10 percent or greater person trips to/from the employment center shall be by transit, carpool, and walking/bicycle. The shuttle service may be enhanced in future phases to serve additional development on the site

Trails

Detailed trails and circulation plans should ensure that development occurs in a manner that promotes transit access and use, and fosters linkages between the various planned land uses and the adopted Countywide trail system.

PHASE II
Land Unit B

CHARACTER

Land Unit B is located in the southwest portion of the EPG site and contains approximately 47 acres. Under the option for mixed-use development, this land unit is planned to contain a high-density mixed-use node of approximately 10 acres developed with mid- and high-rise office buildings at an intensity up to 2.0 FAR. The mid- and high-rise buildings within the node are envisioned to be surrounded by low-rise non-residential uses. See Figure 8.

DEVELOPMENT PROGRAM

Land Unit B represents the second phase of development. It consists of a maximum of 1.2 million square feet of non-residential gross floor area as follows:

Office/research and development flex use	1,100,000 square feet
Support retail use	100,000 square feet

Given the magnitude of development planned in the land unit, it is essential that development occur according to an overall plan that demonstrates functional and attractive integration of all land uses and circulation systems, as detailed in the recommendations for urban design. Accordingly, the development plan for this land unit must address the entire land unit. Final Development Plans lacking sufficient detail or addressing only a portion of the land unit will be deemed to be inconsistent with this recommendation.

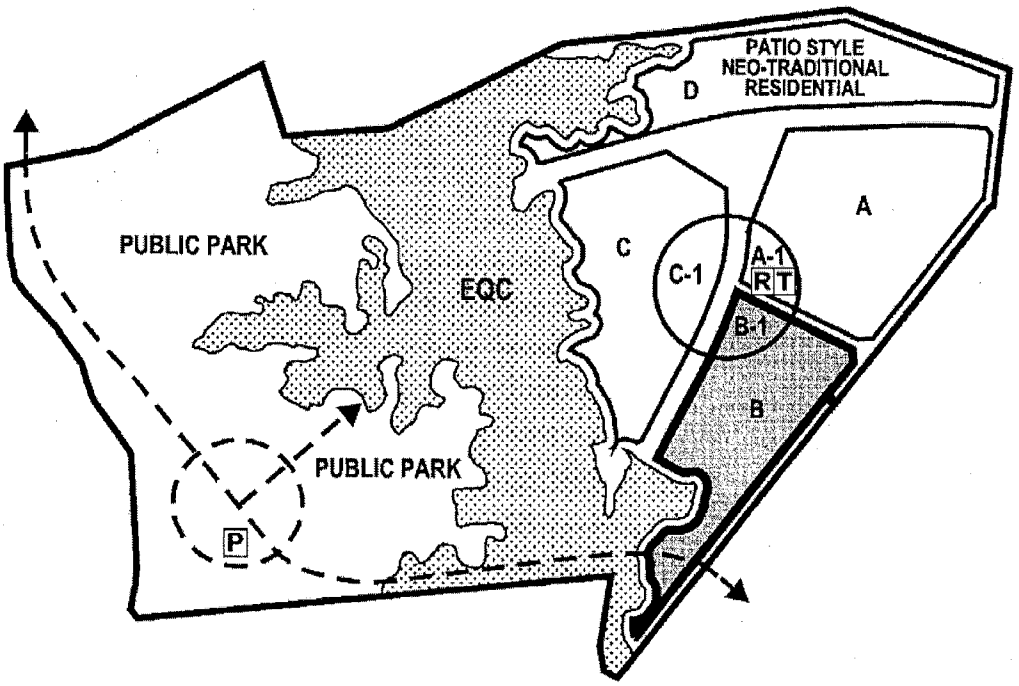
RECOMMENDATIONS

Development proposals and development plans for this land unit will be evaluated based on their conformance with both the Area-wide Recommendations and the Land Unit Recommendations outlined below.

Land Use

Land Unit B is planned for a complementary mix of office, research and development and supporting retail uses located in a high density node of approximately 10 acres tapering down to lower density land uses, located as generally shown in Figure 8.

Development in the high-density nodes is envisioned to be a functionally integrated, well-designed mixture of mid- to high-rise office, research and development uses and supporting retail uses. The node is planned at an intensity up to 2.0 FAR maximum to create a pedestrian-oriented, urban housing and employment center that can be easily served by transit. Building intensity and heights should be tapered down from the node toward the edges to provide a transition to surrounding lower density areas.



KEY
A, B, C, D: LAND UNITS
A-1, B-1, C-1: HIGH INTENSITY NODES
R RAIL FACILITY
T TRANSIT FACILITY
P COMMUTER PARKING
PLANNED INTERCHANGE

Notes:
1. Fire & Rescue site to be located near Backlick Road
2. School site to be located west of the EQC

ENGINEER PROVING GROUND
LAND UNIT B - PHASE II

FIGURE 8

Development adjacent to the node is planned to include low-rise non-residential uses. The low-rise, non-residential uses include office and research and development uses in campus style settings. Land uses outside the node are intended to create a distinct visual break from the urban environments created in the node.

Transportation

The transportation facilities and/or services needed to serve Land Unit B, as determined pursuant to the results of the transportation study which is submitted in conjunction with the Final Development Plan for Land Unit B, shall be provided prior to the initial occupancy of the land unit (See Area-wide Recommendations). In addition to the aggressive TDM program described under Area-wide Recommendations, high frequency transit shuttle service should be provided to and from the Joe Alexander Transportation Center to help achieve a non-SOV mode split target of 15 percent or higher during peak periods - i.e., 15 percent or greater person trips to/from the employment center shall be by transit, carpool, and walking/bicycle.

Trails

Detailed trails and circulation plans should ensure that development occurs in a manner that promotes transit access and use, and fosters linkages between the various planned land uses and the adopted Countywide trail system.

PHASE IIIa
Land Unit C

CHARACTER

Land Unit C is located in the southeast portion of the EPG site and contains approximately 58 acres. Under the option for mixed-use development, this land unit is planned to contain a high-density mixed-use node of approximately 20 acres developed with mid- and high-rise residential and non-residential uses at an intensity up to 2.0 FAR surrounded by low-rise non-residential outside the node. See Figure 9.

DEVELOPMENT PROGRAM

Land Unit C represents the third phase of development. It consists of a maximum of 1500 dwelling units and a maximum of 1.9 million square feet of non-residential gross floor area. The composition of the non-residential component is as follows:

Office use	1,200,000 square feet
Support retail	100,000 square feet
Hotel/conference uses	600,000 square feet

Given the magnitude of development planned in the land unit, it is essential that development occur according to an overall plan that demonstrates functional and attractive integration of all land uses and circulation systems, as detailed in the recommendations for urban design. Accordingly, the development plan for this land unit must address the entire land unit. Final Development Plans lacking sufficient detail or addressing only a portion of the land unit will be deemed to be inconsistent with this recommendation.

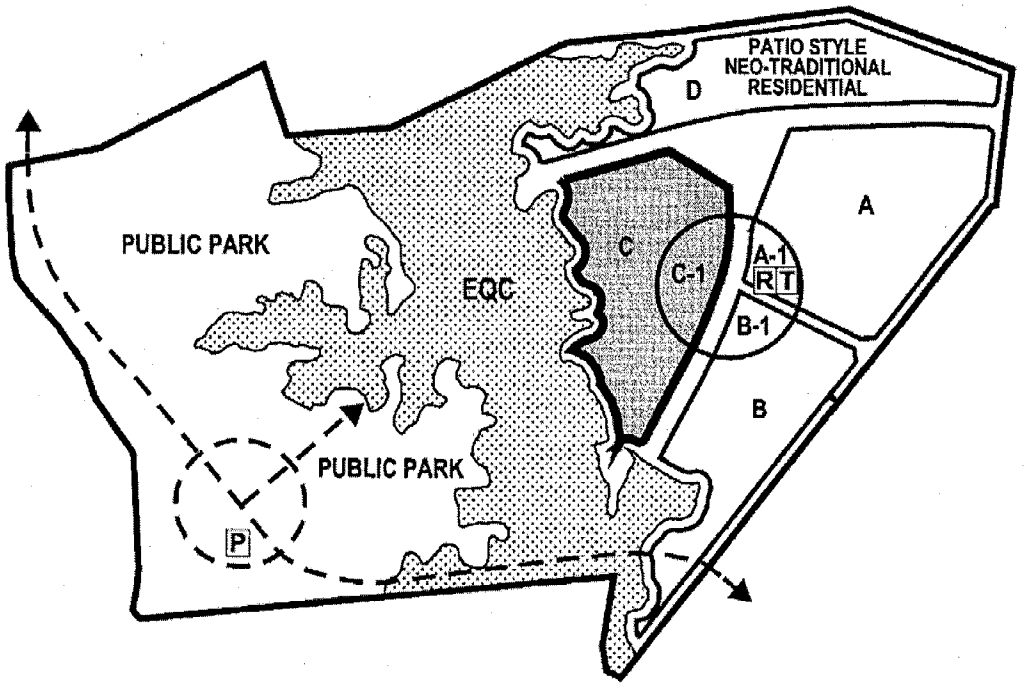
RECOMMENDATIONS

Development proposals and development plans for this land unit will be evaluated based on their conformance with both the Area-wide Recommendations and the Land Unit Recommendations outlined below.

Land Use

Land Unit C is planned for a complementary mix of office, hotel, residential and supporting retail uses located in a high density node tapering down to lower density land uses, located as generally shown in Figure 9.

Development in the high density node is envisioned to include a functionally integrated, well-designed mixture of mid- to high-rise office and hotel/conference uses, mid- to high-rise residential uses, and supporting convenience retail uses. The node is planned at an intensity up to 2.0 FAR maximum to create a pedestrian-oriented, urban housing and employment center that can be easily served by transit. Building intensity and heights should be tapered down from the



KEY
A, B, C, D: LAND UNITS
A-1, B-1, C-1: HIGH INTENSITY NODES
R RAIL FACILITY
T TRANSIT FACILITY
P COMMUTER PARKING
PLANNED INTERCHANGE

Notes:
1. Fire & Rescue site to be located near Backlick Road
2. School site to be located west of the EQC

ENGINEER PROVING GROUND
LAND UNIT C - PHASE III

FIGURE 9

node toward the edges to provide a transition to surrounding lower density areas.

Development adjacent to the node is planned to include garden-style residences and low-rise non-residential uses. The low-rise, non-residential uses include office and hotel/conference uses in campus style settings. Buffering, screening and other landscape features must be provided to mitigate visual and noise impacts where residential and non-residential uses are to be built adjacent to each other. Land uses outside the node are intended to create a visual break from the urban environments created in the node.

Transportation

The transportation facilities and/or services needed to serve Land Unit C of the project, as determined pursuant to the results of the transportation study which is submitted in conjunction with the Final Development Plan for Land Unit C, shall be provided prior to the initial occupancy of the land unit (See Area-wide Recommendations). In addition to the aggressive TDM program described under Area-wide Recommendations, high frequency transit shuttle service should be provided to and from the Joe Alexander Transportation Center to help achieve a non-SOV mode split target of 15 percent or higher during peak periods - i.e., 15 percent or greater person trips to/from the employment center shall be by transit, carpool, and walking/bicycle.

Trails

Detailed trails and circulation plans should ensure that development occurs in a manner that promotes transit access and use, and fosters linkages between the various planned land uses and the adopted Countywide trail system.

PHASE IIIb
Land Unit D

CHARACTER

Land Unit D is located in the northeast portion of the EPG site and contains approximately 46 acres. Under the option for mixed-use development, this land unit is planned for 85 patio style homes. Approximately 9 acres of the Accotink Stream Valley Environmental Quality Corridor are located in this land unit. See Figure 10.

DEVELOPMENT PROGRAM

Land Unit D represents the final phase of development. It consists of a maximum of 85 patio style homes. Patio homes are envisioned as single family detached units located such that one or more of the building walls rests directly on or near a lot line. Given the need to form a transition between higher density development to the south and existing residential use to the north, it is essential that development occur according to an overall plan that demonstrates functional and attractive integration of all land uses and circulation systems, as detailed in the recommendations for urban design and "Transitions and Buffers to Residential Areas." Accordingly, the development plan for this land unit must address the entire land unit. Final Development Plans lacking sufficient detail or addressing only a portion of the land unit will be deemed to be inconsistent with this recommendation.

RECOMMENDATIONS

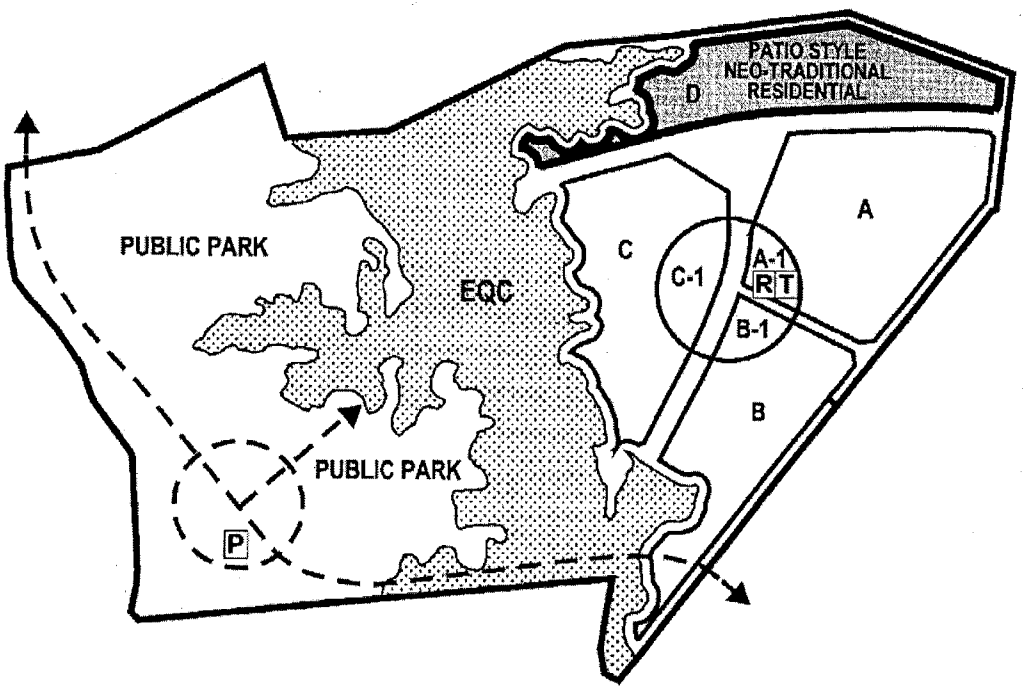
Development proposals and development plans for this land unit will be evaluated based on their conformance with both the Area-wide Recommendations and the Land Unit Recommendations contained outlined below.

Land Use

To ensure effective transition to existing residential uses, a vegetated buffer of at least 100 feet in width is to be provided along the entire northern edge of the property. This buffer should incorporate existing vegetation and be supplemented with additional landscaping as appropriate to buffer the higher density residential areas from the existing single family detached houses.

Trails

Detailed trails and circulation plans should ensure that development occurs in a manner that promotes transit access and use, and fosters linkages between the various planned land uses and the adopted Countywide trail system.



KEY
A, B, C, D: LAND UNITS
A-1, B-1, C-1: HIGH INTENSITY NODES
R RAIL FACILITY
T TRANSIT FACILITY
P COMMUTER PARKING
PLANNED INTERCHANGE

Notes:
1. Fire & Rescue site to be located near Backlick Road
2. School site to be located west of the EQC

ENGINEER PROVING GROUND
LAND UNIT D - PHASE III

FIGURE 10

FRANCONIA-SPRINGFIELD TRANSIT STATION AREA

CHARACTER

The Franconia-Springfield Transit Station Area is located south of Franconia Road between I-95 and the CSX Railroad tracks. The Transit Station Area includes the Joe Alexander Transportation Center; Springfield Crossing; Springfield Station; the Springfield Mall; retail, office, and hotel uses west of Loisdale Road; retail uses along the east side of Frontier Drive; the Federally-owned Parr Warehouse; and the Springfield Center Industrial Park. It also includes the Springfield Forest, Greenwood townhouses, and New Charleston residential communities. Most of the housing in the area is comprised of single-family detached units.

The Joe Alexander Transportation Center is located at a site south of the Franconia-Springfield Parkway adjacent to the CSX Railroad right-of-way. The Transportation Center includes a Metro Station, a Virginia Railway Express commuter rail station, a Greyhound bus station, approximately 5,000 parking spaces, and local bus transfer facilities.

The stream valleys of the upper tributaries of the Long Branch of Accotink Creek cover most of the central and eastern portion of the Planning District. The headwaters of the Long Branch of Accotink Creek form the basis of an environmental quality corridor in this area. Vegetation and wildlife habitats along the stream enhance the open space system. Portions of the area are located in the Coastal Plain geologic province within an aquifer recharge zone and may contain slippage-prone swelling clay soils.

In this planning sector was Oak Grove, a plantation house built around 1820. It was located along Franconia Road, on the current site of the Sunrise Assisted Living Facility. Major undeveloped areas along the CSX Railroad have a high potential for significant heritage resources.

CONCEPT FOR FUTURE DEVELOPMENT

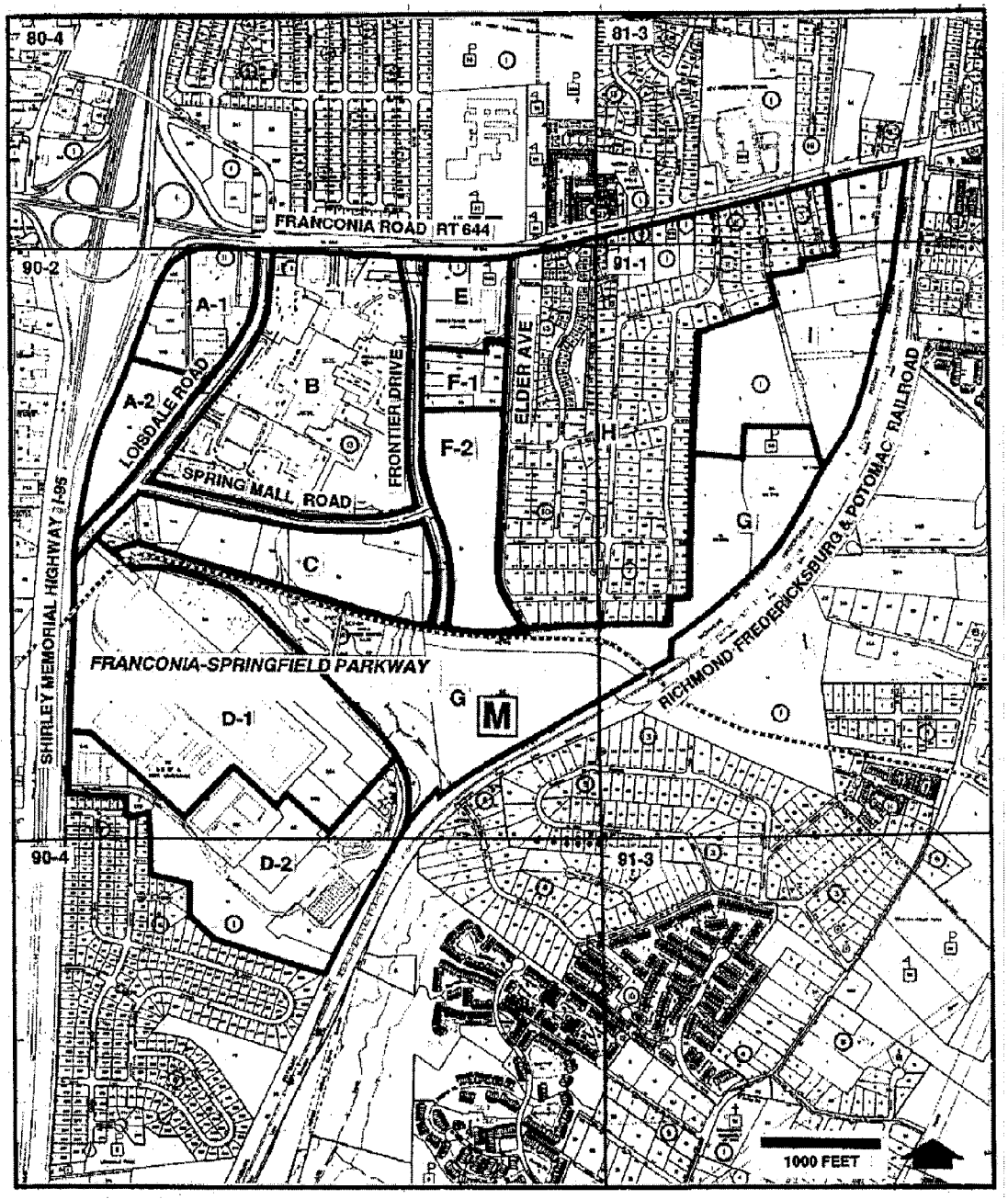
The Concept for Future Development identifies this as a Transit Station Area where mixed-use, transit-oriented development is to be encouraged. The focus of this area is the Joe Alexander Transportation Center, and the area around the Springfield Mall.

Figure 11 shows the Franconia-Springfield Transit Station Area divided into land units for the purpose of organizing land use recommendations. There are nine land units designated for the Transit Station Area, represented on the map by the letters A through I. These land units will be referred to in the remainder of the Plan.

MAJOR OBJECTIVES

The major planning objectives for the Franconia-Springfield Transit Station Area include:

- Provide opportunities for high density residential development in proximity to the Joe Alexander Transportation Center;



FRANCONIA-SPRINGFIELD TRANSIT STATION AREA BOUNDARY AND LAND UNITS **FIGURE 11**

- Encourage mixed-use projects that incorporate existing topography, trees, character, and open space to optimize the Transit Station Area's opportunities through creative design;

- Provide appropriate transitions between varying land uses to mitigate adverse impacts;

- Encourage and implement a coordinated program of transportation system management strategies that reduces traffic congestion and increases the effective capacity of the transportation network by increasing transit ridership, increasing auto occupancy, distributing peak period traffic volumes more evenly, and increasing pedestrian and bicycle travel;

- Preserve the stable single-family detached residential character of the areas that surround the Transit Area, such as Windsor Estates (located in Sector S9), Loisdale Estates, Greenwood, Springfield Forest, and New Charleston, (located in Sector S7) through appropriate screening and buffering at transition boundaries;

- Protect the Accotink Environmental Quality Corridor system.

RECOMMENDATIONS

Land Use

Urban Design Concept

Attractive and functional pedestrian systems, complementary architectural themes, and physical landmarks or focal points are a few of the design elements that can help achieve a cohesive and coherent identity and a more apparent "sense of place" for the Franconia-Springfield Transit Station Area. These elements can be created through redevelopment and new development.

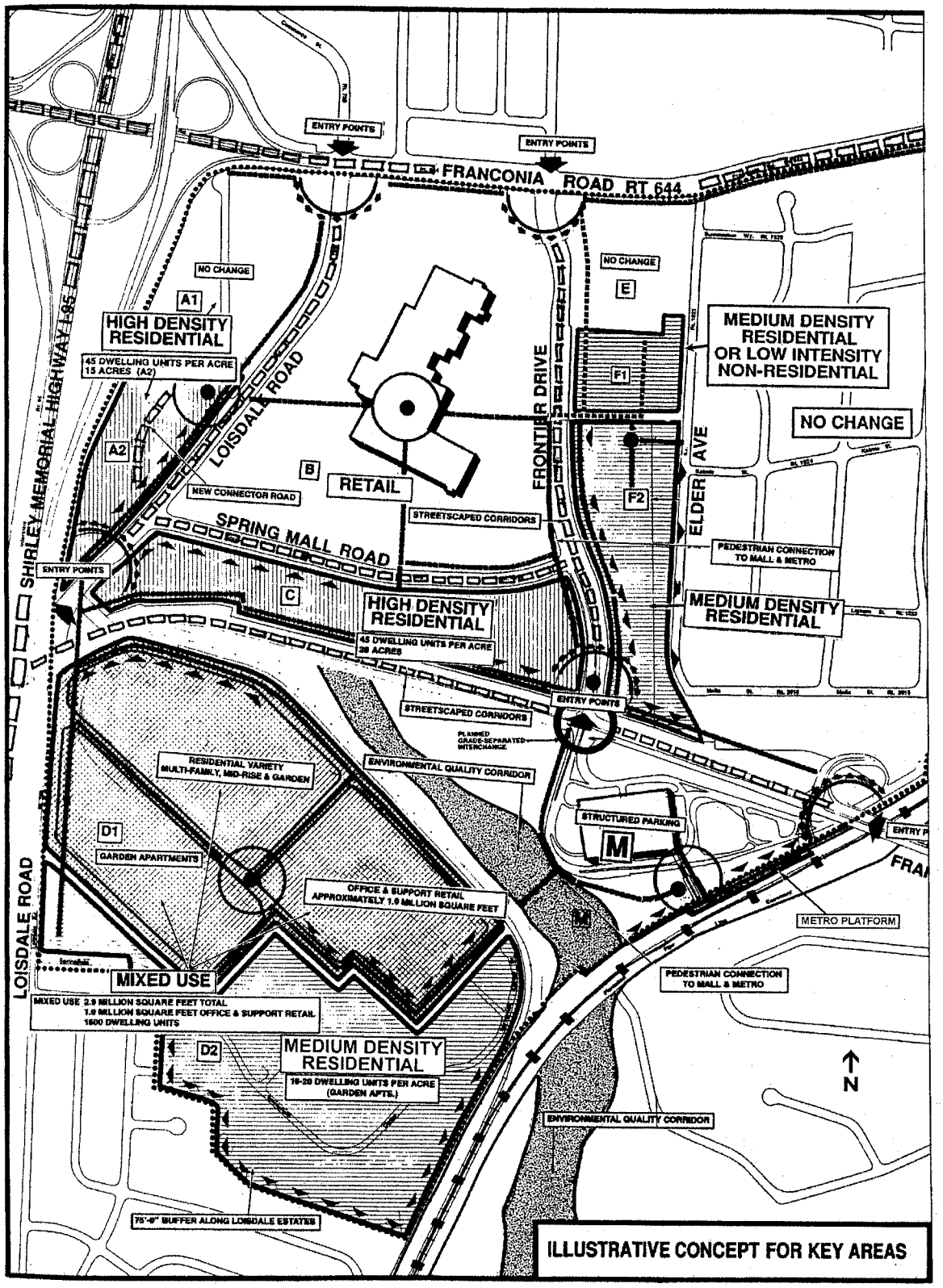
The urban design concept for the Transit Station Area consists of text detailing urban design objectives and guidelines, and figures, which depict opportunities to implement these guidelines. (See Figure 12). The urban design goal for the Franconia-Springfield Transit Station Area is to create a cohesive physical and visual environment that is orderly, functional, and aesthetically appealing.

Design Objectives

The following objectives are formulated to achieve the urban design goals:

- Provide high-quality development that is functionally integrated, orderly, identifiable and attractive.

- Use design features to help establish a sense of place and assist in orienting people to find their way to the area's workplaces, stores, and other facilities.


ENTRY POINTS
ENTRY POINTS
FRANCONIA ROAD RT 644
NO CHANGE
A1
HIGH DENSITY RESIDENTIAL
45 DWELLING UNITS PER ACRE
15 ACRES (A2)
A2
LOISDALE ROAD
SHIRLEY MEMORIAL HIGHWAY I-95
NEW CONNECTOR ROAD
B
RETAIL
STREETSCAPED CORRIDORS
SPRING MALL ROAD
ENTRY POINTS
C
HIGH DENSITY RESIDENTIAL
45 DWELLING UNITS PER ACRE
28 ACRES
FRONTIER DRIVE
NO CHANGE
E
F1
F2
MEDIUM DENSITY RESIDENTIAL OR LOW INTENSITY NON-RESIDENTIAL
NO CHANGE
ELDER AVE
PEDESTRIAN CONNECTION TO MALL & METRO
MEDIUM DENSITY RESIDENTIAL
ENTRY POINTS
STREETSCAPED CORRIDORS
PLANNED GRADE-SEPARATED INTERCHANGE
ENVIRONMENTAL QUALITY CORRIDOR
RESIDENTIAL VARIETY
MULTI-FAMILY, MID-RISE & GARDEN
D1
GARDEN APARTMENTS
STRUCTURED PARKING
M
OFFICE & SUPPORT RETAIL
APPROXIMATELY 1.0 MILLION SQUARE FEET
M
METRO PLATFORM
PEDESTRIAN CONNECTION TO MALL & METRO
LOISDALE ROAD
MIXED USE
MIXED USE 2.9 MILLION SQUARE FEET TOTAL
1.0 MILLION SQUARE FEET OFFICE & SUPPORT RETAIL
1500 DWELLING UNITS
D2
MEDIUM DENSITY RESIDENTIAL
16-20 DWELLING UNITS PER ACRE
(GARDEN APTS.)
ENVIRONMENTAL QUALITY CORRIDOR
75'-0" BUFFER ALONG LOISDALE ESTATES
N
ILLUSTRATIVE CONCEPT FOR KEY AREAS

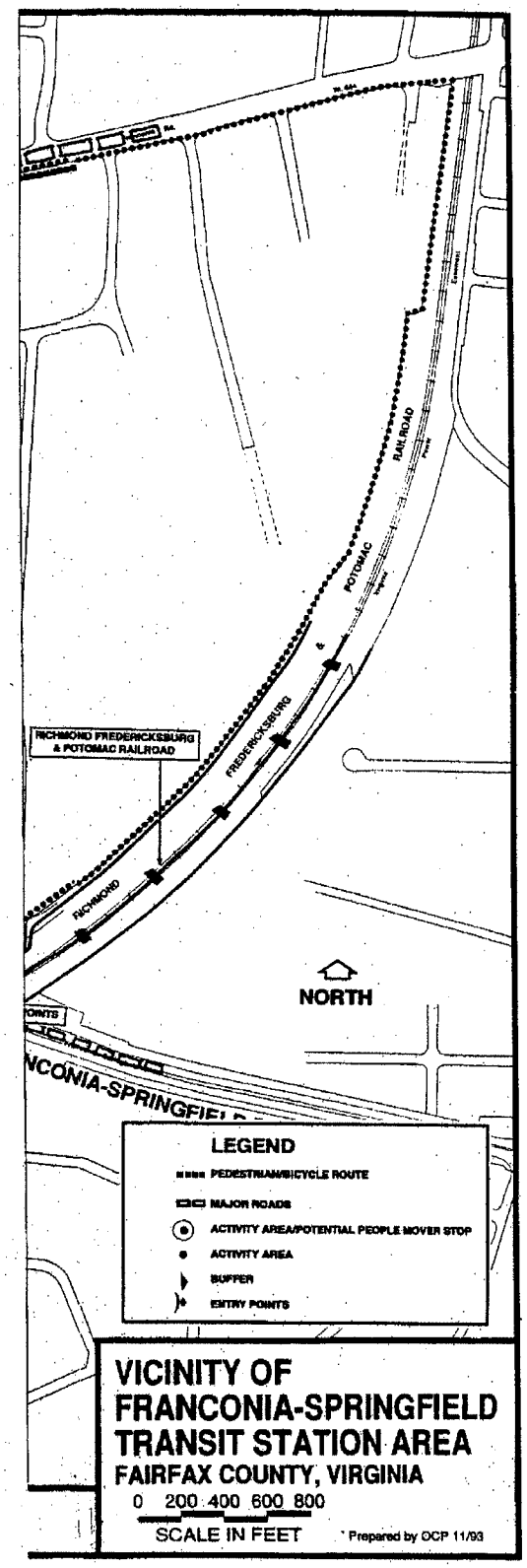

RICHMOND FREDERICKSBURG & POTOMAC RAILROAD
RICHMOND
FREDERICKSBURG
POTOMAC
RAILROAD
NORTH
LEGEND
PEDESTRIAN/BICYCLE ROUTE
MAJOR ROADS
ACTIVITY AREA/POTENTIAL PEOPLE MOVER STOP
ACTIVITY AREA
BUFFER
ENTRY POINTS
VICINITY OF
FRANCONIA-SPRINGFIELD
TRANSIT STATION AREA
FAIRFAX COUNTY, VIRGINIA
0 200 400 600 800
SCALE IN FEET
Prepared by OCP 11/93

FIGURE 12

- Design development projects to allow for pedestrian access between buildings; provide open space and urban parks and plazas; allow opportunities for shared or reduced parking; and generally make more efficient use of land.

- Create a pedestrian circulation system that provides direct access to the Transportation Center and promotes the integration of employment, residential and retail uses.

- Protect adjacent residential neighborhoods from the impacts of new development by maintaining natural vegetation and/or establishing landscaped buffers and other features. Keep noise, glare and traffic intrusion at a minimum.

- Encourage parcel consolidation in order to realize the benefit of comprehensive urban design and circulation/access principles.

- Protect and enhance environmental and heritage resources, integrating these features into development wherever practicable.

These design objectives should be used in evaluating development proposals for land units within the Transit Station Area.

Transportation

With its proximity to the Capital Beltway (I-95/I-495) and to Shirley Highway (I-95), the Franconia-Springfield Transit Station Area is provided extensive access to the regional highway network. Access to the Interstate system is provided at the interchange of Old Keene Mill Road/Franconia Road with I-95. Major east-west movement is provided by Franconia Road, and by the Franconia-Springfield Parkway, which also permits high-occupancy vehicle (HOV) access to I-95. Transit service is provided by a number of Fairfax County Connector and Metro bus routes.

Existing Conditions

Despite the enhanced accessibility afforded by these regional transportation facilities, traffic demand on most facilities in the Transit Station Area during peak hours of travel matches or exceeds the existing capacity of the roadway system. Locations exhibiting the most congested conditions, in terms of volume-to-capacity ratios, include Commerce Street, Loisdale Road, and Franconia Road in the vicinity of the I-95 ramps. These facilities currently operate at Level of Service (LOS) F, indicating forced flow conditions with long delays. However, the completion in 1992 of the Franconia-Springfield Parkway provided much needed additional roadway capacity to the area. As a result, overall there is currently sufficient highway capacity to accommodate existing peak hour traffic volumes. However, this condition does not reflect localized congestion such as that described above.

Relatively few people who work or shop within the Transit Station Area utilize public transportation or other high occupancy vehicles for these trips. The area exhibits a transit/HOV mode split typical of most suburban activity centers in Fairfax County, generally about 10 percent.

Transportation

Future Conditions

The transportation analysis for the Transit Station Area indicated that within the immediate area the planned highway network will have sufficient capacity to accommodate planned land uses. Localized improvements such as additional turning lanes and intersection and frontage improvements may be required to adequately serve specific development applications.

However, when forecast traffic from other parts of the Franconia-Springfield Area is also considered, the levels of traffic increase substantially. With a future 15 percent HOV/transit mode split assumption, (the Policy Plan goal), additional roadway capacity will be required in each direction to balance future traffic demand with planned roadway supply.

Transportation recommendations are shown on Figures 13 and 14. In some instances, site-specific transportation recommendations are included in the land use recommendations section. The figures show access orientation, circulation plans, interchange impact areas and generalized locations of proposed transit facilities. The recommendations contained in the Area Plan text and maps, the Policy Plan and Transportation Plan map, policies and requirements in the Public Facilities Manual, the Zoning Ordinance, and other standards will be utilized in the evaluation of development proposals.

The transportation recommendations for the Franconia/Springfield Transit Station Area are divided into three categories: General Recommendations, Roadway and Circulation Improvements, and Public Transportation Improvements. These are described in the following sections.

General Recommendations

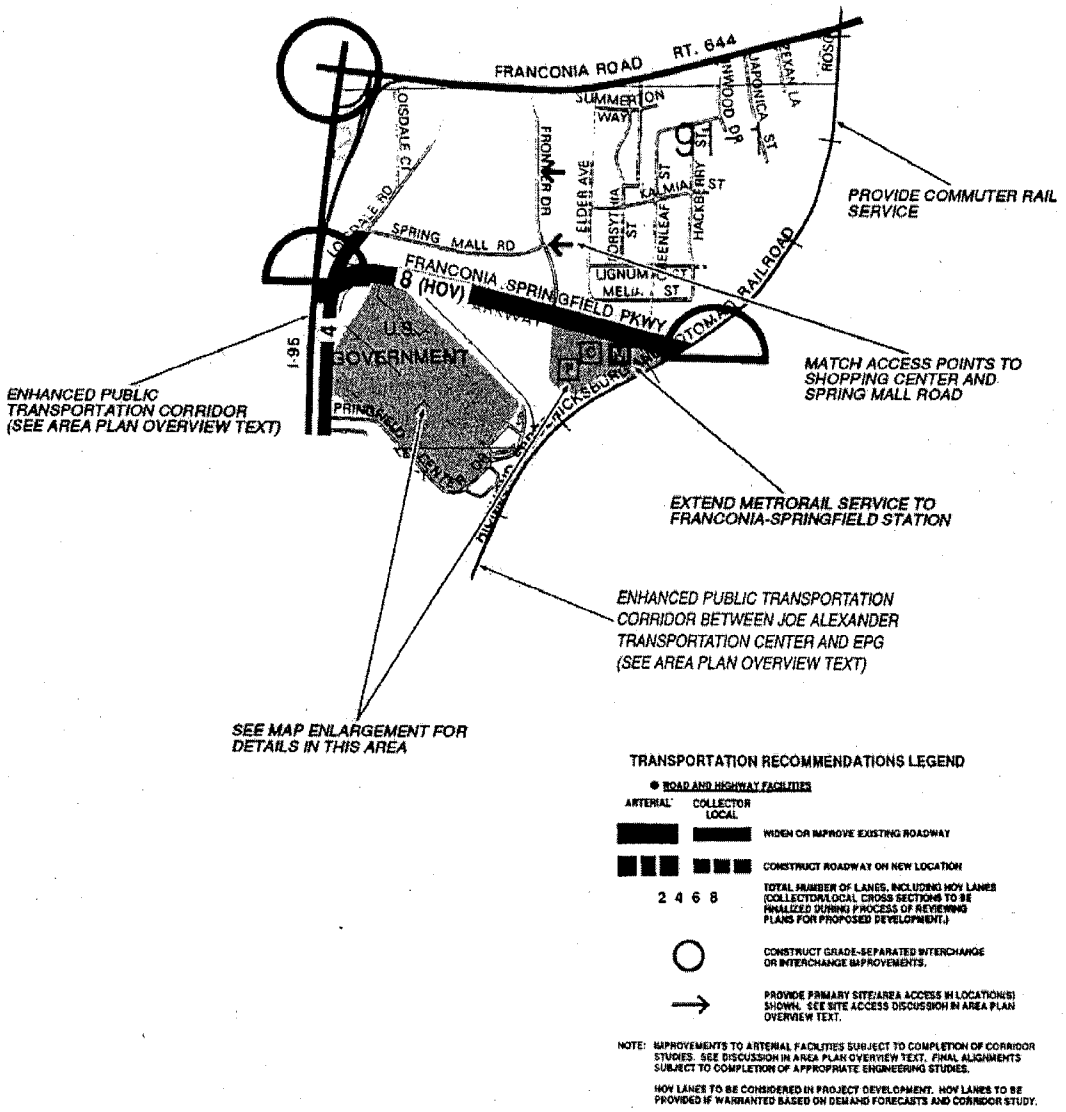
The following general recommendations have been developed to set the framework and guide future development in the Transit Station Area:

- Transportation System Adequacy

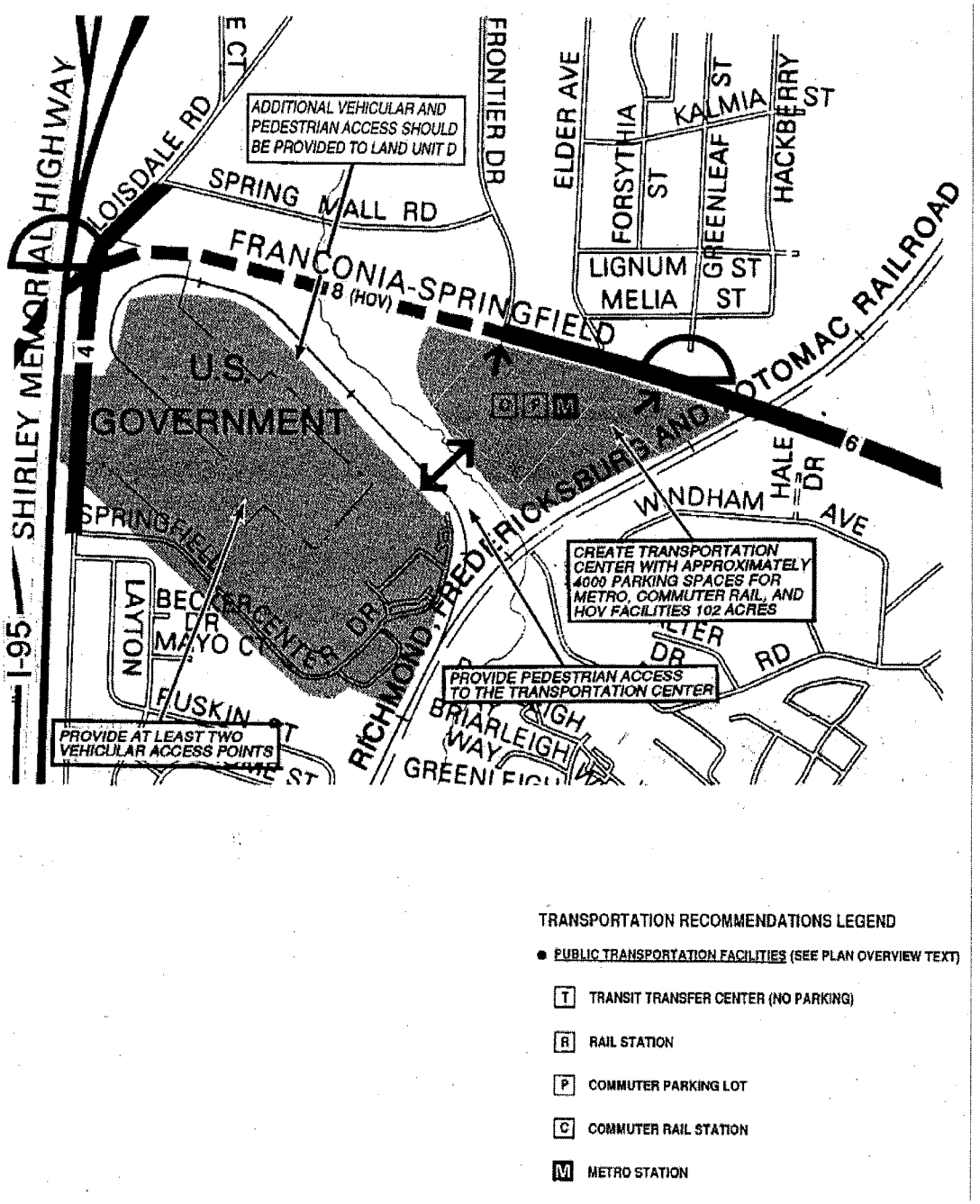
  Proposed development in the Transit Station Area should ensure that acceptable levels of service can be maintained on the surrounding roadway system. Applicants for new development should demonstrate that their proposals can maintain a LOS D when site-generated traffic is added to ambient and forecast traffic levels. LOS D is a condition with heavy traffic operating at tolerable speeds with occasional slowdowns. Where it cannot be demonstrated that LOS D conditions will be achieved, applicants will be required to provide commitments beyond those which might otherwise be required, as a means of offsetting the impact of the project and maintaining system adequacy.

- Public Transportation/HOV Goals

  The County's Policy Plan sets forth a goal of 15 percent transit/HOV use for development centers. Attainment of this goal will require a significant increase in the



TRANSPORTATION RECOMMENDATIONS **FIGURE 13**



TRANSPORTATION RECOMMENDATIONS LEGEND

- PUBLIC TRANSPORTATION FACILITIES (SEE PLAN OVERVIEW TEXT)
  - T TRANSIT TRANSFER CENTER (NO PARKING)
  - R RAIL STATION
  - P COMMUTER PARKING LOT
  - C COMMUTER RAIL STATION
  - M METRO STATION

TRANSIT FACILITY RECOMMENDATIONS
FRANCONIA-SPRINGFIELD TRANSIT STATION AREA
LAND UNITS D AND G

FIGURE 14

percentage of persons traveling to the Transit Station Area in transportation modes other than single-occupant automobiles. Rigorous transportation demand management (TDM) programs implemented by employers, combined with substantial public and private sector investments in transit improvements have been identified as a means of achieving these goals.

- Dedication of Rights-of-Way

  Implementation of identified roadway and circulation improvements for the Transit Station Area will require dedication of rights-of-way where such improvements are required. Rights-of-way may be required for major highway and transit projects, subject to the completion of appropriate studies. To ensure that options for undertaking necessary transportation improvements are not foreclosed, such dedication should occur as new development is approved.

Roadway and Circulation Improvements

The roadway and circulation plan for the Transit Station Area addresses improvements to: (1) arterial roads; (2) interchanges and (3) collector and local streets. The specific recommendations contained in the adopted Fairfax County Transportation Plan are:

- Widen Franconia-Springfield Parkway to 8 lanes between the Fairfax County Parkway and Frontier Drive to include an HOV facility providing peak period service to and from the Joe Alexander Transportation Center and I-95 HOV lanes.

Public Transportation Improvements

The development concept for the Transit Station Area is based on an assumption that planned road improvements alone cannot sustain the Plan's development potential, and that transit and HOV usage substantially higher than identified in the Policy Plan must be achieved. Recommended public transportation improvements for the Transit Station Area are described below:

- Transit Improvements

  The Joe Alexander Transportation Center is located in Land Unit G, south of the Franconia-Springfield Parkway. The primary entrance to the Transportation Center is located at the interchange of Frontier Drive with the Parkway. A secondary entrance is provided from a partial interchange to be located at the Parkway along the eastern boundary of the site. This facility consolidates in one location a Metrorail Station, Metrobus connections, a Virginia Railway Express Commuter rail station, a Greyhound Bus Station, and 5,000 parking spaces. Additional parking is being constructed on the site. In order to increase the HOV and transit mode split to the levels assumed for the Land Use Plan, applications for new development should provide high frequency service to and from the Transportation Center.

- High Occupancy Vehicle Facilities

  HOV facilities are planned on the Franconia/Springfield Parkway, the Capital Beltway (I-495) and the Shirley Highway (I-95). These facilities will provide additional incentives for commuters to the Transit Station Area to utilize carpools,

vanpools and transit buses during peak periods of travel. Over the long term, availability of the HOV lanes during peak periods of travel will help to induce more ridesharing and express bus travel to and from employment sites in the Transit Station Area and Franconia-Springfield area.

- Transportation Demand Management Programs

  TDM programs are identified as a necessary component to increase the use of public transportation to and from the Transit Station Area. Since land use plans for this area assume higher levels of HOV and transit usage than is currently anticipated to occur in the Policy Plan, it will be necessary for employers to adopt rigorous and enforceable TDM programs to achieve this goal. These TDM programs should be designed to take advantage of the close proximity of the Metrorail, Virginia Rail Express Commuter rail, and HOV facilities planned for the area, and should include such activities as the provision of high frequency transit service to the Joe Alexander Transportation Center, alternative work schedules, HOV subsidies, vanpool and carpool matching programs, and reduced parking, as well as other features.

Land Unit Recommendations

Where parcel consolidation is specified, it is intended that such consolidations will provide for projects that function in a well-designed, efficient manner and provide for the development of unconsolidated parcels in conformance with the Area Plan.

Land Unit A-1

This land unit is planned for a mix of office and hotel uses at an intensity up to .50 FAR. Accessory uses such as banks and restaurants may also be appropriate provided they are not located in free standing structures. Landscaping and plantings along sidewalks and streets are encouraged to foster pedestrian activity. Safe pedestrian connections to the Springfield Mall and to the Transportation Center should be incorporated into the pedestrian circulation plan and network for this land unit.

Development in this land unit should be linked with the Joe Alexander Transportation Center through the provision of high frequency transit service, such as a bus system.

Land Unit A-2

This land unit, about 15 acres, contains retail stores. It is planned for a mix of office and hotel uses at an intensity up to .50 FAR. Accessory uses such as banks and restaurants may also be appropriate provided that they are not located in free standing structures. Landscaping and plantings along sidewalks and streets are encouraged to foster pedestrian activity. Safe pedestrian connections to the Springfield Shopping Mall and to the Joe Alexander Transportation Center should be incorporated into the pedestrian circulation plan and network for this land unit.

As an option, multi-family residential use at a density of up to 45 dwelling units per acre may be appropriate provided that the following conditions are satisfied:

- The entire land unit is developed as residential use through a unified development plan which highlights pedestrian and vehicular access;

- High quality architecture and site design is provided, including landscaping and lighting;
- Structures are mid- or high-rise, not garden type apartments in order that they may be compatible with existing and planned development in the immediate area;
- Structures are located to provide an appropriate set back from I-95 to mitigate noise. Additional noise mitigation measures may also be necessary;
- Parking is provided either underground and/or in structures to maximize land area for open space and recreational amenities;
- Recreation facilities are provided to meet the active recreation needs of residents. These facilities should be an integral part of the residential complex or building; and
- Effective landscaping is provided on the periphery of the site in order to buffer this residential development from existing and planned non-residential use adjacent to the land unit and in the immediate area.

An internal roadway should be constructed within Land Unit A-2, extending from the intersection of Loisdale Road with Spring Mall Road, to Loisdale Court. Development planned for this land unit should have all access oriented to the internal road.

Development in this land unit should be linked with the Joe Alexander Transportation Center through the provision of high frequency transit service, such as a bus system.

Land Unit B

The land unit contains Springfield Mall and other retail uses. Springfield Mall is planned for retail uses up to .50 FAR to recognize its regional-serving function. The area along the perimeter of the mall property is planned for community-serving retail uses up to .35 FAR. Drive-through facilities are discouraged in this land unit.

Pedestrian access to and from the Transportation Center should be provided. Development in this land unit should be linked with the Joe Alexander Transportation Center through the provision of high frequency transit service, such as a bus or automated guideway transit system. An automated guideway transit system has been proposed as part of the optional mixed-use development concept for the Engineer Proving Ground. The system would include construction of a segment linking the Transit Station Area to the EPG and Springfield Community Business Center. In the event that an automated guideway transit system (People Mover) is designed and programmed for construction, any right-of-way identified within this land unit should be dedicated for the selected system.

Land Unit C

This land unit is located south of Spring Mall Road and west of Frontier Drive and includes the Springfield Station apartments, which are developed at a density of 45 dwelling units per acre. The approximately 28-acre land unit is bordered on the south by the Franconia-Springfield Parkway.

All of Land Unit C is planned for multi-family residential use at a density of 35 dwelling units per acre. A mix of garden apartments and mid- or high-rise structures is encouraged. Residential use in this area will serve to expand housing opportunities in proximity to a major transportation center. Limited retail uses, to serve the residents of the development may be appropriate, provided that the retail uses are not contained in free-standing structures.

Land Unit C includes an area currently used as an automobile dealership (Tax Map 90-2((1))53, 54, 55, 57D). Expansion of this use beyond these parcels within the land unit is not recommended, and consolidation of these parcels with the remainder of Land Unit C for residential or mixed-use development is encouraged to achieve the unified development of this land unit.

Two options for development have been identified for this land unit: residential use at a density of 45 dwelling units to the acre, or mixed-use development comprised of residential and retail use at an intensity of up to 1.0 FAR. Mixed-use development must be predominantly mid- or high-rise residential in character with no more than one-third of the total gross square footage devoted to retail use. The retail and residential uses must be integrated and physically linked to one another to create a cohesive project, as opposed to a development that represents a mixture of disparate uses on the site.

Under either option, the following conditions must be met:

- Structures are mid- or high-rise, rather than garden style units, in order that they may be compatible with existing and planned development in the immediate area. Structures should be located to provide an appropriate setback from the Franconia-Springfield Parkway to mitigate noise. Other noise mitigation measures should be provided as necessary;

- At least one-third of the required parking is provided either underground, in structures or designed as a combination of the two. This will help maximize land area for open space and recreational amenities;

- Effective landscaping is provided on the periphery of the site to adequately buffer this residential development from existing and planned non-residential use in the immediate area;

- Safe pedestrian access and connections are provided to the Springfield Mall and to the Transportation Center. The pedestrian circulation plan and network for this land unit should be part of the overall circulation plan for the Transit Station Area;

- A high quality living environment with active recreation and other site amenities is provided to meet the active recreation needs of residents; and

Pedestrian access to and from the Transportation Center should be provided as a part of any development of this land unit. Development in this land unit should be linked with the Joe Alexander Transportation Center through the provision of high frequency transit service, such as bus or automated guideway transit system. An automated guideway transit system has been proposed as part of the optional mixed-use development concept for the Engineer Proving Ground. The system would include construction of a segment linking the Transit Station Area to the EPG and Springfield Community Business Center. In the event that an automated guideway

transit system (People Mover) is designed and programmed for construction, any right-of-way identified within this land unit should be dedicated for the selected system.

Land Unit D

Land Unit D is located between the Joe Alexander Transportation Center and Loisdale Estates, a residential subdivision. Land Unit D is planned for industrial use up to .50 FAR to recognize existing uses and to minimize traffic generation in an area with limited transportation capacity.

The land unit is divided into Sub-units D-1 and D-2. Sub-unit D-1 is located south of the Franconia-Springfield Parkway, south and west of the Long Branch Stream Valley, and west of the CSX Railroad right-of-way. The sub-unit is about 95 acres in size, and contains residential and hotel uses as well as the federally owned GSA-Parr Warehouse. A railroad spur and the Long Branch of Accotink Creek separate this land unit from the Joe Alexander Transportation Center (Land Unit G). If in the future, the GSA-Parr Warehouse site is declared surplus or otherwise proposed for private redevelopment, redevelopment plans should be supported only if they are consistent with the County's goals and the Comprehensive Plan.

Sub-unit D-2 is located south of Sub-unit D-1 and north of the Loisdale Estates Subdivision. It is about 61 acres in size, and contains the site of the Northern Virginia Community College and the Springfield Center Industrial Park.

Land Unit D has extreme traffic/transportation constraints. To accommodate development under the current Plan, Loisdale Road should be improved to a 4-lane section between Springfield Center Drive and Spring Mall Road. Any redevelopment of Land Unit D will be constrained by the need to mitigate/minimize both daily and peak hour trips.

Sub-unit D-1

The following options address Sub-unit D-1 as separate development areas. However, any development or redevelopment in these areas should be planned and designed with reference to a coordinated and integrated plan for all of Land Unit D.

Options for Northern Portion of Sub-unit D-1
The following land uses and intensities are recommended for the northern portion of Sub-unit D-1 at the optional level:

- Parcels 90-2 ((1)) 56 and 59B are planned for up to 377 residential units and a 115,000 square feet hotel to reflect approved development;

- Parcels 90-2 ((1)) 58A pt., 58B and 59A pt. constitute an area of approximately 10 acres located southwest of the Metro property. This area is planned for up to 475,000 square feet of office use. As an alternative, a combination of up to 360,000 square feet of office use and up to 160,000 square feet of hotel use may be appropriate. The office/hotel uses may include support retail use to serve residents and workers at the site.

In addition to the addressing the recommendations provided in the transportation section for Land Unit D, development of Sub-unit D-1 should provide a pedestrian and vehicular

connection to the Joe Alexander Transportation Center. The vehicular connection should, at a minimum, accommodate shuttle bus service to the Transportation Center.

Options for GSA-Parr Warehouse Area
The GSA-Parr Warehouse is a federally owned facility that encompasses approximately 1.34 million square feet of warehouse space on approximately 70 acres. Like all of Land Unit D, the site is constrained by poor access and roadway capacity. Because the GSA-Parr Warehouse is a publicly owned property, there is an opportunity for the federal government and the County to work together to facilitate the implementation of the County's Comprehensive Plan.

The Plan envisions a mix of uses that may include biotech, office and/or an entertainment/ conference center/hotel complex. These uses would complement the Northern Virginia Community College/INOVA medical center located in Sub-unit D-2, and the approved residential and hotel uses to the north. A major benefit is the reduction in transportation impact that is expected by these types of uses.

As a first option, the GSA-Parr Warehouse area is planned for mixed-use development as follows:

- Up to 1,090,000 square feet of light industrial/research and development use;
- Up to 160,000 square feet for a conference center;
- Up to 40,000 square feet of office and support retail use. Support retail is defined as those goods and services that serve residents and workers at the site.

Additional office use may be substituted for light industrial/research and development use at a ratio of 1 square foot of office use per 1.35 square feet industrial use, to a maximum of 100,000 square of additional office use.
As a second option, an entertainment/conference center/hotel complex may be appropriate as follows:

- An entertainment center (such as performing arts facility and/or cultural center) with a capacity of up to 6500 patrons
- Up to 160,000 square feet for a conference center;
- Up to 40,000 square feet of office and support retail uses. Support retail is defined as those goods and services that serve residents and workers at the site; and
- Up to 565,000 square feet of hotel use;
- A detailed design plan is provided that demonstrates architectural excellence; and
- Open space and pedestrian amenities are provided for visitors and employees and designed as an integral part of each type of development.

Sub-unit D-2

This Sub-unit is located south of the GSA-Parr Warehouse and north of the Loisdale Estates Subdivision. It is about 61 acres in size and contains the site of the Northern Virginia Community College and Springfield Center Industrial Park.

Sub-unit D-2 is planned for light industrial use up to .35 FAR. As an option, biotech/research and development uses up to .50 FAR may be appropriate to complement the NVCC/INOVA medical center. Any development under this option must demonstrate that it will generate less peak hour traffic than the planned baseline use to minimize traffic generation in an area with limited transportation capacity. Development should provide a landscaped buffer of at least 75 feet in width along the Loisdale Estates subdivision boundary.

Transportation

In order to mitigate serious transportation issues the following conditions should be addressed for any development proposed for Sub-units D-1 or D-2:

- Improve Loisdale Road to a 4 lane section between Spring Mall Road and Springfield Center Drive;
- Provide two points of access to Loisdale Road and an interconnected 4 lane divided section to serve the site;
- Phase buildout of the site conditioned on the provision of additional access via a road connection to/from the Joe Alexander Transportation Center or Franconia-Springfield Parkway. Incorporate pedestrian access into the roadway connection;
- Site access is coordinated and/or integrated to the extent possible with the facilities provided at the Joe Alexander Transportation Center;
- Transportation impacts are mitigated through an aggressive transportation demand management system emphasizing transit alternatives to vehicular use that achieves at a minimum, 15% usage of public transportation for commuting trips to and from the site; and
- A Transportation Management Association (TMA) is established to implement such measures.

Land Unit E

Tax Map 90-2((1))85B and 90B comprise this land unit. Tax Map 90-2((1))85B is planned for institutional use up to .30 FAR and is developed with an assisted living/medical care facility for the elderly. The assisted living facility is located on the site of the former Oak Grove Plantation House. Tax Map 90-2((1))90B is planned for public facilities and is the site of the Forestdale Elementary School. Any future uses should be well-buffered from Franconia Road and Frontier Drive.

Land Unit F-1

This land unit, about 8.5 acres in size, is located south of Forestdale Elementary School between Frontier Drive and Elder Avenue. The land unit is comprised of Tax Map 90-2((1)) 86A and 96A. Parcel 90-2((1))96A is a cemetery, known as the Broders Family Cemetery. It is on land that was once part of the Oak Grove Plantation. It contains fragments of gravestones scattered about the site dating from the turn of the Twentieth Century. Parcel 90-2((1))86A is planned for low-intensity retail use up to .30 FAR. This use should be one-story in character, with buildings and access oriented to Frontier Drive. A minimum 50-foot vegetated buffer and a brick wall should be provided along Elder Avenue to assist in creating a transition to the existing residential communities in this area. The buffer should be enhanced with evergreen trees to provide year round screening. No sidewalk or curb and gutter should be provided along Elder Avenue.

The primary access to development in Land Unit F-1 should be oriented to Frontier Drive opposite the entrance to Springfield Mall.

Land Unit F-2

Land Unit F-2, approximately 23 acres, is located immediately north of the Franconia-Springfield Parkway and situated between Elder Avenue and Frontier Drive. This land unit is planned for office and retail use up to 0.30 FAR and is developed at 0.28 FAR. To achieve an effective transition to the Springfield Forest subdivision, the retail uses should be low-rise in character with a maximum height of 35 feet, with buildings and access oriented to Frontier Drive. In addition to a maximum height of 35 feet, all buildings and structures shall be limited in height by a 14° line of sight as measured from the front property line of Springfield Forest residences adjacent to this land unit and east of Elder Avenue.

Retail and office uses should be developed under the following conditions:

1. A minimum of 50 foot vegetative buffer incorporating existing vegetation should be provided along Elder Avenue together with a seven-foot brick wall on the western side of the buffer to assist in creating a transition to the existing residential communities in the area. The buffer should be enhanced with evergreen trees and supplemental shrubbery to provide year round screening.

2. The only access, vehicular or pedestrian, to this land unit should be from Frontier Drive with the primary vehicular access point at the intersection of Spring Mall Road.

3. The entire land unit should be developed under a single development plan which will reflect high quality architecture and site design.

4. All site lighting should be located, directed, and designed to reduce glare and slippage onto the adjacent residential property.

As an option, multi-family residential use at a density of up to 20 dwelling units per acre may be appropriate. The entire land unit should be developed under a single development plan which reflects high quality architecture and site design. Structure type should be limited to garden or mid-rise dwelling units. To help foster an effective transition to the Springfield Forest subdivision, height of the buildings should be limited by a 14° line of sight as measured from the front property line of Springfield Forest residential structures east of Elder Avenue. This

transition should also include a vegetated buffer, incorporating existing vegetation, of at least 100 feet in width along Elder Avenue.

It is important that good pedestrian access be provided to the Joe Alexander Transportation Center and to the office and retail uses in the area. Vehicular access to this land unit should be limited to Frontier Drive with the primary access point at the intersection of Spring Mall Road. Development in this land unit should be linked with the Joe Alexander Transportation Center through the provision of high frequency transit service, such as a bus system.

Land Unit G

This land unit consists of property owned by the Washington Metropolitan Area Transit Authority (WMATA) and is planned for public facilities. A Transportation Center containing approximately 5,000 parking spaces and bus transfer facilities have been constructed in this land unit along with the Franconia-Springfield Metrorail Station. This entire land unit contains significant wetlands, marine clays, and Environmental Quality Corridor (EQC) land, which pose development constraints and stormwater management and wetlands mitigation issues. Pedestrian access has been provided to connect the Transportation Center to surrounding development.

Should the redevelopment of Land Unit D-1 be appropriate for a cultural facility, a shared parking arrangement utilizing the parking garage at the Joe Alexander Transportation Center should be considered.

South of the Parkway immediately west of the proposed Joe Alexander Transportation Center, Parcel 90-2((1))60 is planned for public facilities. A fifty-foot buffer with earth berms with planting and fencing is recommended for the northern edge of the property to buffer planned residential uses for the property immediately to the north.

The Joe Alexander Transportation Center facilities have been designed so that pedestrian and bicycle access from the Springfield Forest subdivision to the Metrorail station platform is provided over a safe corridor.

Land Unit H

This land unit contains the Springfield Forest Subdivision and is planned for single-family residential use as shown on the Plan map. Infill development within this land unit should be of a compatible use, type, and density and be in accordance with the Plan map. The woods surrounding the Springfield Forest, New Charleston, and Greenwood subdivisions protect the neighborhood from the visual intrusion of Springfield Mall and the Franconia-Springfield Parkway. After construction of the Metrorail station, this buffer will be an important amenity to retain.

Land Unit I

This land unit consists of the Springfield Forest Park and the Greenwood townhouse development. They are situated on the west side of the CSX Railroad, east of Springfield Forest, and south of Franconia Road. The residential portion is planned and developed at 5-8 dwelling units per acre. A 100 foot buffer should be maintained. A shuttle bus and shuttle service should connect the residences in Land Unit I and the Joe Alexander Transportation Center.

Parks and Recreation

Parks and recreation recommendations for this area are shown in Springfield East Community Planning Sector on Figure 39. The column "Park Classification" includes existing park facilities. The "Recommendations" column includes entries for both existing and proposed facilities. Prior to developing parkland, the Fairfax County Park Authority initiates a master planning process to determine the appropriate facilities and design for that park. This process involves extensive citizen review and participation. If an existing park is listed but no recommendation appears on that line, it means the park has been developed in accordance with its master plan.

Trails

Trails planned for this area are delineated on Figure 40, in the Springfield East Community Planning Sector (S7), and are an integral part of the overall County system. While some of the segments have already been constructed, the map portrays the ultimate system for the sector. In addition, the map specifies either a pedestrian, bicycle or equestrian classification for each segment which represents the desired ultimate function of that trail. Specific construction requirements are detailed in the Public Facilities Manual.

SPRINGFIELD COMMUNITY BUSINESS CENTER

CHARACTER

The Springfield Community Business Center (CBC) is located in the northwest and southwest quadrants of the intersection of I-95 (Shirley Highway) and Route 644 (Old Keene Mill Road). The portion of the CBC north of Old Keene Mill Road is linked to the southeast side of I-95 and the commercial uses located there, by the Veterans Bridge (Amherst Street overpass). The CBC functions as a neighborhood- and community-serving retail and services center and to some extent as a regional employment center. The County has initiated a public/private partnership approach -- the Commercial Revitalization Program -- to improve the economic vitality of central Springfield. Part of this program's focus is to assist in upgrading the attractiveness of Springfield in order to enhance the competitiveness of the Springfield business community, particularly retail establishments, and improve circulation throughout the area, while maintaining the community-serving function of the commercial area. To achieve this end, the Central Springfield Business District Revitalization Plan was developed and the area was designated a Commercial Revitalization District.

As a commercial revitalization district, certain zoning ordinance criteria apply in furtherance of the County's commitment to revitalization. The ordinance creates a unique set of regulations, which provide flexibility in the development, or redevelopment of these properties. In addition, it is the policy of the Board of Supervisors to extend other initiatives to this area to generate investment activity. These include services such as facilitated review of development proposals and amendments to the Comprehensive Plan.

The Community Business Center is characterized by a number of shopping centers interspersed throughout the area, each center with its own large parking lot. Freestanding structures such as banks, restaurants and office buildings occur in random locations along the internal road network of the area. Architectural styles are diverse and there are few amenities such as plazas or visual focal points.

The area south of Old Keene Mill Road is segmented both by Amherst Avenue and Backlick Road and is characterized by strip commercial uses along both roadways. Access to some areas is difficult. The predominant development is auto-oriented, with uses such as auto dealerships, service stations, and auto repair and accessories shops present. Older retail plazas line Backlick Road. The linear development pattern and numerous curb cuts contribute to traffic congestion and discourage pedestrian use of the area. In general, the portion of the Community Business Center south of Old Keene Mill Road consists of many freestanding uses that lack a unifying architectural theme or identity.

To implement the Central Springfield Business District Revitalization Plan, and meet goals to improve local economic competitiveness, public and private improvement projects have been initiated to begin correcting aesthetic, land use and circulation deficiencies. To date these projects include establishing a streetscape plan, planting trees in the public right-of-way and on private property, installing attractive signs to orient visitors and identify businesses, and renovating several shopping centers.

CONCEPT FOR FUTURE DEVELOPMENT

The Springfield Community Business Center (CBC) is identified in the Concept for Future Development as a mixed-use center, which serves as a community focal point. Recommendations for the Springfield CBC are intended to enhance both the community-serving commercial aspects of Springfield as a pedestrian "town center," and assist in recognizing its more recent pattern of providing housing and employment to a wider market area.

Figure 15 shows the Springfield CBC divided into "land units" for the purpose of organizing land use recommendations. There are five land units designated for the CBC, represented on the map by the letters A through E. These land units will be referred to in the remainder of the Plan.

MAJOR OBJECTIVES

Planning objectives for the Springfield Community Business Center are the following:

- Establish a Springfield CBC identity and image as a community/town center and meeting place;
- Revitalize the CBC by enhancing the economic competitiveness of local businesses; reducing inefficient land use patterns; improving traffic circulation; promoting the use of public transit; and enhancing the image and visual appearance of both public and private space and buildings;
- Create a more pedestrian-friendly environment through providing elements such as street level retail uses, civic plazas and amenities such as coordinated lighting, planting, and street furnishings;
- Minimize pedestrian/automobile conflicts by having well-defined crossings;
- Assist motorists and pedestrians in finding businesses and services through better signage;
- Focus good views; screen bad ones;
- Plan, develop and maintain an integrated public transportation system that moves people efficiently and safely;
- Promote a mixture of land uses to facilitate transit usage;
- Establish transition areas that prevent commercial encroachment and protect residential areas; and
- Complement efforts made by the local community to revitalize central Springfield.

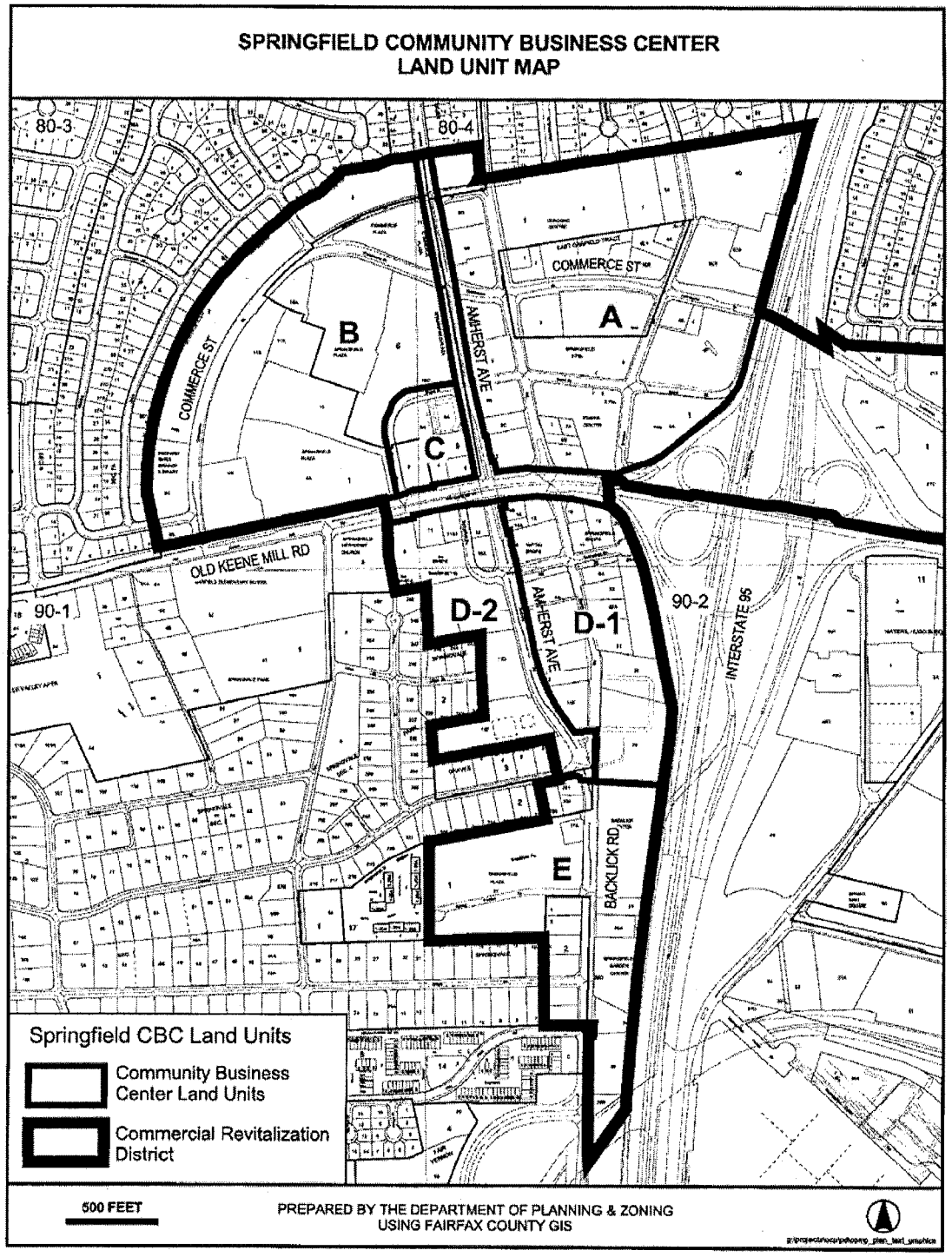

SPRINGFIELD COMMUNITY BUSINESS CENTER
LAND UNIT MAP
80-3
80-4
COMMERCE ST
A
B
C
AMHERST AVE
OLD KEENE MILL RD
90-1
D-2
D-1
90-2
INTERSTATE 95
E
BACKLICK RD
Springfield CBC Land Units
Community Business Center Land Units
Commercial Revitalization District
500 FEET
PREPARED BY THE DEPARTMENT OF PLANNING & ZONING
USING FAIRFAX COUNTY GIS

FIGURE 15

RECOMMENDATIONS

Land Use

Urban Design and Streetscape Guidelines

Some of the planning objectives for the Springfield CBC relate to improving the image, appearance, and functioning of the CBC through urban design. The urban design and streetscape concept for the Springfield Community Business Center consists of guidelines to support the creation of a distinct identity and a pedestrian- and transit-oriented environment. These guidelines are intended to be used in the site plan and development review process:

The following guidelines have been grouped under subheadings to improve organization.

Buildings

- Buildings should be located close to streets, with transit stops provided to the extent possible;
- Buildings should be clustered around central pedestrian spaces or plazas to encourage pedestrian access, shorten walking distance and promote walking, rather than driving between buildings;
- Building facades should establish a pedestrian-scale relationship to the street;
- Architectural design features such as variations of window or building details are encouraged;
- When appropriate, arcades, awnings or other building features to distinguish ground floor retail are desirable.

Parking

- Surface parking or structured parking should be attractively integrated with major pedestrian networks and accessible from side streets or exterior passageways between buildings;
- Encourage redesign and consolidation of private parking lots to create additional parking space;
- Provide space for trees in parking lots.

Signage

- Comprehensive sign systems that establish a distinctive theme and identity and eliminate visual clutter are desirable. Building-mounted signs and ground-mounted shopping center signs incorporated within a planting strip are encouraged. Pole mounted business signs are prohibited.

Streetscape

- In and adjacent to public rights-of-way, in areas such as parking lots, plazas, streetside areas and private property, streetscape improvements should be in accordance with the Springfield Streetscape Design. The purpose of the streetscape program is to promote a more pleasing and conducive physical environment for the commercial revitalization in the Springfield CBC.

- The implementation of streetscape design by private landowners is encouraged.

- Elements that should be incorporated and maintained in new development in all land units as appropriate, are: landscaping to shade sidewalks and parking lots on all land units, seating areas, distinctive paving materials or patterns to indicate focal points or building entrances; coordinated light fixtures; and coordinated signage;

- Public spaces and amenities should directly access mass transit and the pedestrian network. Pedestrian connections to adjacent blocks are encouraged;

- Curb cuts should be minimized through consolidation of street access and provision of interparcel access;

- Use of texture, pattern, and color of materials, as well as public space furniture and/or entry accents are encouraged;

- Whenever practical, utilities should be placed underground within the Community Business Center; and

- All areas of available right-of-way should be utilized for streetscape improvements.

General Land Use Recommendations

Recommendations for the Community Business Center (CBC) strive to promote a transit-oriented, mixed-use center, combining neighborhood- and community-serving retail uses with significant office and residential components. The recommendations also promote the commercial revitalization of the CBC. Within the CBC, the mix and intensity of uses vary by land unit and build upon existing character and development, as do efforts to conserve, revitalize, or redevelop them. The Plan recognizes the importance of on-going revitalization, and supports the implementation of revitalization efforts. Where existing uses do not conform to the long-term recommendations of the Comprehensive Plan, the guidelines for Interim Improvements of Commercial Establishments found in the Land Use Section of the Policy Plan should be used.

A portion of the CBC is designated for high-density mixed-use development. High-density development provides an opportunity to achieve a high standard of urban design and to integrate civic, art, office, residential, hotel, and retail uses. Outside the high-density areas, lower density community- and neighborhood-serving retail, office and residential uses are planned.

The following general land use and transportation guidelines apply throughout the Community Business Center:

- Space for small businesses, particularly in the ground floor of multi-family residential or office buildings is encouraged.

- Existing housing should be retained and new housing as identified within the Community Business Center should be provided to ensure a mixed-use character. As needed, residential development should be phased according to the availability of school capacity.

- A common design theme should be established to enhance land uses planned for retention. The creation of an attractive streetscape and the provision of improved pedestrian and vehicular traffic circulation are encouraged. Revitalization efforts should continue as a way to enhance the entire CBC.

- Drive-through uses are discouraged in the Springfield Community Business Center. New drive-through uses have the potential to cause on-site and off-site traffic circulation problems. Uses, such as fast-food restaurants and service stations, are discouraged because each may disrupt pedestrian flow and circulation. However, drive-through uses such as financial institutions and drug stores, when appropriately integrated in a multi-tenant building and designed in a manner that does not adversely impact pedestrian circulation, may be appropriate. Free-standing drive through-uses are prohibited.

- To implement the streetscape design, and allow development or redevelopment, provision should be made for additional sidewalks, pedestrian linkages, transit facilities and bike lanes.

- Community-serving facilities, such as recreational, assembly halls with meeting rooms, auditoriums for the performing arts, and cultural exhibits, should be incorporated into combination public/private space, when possible or contributions should be made toward the establishment of such facilities.

- Coordinated signage, landmarks, shaded open space, appropriate lighting, plantings, and street furniture should be added to enhance the identity, appeal, and functionality of the Springfield Community Business Center. Additionally, any development proposal should provide for the establishment and maintenance of adjacent off-site landscaping.

- Support for transit services and Transportation Demand Management (TDM) strategies, which include transit service sufficient to mitigate adverse impacts on the adjacent roadway network as determined during the development review process should be demonstrated. Support may include contribution(s) to roadway improvements, commuter parking and staging areas, the TAGS program and other examples listed in Figure16.

- The guidelines contained in Appendix 6, "Guidelines for Interim Improvement of Commercial Establishments," of the Land Use section of the Fairfax County Policy Plan, 2000 Edition should be considered when reviewing proposals for existing uses.

Figure 16. Examples of Transportation Demand Management (TDM) Measures

Individual Employer TDM Measures

Alternative Transportation Services
- Shuttle Bus (es)
- Company Vanpools
- Telecommuting

Support Facilities/Programs
- On-Site Transportation Coordinator
- Employer Ridematching Services
- Preferred high Occupancy Vehicles (HOV) Parking Locations
- Flexible Work Hours
- Guaranteed Ride Home Programs

Pricing Programs
- Parking Management/Pricing Programs
- Subsidies for use of HOV Modes

Implementation
- CEO Commitment
- Proffers/Negotiated Agreements
- Participation in Transportation Management Association (TMA)

Area-wide TDM Measures

Alternative Transportation Options/Services

- Expand Transit Services (peak, off peak and midday hours)
- Carpools, Vanpools
- Shuttle Bus(es)

Support Facilities/Programs
- Transit Center
- Park & Ride lots
- HOV Lanes
- Parking Location
- Multi Employer Ridematching Services
- Guaranteed Ride Home Program

Pricing Programs
- Road/Congestion Pricing Programs
- Parking Management/Pricing Programs
- Transportation Allowances

Implementation
- Employer Trip Reduction: Reduction Ordinance
- Parking Management Ordinance
- Site Design Controls
- Proffers/NegotiatedAgreements
- TMA Coordination

Land Unit Recommendations

Land Unit A

Land Unit A is approximately 56 acres in size, and is bounded by Amherst Avenue, I-95, and Old Keene Mill Road. It is located in the northeastern portion of the Springfield Community Business Center (CBC). The Comprehensive Plan recommendations encourage the creation of an urban, pedestrian-oriented area comprised of a mix of medium to high intensity office, retail, hotel, civic, arts, and residential uses.

Currently Land Unit A is developed with approximately 360,000 square feet of retail use, 205,000 square feet of office use and 165,000 square feet of hotel use. The Comprehensive Plan assumes redevelopment of much of this space and the addition of approximately 600,000 square feet of office, 350,000 square feet of retail and 280,000 square feet of hotel uses for a total of approximately 2.0 million square feet of non-residential uses and 800 dwelling units. In total, this amount of development equates to an overall intensity of approximately 1.1 FAR.

A "main street area" treatment is planned along all streets in Land Unit A, except the area to the north of Commerce Street. Figure 17 shows the location of the core, or "main street" area within Land Unit A, which is approximately 27 acres. Like all areas in the CBC, the main street should incorporate the streetscape design features recommended by the Springfield Streetscape Conceptual Design. Street level retail uses are an integral aspect of the main street approach and are intended to help create an urban, people-oriented place that provides convenient retail services and encourages pedestrian movement.

Building facades and entrances should be oriented to the streets with parking located toward the rear of buildings, or below ground. The main street area should have wide sidewalks fronting retail shopping and restaurants on the lower floors of the office and/or residential buildings. Streetscape design should include corner plaza entry features at the intersections of Commerce Street/Backlick Road, Commerce Street/Brandon Avenue, Backlick Road/Bland Street and Bland Street/Brandon Avenue. Plazas at these locations will create an aesthetically pleasing streetscape environment and encourage pedestrian activity.

The main street area will function as the core area of the Community Business Center and will be characterized by multi-story buildings with a mix of street level-retail, hotel, civic, arts, residential, and/or office uses developed with a common design or architectural theme. The portion of a building above three stories should be stepped back from the street-side façade to avoid creating a canyon-like streetscape.

To implement this vision, a unified development plan demonstrating logical and substantial redevelopment of the core area is required with the initial rezoning, including a site for a public building or space for public use to house cultural, performing and visual arts, community and/or governmental use.

Along Commerce Street, consolidation of parcels 80-4 ((6)) 3 and 4C, is encouraged. The area is envisioned to be high rise office, residential or hotel use or a mix of these uses. Facades and entrances should be oriented to the streets with parking located toward the center of the block and to the rear of buildings.

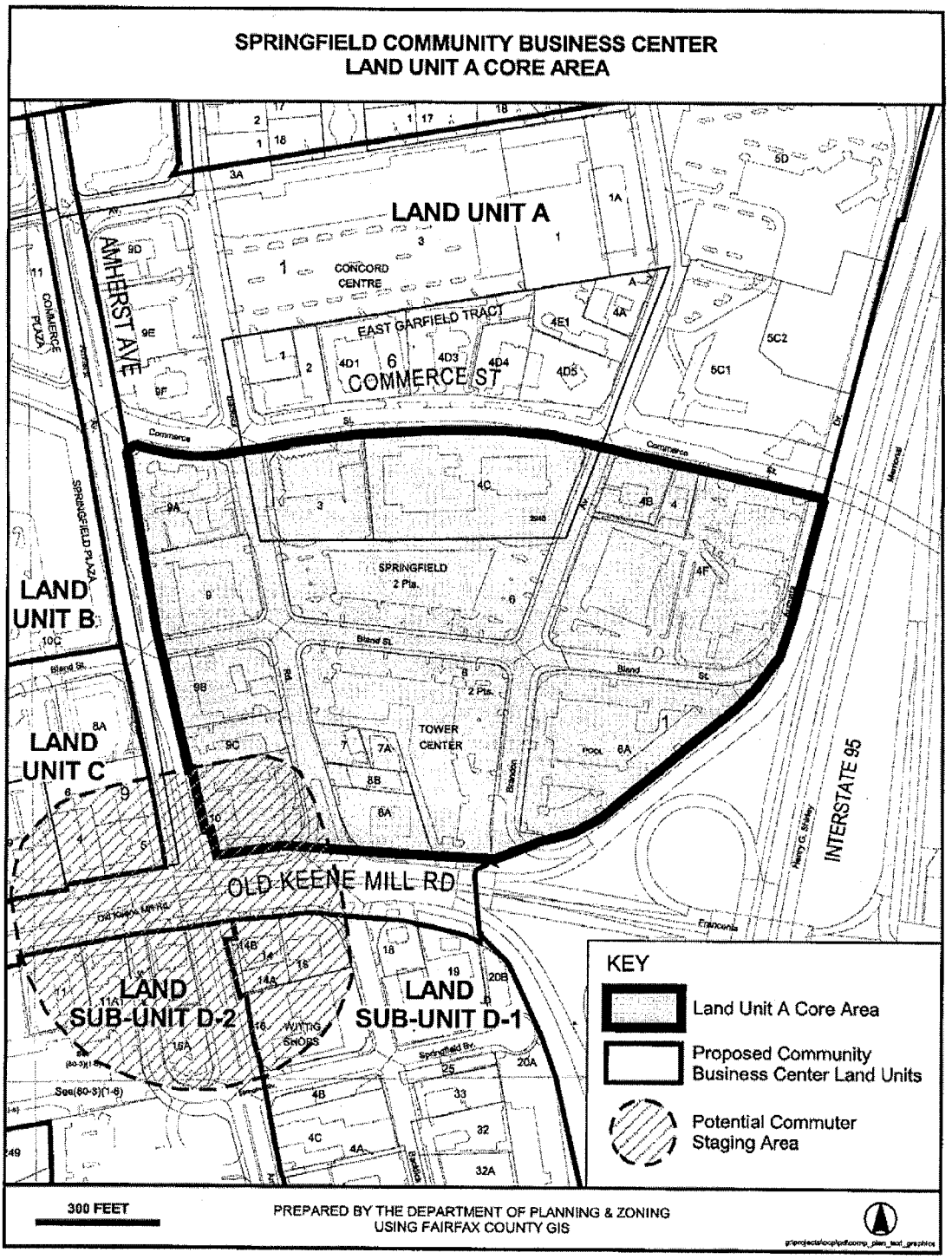

SPRINGFIELD COMMUNITY BUSINESS CENTER
LAND UNIT A CORE AREA
LAND UNIT A
CONCORD CENTRE
EAST GARFIELD TRACT
COMMERCE ST
AMHERST AVE
COMMERCE PLAZA
SPRINGFIELD PLAZA
LAND UNIT B
LAND UNIT C
SPRINGFIELD
TOWER CENTER
OLD KEENE MILL RD
INTERSTATE 95
LAND SUB-UNIT D-2
LAND SUB-UNIT D-1
KEY
Land Unit A Core Area
Proposed Community Business Center Land Units
Potential Commuter Staging Area
300 FEET
PREPARED BY THE DEPARTMENT OF PLANNING & ZONING
USING FAIRFAX COUNTY GIS

FIGURE 17

Buildings should step down to a lower height towards Yates Village to maintain a transition to the adjacent residential neighborhood. Building design should include varying rooflines for visual interest. Year round screening should be provided by vegetated buffer located along the northern boundary of Land Unit A in 80-3((1))1, 1A, 3 and 5D. This buffer may be utilized for surface parking provided that:

- Parking areas are landscaped with planting beds and trees in excess of that prescribed by the Zoning Ordinance;
- A minimum of 40 feet wide fully vegetated buffer is placed along the residential neighborhood with an eight foot high brick or architectural wall constructed along the parking edge;
- Buildings are located a minimum of 120 feet from the residential neighborhood. Appropriately landscaped surface parking may be located in this area;
- Office use should be compatible in design with the residential neighborhood; and
- Lighting from any development should be designed so that it is not intrusive to the adjacent residential development.

Freestanding single-use retail or office uses may be appropriate along Old Keene Mill Road and close to I-95. Under the option for redevelopment of the core area, freestanding single-use retail, hotel or office uses are only appropriate along Old Keene Mill Road and close to I-95. As part of the redevelopment of the core area, hotel use up to 110,000 square feet may be appropriate on the northwest corner of Old Keene Mill Road and Backlick Road, Tax Map 80-4((1))10. The site should be considered for this intensity only if enhanced streetscape amenities that create a focal point and gateway to the CBC are provided in addition to meeting the development criteria for Land Unit A. Additionally, to offset the effects of impervious surfaces the installation of rooftop vegetation and/or rain gardens is encouraged.

As discussed in the Transportation section and depicted on Figure 18, a commuter parking facility is planned in Land Unit A and/or C in the area adjacent to Amherst Avenue north of Old Keene Mill Road. The facility will complement a commuter staging area for car pool formation and bus/van service located across Old Keene Mill Road.

A major objective of the redevelopment of Land Unit A is the creation of a visually and functionally cohesive community. In addition to the implementation of urban design and architectural guidelines, land consolidation is necessary to physically unify freestanding buildings and for parking to be located to the rear of buildings or in the center of blocks. Where development intensity greater than .35 FAR is proposed, consolidation of at least 2 contiguous acres is encouraged, except as otherwise specifically recommended. When a consolidation is less than two acres, development should provide for vehicular and pedestrian access with abutting properties. As an alternative, coordinated development plans and concurrent processing of the development applications with a combined land area of at least 2 acres may be appropriate. In any instance, it must be demonstrated that any unconsolidated parcels are able to develop in conformance with the Plan.

All such development proposals in Land Unit A should also meet the following criteria:

- Multi-story buildings should have retail and service uses primarily located on the ground level. Retail and service uses are intended to serve both the needs of the office workers and residents;

- To the extent possible, parking facilities should be located in the center of the block, behind buildings or otherwise screened from view;
- Development should be transit-friendly: i.e. buildings should be located close to the street and streetscape amenities such as benches and bus shelters should be provided;

- As consistent with County Policy, a detailed traffic impact analysis should be prepared to determine any additional improvements required to mitigate the impacts of the proposed development on the street network in the vicinity of the development. Development under this option should mitigate the incremental traffic impact of the proposed development. Examples of mitigation may include but not be limited to making contributions to alternative traffic mitigation projects that benefit the greater Springfield area;

- Buildings and ground floor retail uses should have street level public access. Display windows oriented towards the street should be provided;

- Pedestrian circulation and the use of public transit should be encouraged through site design and connections to sidewalk and trails;

- Building design should reduce the effect of building height and bulk;

- Shared parking is encouraged;

- Curb cuts should be minimized; and

- Urban design elements such as the pedestrian plaza, pedestrian amenities, and landscaping should be provided.

Land Unit B

Land Unit B is located west of Amherst Avenue and extends along the northern boundary of the Springfield Community Business Center (CBC) and contains a variety of uses including the Springfield Plaza and Commerce Plaza shopping centers, multifamily residences, the Richard Byrd Library, and an office building. The Richard Byrd Library should be expanded at its present location in place or relocated within the CBC.

Streetscape design improvements as shown on the Springfield Streetscape Conceptual Plan should be incorporated into the area to upgrade existing development and create a harmonious visual appearance. Buildings should be well landscaped, oriented to a public street, and screened from stable residential areas. Lighting should be designed so that it is not intrusive to the surrounding residential areas. Additional guidance concerning urban design, architecture, landscaping, pedestrian circulation, and pedestrian amenities for the land unit are provided in the urban design and streetscape section.

The area located to the west and north of Commerce Street is planned for multifamily residential use at a density up to 30 dwelling units per acre with the exception of the Richard Byrd Library, which is planned for public facilities uses and Tax Map 80-3 ((1)) 3D, which is planned for office use up to .35 FAR. Elderly housing at a density up to 30 dwelling units per acre is encouraged for the area between Dinwiddie Street, Commerce Street, and Amherst Avenue. The vacation of Cumberland Avenue as a part of this option should be explored in order to create a larger development site. Any northern or westward expansion of non-residential uses along Backlick Road and beyond Commerce Street is discouraged.

The Springfield Plaza and Commerce Plaza shopping centers comprise the rest of the land unit. They are major features of this area and are planned for community-serving retail uses up to .50 FAR. Expansion of the area with additional retail and office uses is encouraged. With this expansion, emphasis should be placed on creating a pedestrian-oriented streetscape along the eastern boundary to include public amenity features such as gathering spaces with shaded areas, improved parking area landscaping, pedestrian connections to the rest of the CBC, and a coordinated entry drive at Bland Street.

Land Unit C

Land Unit C is located west of Amherst Avenue, north of Old Keene Mill Road and south and east of Bland Street. The land unit is planned for office use with support retail up to 0.50 FAR with substantial parcel consolidation. High-quality architecture, landscape design, and pedestrian amenities should be provided. Shared parking is encouraged and should be shielded from view within the site. As discussed in the Transportation section and depicted on Figure 18, a commuter parking facility is planned in Land Unit A and/or C in the area adjacent to Amherst Avenue north of Old Keene Mill Road. The facility will complement a commuter staging area for car pool formation and bus/van service located across Old Keene Mill Road.

Land Unit D

Land Unit D is located on the southern portion of the Springfield Community Business Center (CBC). As with the northern portion of the CBC, the Comprehensive Plan encourages the creation of an urban, pedestrian oriented area with a mix of medium to high intensity office, hotel, retail, residential, and ground floor retail uses.

Parcels in the vicinity of Springfield Boulevard and Amherst Avenue south of Old Keene Mill Road may be appropriate for use as a commuter staging area for car pool formation and bus/van service. As discussed in the Transportation section and depicted on Figure 18, a commuter parking facility is planned in Land Unit A and/or C in adjacent to Amherst Avenue north of Old Keene Mill Road. The commuter staging area will complement a parking area located across Old Keene Mill Road.

Sub-Unit D-1

Sub-unit D-1 is generally located south of Old Keene Mill Road and north of the Backlick Center, between Amherst Avenue and Interstate 95. Auto-serving retail and service establishments, ethnic restaurants, and other retail uses characterize this area. The sub-unit is an area where medium- to high-density redevelopment with consolidation of parcels is encouraged to alleviate some restrictions to development of narrow parcels. Sidewalk connections and landscaping complementary to streetscape improvements are recommended.

The area between Old Keene Mill Road and Springfield Boulevard is planned for retail uses up to 0.70 FAR with the following conditions:

- Uses located on the ground floor should have direct public access and display windows oriented towards the street;
- Building design should reduce the effect of building height and bulk;
- High-quality architecture and landscape design should be demonstrated;
- Pedestrian connections should be provided between buildings and uses;
- Structured parking should be shielded from view within the development; and
- Transportation impacts should be mitigated through the use of transportation demand management (TDM) strategies as shown in Figure 16.

With substantial consolidation, the area is planned for office and retail uses up to 1.5 FAR.

Parcels in the vicinity of Springfield Boulevard and Amherst Avenue south of Old Keene Mill Road may be appropriate for use as a commuter staging area.

The area south of Springfield Boulevard and east of Backlick Road is planned for retail uses up to 0.70 FAR if the following conditions are met:

- Uses located on the ground floor should have direct public access and display windows oriented towards the street;
- Building design should reduce the effect of building height and bulk;
- High-quality architecture and landscape design should be demonstrated;
- Pedestrian connections should be provided between buildings and uses;
- Structured parking should be placed at the rear or shielded from view within the development; and
- Transportation impacts should be mitigated through the use of transportation demand management (TDM) strategies as shown in Figure 16.

With substantial consolidation, the area is planned for high-rise office, hotel and/or residential uses with ground floor retail uses up to 1.5 FAR

The area south of Springfield Boulevard and west of Backlick Road is planned for mid-rise office use with ground floor retail uses up to 0.70 FAR. To the extent possible, a public park/plaza should be provided at the southern end of Parcel 11F and streetscape improvements, including sidewalks, landscaping and pedestrian amenities along Backlick Road and Amherst Avenue. As an alternative, uses such as automobile sales and services may be considered for this area at an intensity up to 0.70 FAR. With substantial and logical consolidation, development up to 1.0 FAR may be considered if the following additional conditions are met:

- Uses located on the ground floor should have direct public access with display windows oriented towards the street;
- Building design should reduce the effect of building height and bulk;
- High-quality architecture and landscape design should be demonstrated;
- Pedestrian connections should be provided between buildings and uses;
- Structured parking should be shielded from view within the development; and
- Transportation impacts should be mitigated through the use of transportation demand management (TDM) strategies as shown in Figure 16.

Sub-Unit D-2

Sub-unit D-2 is located south of Old Keene Mill Road between the Springvale community, Amherst Avenue, and north of the junction of Amherst Avenue with Backlick Road.

Tax Map 90-2 ((1)) 11D and 11E are planned to continue as automobile sales and service use up to .50 FAR. The remainder of the sub-unit is planned for low intensity retail and office uses up to .50 FAR with a height limitation of 50 feet. Any development should be screened from the Springvale community and meet the following additional conditions:

- Uses located on the ground floor should have direct public access with display windows oriented towards the street;
- Building design should reduce the effect of building height and bulk;
- High-quality architecture and landscape design should be demonstrated;
- Buildings should be set back 50 feet from the property line adjacent to residential uses;
- Structured parking should be shielded from view within the development;
- Pedestrian connections should be provided between buildings;
- A joint use structured public parking facility should be provided; and
- Transportation impacts should be mitigated through the use of transportation demand management (TDM) strategies.

Land Unit E

This land unit is located north of the Franconia-Springfield Parkway, between I-95 and the residential areas west of Backlick Road. Land Unit E is located south of the junction of Amherst Avenue with Backlick Road. Retail, low-rise office, and residential uses are planned for this land unit. Community-serving retail uses with intensities up to .35 FAR are planned in order to retain existing businesses and provide space for the start-up of new businesses. Office uses

shown on the Plan map should be retained and existing office uses located along Backlick Road should be retained at existing FARs. However, non-residential development along the Franconia-Springfield Parkway is discouraged.

That portion of Parcel 90-2((1))23 that is opposite the Grand View townhouse development located on Villa Park Road is planned for transitional low-rise office use. Such office development should consolidate parcels to provide for existing and proposed roadway improvements, and provide effective noise attenuation measures as needed. Appropriate landscape treatment should be provided where necessary to protect adjoining residential or institutional uses.

The Brookfield Plaza shopping center site, located west of Backlick Road off Spring Garden Drive, is planned for community-serving retail use up to .35 FAR. As an option, residential use at 16-20 dwelling units per acre may be appropriate to create a distinct edge to commercial development and be compatible with surrounding residential uses. Under this option, the following conditions should be met:

- Complete parcel consolidation (Tax Map 90-2((1))17, 17A, ((2))1 and 2) to provide for a well-designed project;
- Provision of effective screening and buffering to adjacent residential neighborhoods;
- Heights of structures do not exceed 40 feet; and
- Access is limited to Backlick Road and curb cuts are minimized.

Transportation

Existing Conditions

The Springfield CBC is heavily impacted by traffic oriented to the Capital Beltway and I-95, as well as to the development within the greater Franconia-Springfield area. Existing traffic conditions (as of 2001) are in the Level-of-Service (LOS) E to F range as measured by delay at critical intersections, indicating severe traffic congestion during peak hours of travel, with forced flow conditions. Traffic congestion is most evident along Old Keene Mill Road, Backlick Road, and the Commerce Street Bridge.

Traffic patterns in the Springfield CBC have been substantially affected by the Springfield Interchange Improvement project. This multi-year VDOT improvement of the Capital Beltway/Old Keene Mill-Franconia Road/I-95 Interchange is scheduled to be completed by 2008. Construction activities associated with the project have disrupted normal patterns of traffic flow in the area. Most of the construction activity within the CBC area has been completed.

The Springfield CBC is traversed by a number of Metrobus, Fairfax County Connector bus routes, and the Transportation Association of Greater Springfield (TAGS) shuttle bus. These bus routes carry large volumes of riders to the adjacent I-95 HOV lanes and to the Pentagon and downtown D.C. The CBC is also used as a staging area for formation of carpools utilizing the I-95 HOV lanes.

Future Conditions

Analysis of future conditions based on planned land use indicates significant increased traffic as a result of redevelopment within the CBC. It is estimated that the additional development to a build out level will increase peak hour traffic volumes in the CBC area by at least 3,500 trips. This will result in diminished levels-of-service at intersections in and around the CBC.

Two conditions help to alleviate some of the impact of these projected increased traffic volumes. First, the increased mix of uses due to the planned increases in residential, retail, and hotel uses will serve to increase the percentages of internal trips and walk trips, reducing the volumes that would otherwise be entering and exiting the area during peak hours of travel. To the extent that commuters and shoppers are attracted from within the area, and walk rather than drive, projected traffic volumes are reduced. Second, improvements to the roadway network within the CBC as a result of the Springfield Interchange Improvement have added system capacity. Old Keene Mill Road has been widened to 8 lanes in the CBC area, and the Commerce Street Bridge to 4 lanes. These improvements add capacity to the arterial roadway system supporting the CBC, offsetting some of the projected future increase in traffic volumes.

On an areawide basis, the Springfield CBC is affected by growth in other parts of the Franconia-Springfield Area and the surrounding region. Large volumes of daily and peak hour traffic pass through the CBC. Increased traffic is also expected to occur from the nearby Franconia-Springfield Transit Station Area and the Engineer Proving Ground property.

The existing and planned highway capacity to and from the Springfield Area is not adequate to accommodate projected traffic volumes at accepted levels of service. In order to minimize future traffic congestion in the area, the levels of transit and HOV usage must be increased significantly beyond that which occurs at present or has been observed to date in other suburban environments.

Transportation recommendations are shown on Figure 18. In some instances, site-specific transportation recommendations are included in the land use recommendations section. The recommendations contained in the Area Plan text and maps, the Policy Plan and Transportation Plan map, policies and requirements of the Public Facilities Manual, the Zoning Ordinance, and other standards will be utilized in the evaluation of development proposals.

Transportation recommendations for the Springfield CBC are divided into three areas: General Recommendations, Roadway and Circulation Improvements, and Public Transportation Improvements.

General Recommendations

The following General Recommendations are provided to set the framework and guide development in the CBC:

- Transportation System Adequacy
  Proposed development in the CBC should ensure that acceptable levels of service can be maintained on the surrounding roadway system. Applicants for new development should demonstrate that their proposals can maintain at least a Level of Service (LOS) D when site-generated traffic is added to ambient and forecast traffic levels. LOS D is a condition with heavy traffic operating at tolerable speeds with occasional

slowdowns. Where it cannot be demonstrated that LOS D conditions will be achieved, applicants will be required to provide commitments beyond those which might otherwise be required, as a means of offsetting the impact of the project and maintaining system adequacy.

- Public Transportation/HOV Goals
  The County's Policy Plan sets forth a goal of 15 percent transit/HOV use for all development centers except Tysons Corner. Attainment of this goal will require a significant increase in the percentage of persons traveling to the CBC in transportation modes other than single-occupant automobiles. Rigorous transportation demand management (TDM) programs implemented by employers, combined with substantial public and private sector investments in transit improvements, have been identified as a means of achieving this goal.

- Dedication of Rights-of-Way
  Implementation of identified roadway and circulation improvements for the CBC will require dedication of rights-of-way where such improvements are required. Rights-of-way may be required for major highway and transit projects, subject to the completion of appropriate studies. To ensure that options for undertaking necessary transportation improvements are not foreclosed, such dedication should occur as new development is approved. Dedication should include agreement to forecast the easements required for ancillary needs for transportation improvements.

- Dedicated Sources of Funding
  A key factor in the implementation process is the ability to generate stable and ongoing sources of funding for transportation improvements. Development at the levels recommended is feasible only if the private sector contributes a proportional share of the funding to meet such needs. A study of the total transportation needs and costs of improvements is recommended to determine the appropriate means of providing private sector contributions for transportation improvements and services. Examples of projects to be funded include: local share of funding of TAGS bus service, commuter parking facilities to encourage carpool formation, streetscape improvements, and improvements to local streets and intersections to reduce traffic congestion, enhance access, and improve circulation in the Town Center.

Roadway and Circulation Improvements

The roadway and circulation plan for the CBC addresses improvements to accommodate: 1) through traffic; 2) internal circulation of traffic; and 3) access to property. Roadway improvements planned for the Springfield CBC are described below and illustrated on Figure 18.

Arterial Roadways

Arterial roadways consist of freeways/expressways, other principal (or major) arterials, and minor arterials. On arterial roadways, local access is subordinate to the primary function of carrying through traffic. The following arterial roadway improvements were recently completed to serve the Springfield CBC's planned land use and through traffic:

1. Widening of Old Keene Mill Road to 8 lanes between Commerce Street and the I-95 interchange.

2. Widening of Commerce Street to 4 lanes between Amherst Avenue and Franconia Road interchange.

Improvements to grade-separated interchanges are recommended at several locations. The provision of an interchange has both land use and transportation planning implications. Development or redevelopment of properties adjacent to future interchange improvements should recognize the need to reorient access in a manner consistent with the future interchange design. The following interchange improvements are planned to serve the Springfield CBC area:

1. I-95/Old Keene Mill Road interchange. The "Springfield Interchange Improvement" is a multi-year VDOT project which, when completed, will substantially reorient traffic in, around, and through the Franconia-Springfield Area. As part of this larger improvement of the Capital Beltway and I-95/I-395 interchange, ramp connections from Old Keene Mill Road to and from I-95 and the HOV lanes have been substantially reconfigured, and Old Keene Mill Road through the CBC area has been widened to 8 lanes. The project also includes widening of the Commerce Street Bridge across I-95, including new access from Commerce Street to northbound I-95 and the westbound I-495 lanes. The entire Springfield Interchange Improvement project is scheduled to be completed by 2008.

2. I-95/Franconia-Springfield Parkway interchange. This project will construct ramps to allow low-occupancy vehicle access between I-95 and the Franconia-Springfield Parkway. Improvements to introduce new ramps to/from I-95 in the area of the Backlick Road interchange, will require realignment of the existing entrance and exit ramps to the Parkway at Backlick Road.

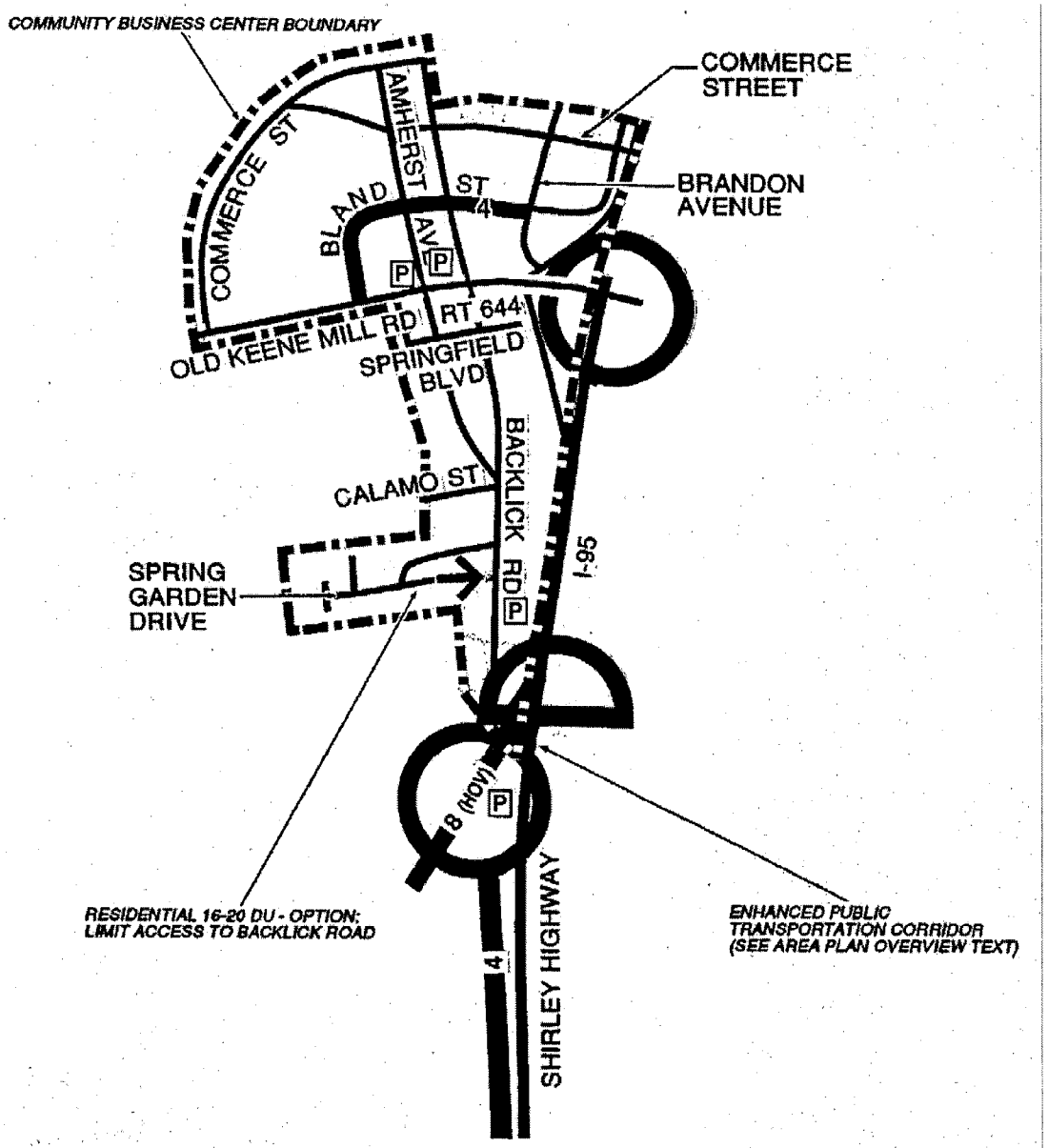
Collector, Local Street and Other Circulation Improvements

Collector roadways route traffic to and from local streets to the arterial road system. Collector roads generally are not intended to attract through trips, but instead provide for internal traffic circulation, including transit service. For the most part, collector and local street improvements are made in conjunction with revitalization/ redevelopment activity.

Analysis of existing and future traffic conditions in the CBC has indicated the need for a number of improvements to be made to the street system to enhance access, improve internal circulation, and implement the Town Center concept. Additional refinement and analysis will be needed prior to implementation. The following recommendations are made to improve traffic circulation and enhance the revitalization of the CBC:

1. Improved access to the Town Center – The Springfield Town Center is served by four arterial roadways; Old Keene Mill, Amherst Avenue, Backlick Road, and Commerce Street. While these facilities provide connections to the regional and interstate roadway system from the CBC, improvements are needed to enhance access to the Town Center from these roadways, particularly from the Old Keene Mill Road commuting corridor. The following improvements have been identified for further study:

   - Old Keene Mill Road/Commerce Street intersection. The Commerce Street intersection serves as a gateway to the CBC, providing the first opportunity for left turn access to the Town Center area for eastbound traffic on Old Keene Mill Road.



SEE TEXT FOR CIRCULATION AND ACCESS IMPROVEMENTS RECOMMENDED WITHIN THE CBC

TRANSPORTATION RECOMMENDATIONS **FIGURE 18**

The intersection does not presently accommodate left turns to Commerce Street without vehicles backing out into the eastbound through lanes on Old Keene Mill Road. Widening of the Commerce Street bridge and opening of a new ramp from the bridge to westbound Capital Beltway are expected to attract additional left-turning traffic. Evaluation of the intersection indicates a current need to provide a second left turn lane and an extension of the storage length.

- Springfield Boulevard. The intersection of Old Keene Mill Road with Backlick Road provides an opportunity for eastbound traffic to access the Town Center via a continuous right-turn movement at Backlick Road, Springfield Boulevard and across the Amherst Street Bridge. This movement also provides a convenient access to theplanned future commuter parking facility north of Old Keene Mill Road. It is expected that, under future traffic conditions, westbound Springfield Boulevard traffic will spill back though the intersection with Backlick Road without further improvements. Improved signage, signalization, and lane geometry on Old Keene Mill Road, Backlick Road, and Springfield Boulevard are needed to enhance access to the Town Center and to the planned commuter and Town Center parking facilities.

2. Major weaving areas – Further traffic analysis is recommended to address two major weaving areas in the CBC:

   - Westbound Old Keene Mill Road weave section between Backlick Road and Bland Street. This weave has recently developed with the placement of the raised median, from the Springfield Interchange project, precluding right turns from accessing northbound Backlick Road from the express lanes. After the project is completed and traffic is stabilized, analysis should be undertaken and the impacts of the median placement reviewed. An option to evaluate would be to signalize westbound Old Keene Mill Road movements and the right turn movements from southbound Backlick Road to westbound Old Keene Mill Road. If signalization analysis indicates that stopping ramp traffic does not impede operations on the interstate, consideration of allowing a right turn from the center "express lanes" should also be explored.

   - Eastbound Cumberland Avenue weave between Amherst Avenue and Backlick Road. The preponderance of traffic traveling from southbound Amherst Avenue through the weave on Cumberland Avenue is turning left onto eastbound Commerce Street at Backlick, rather than traveling through the intersection to the dual lefts at Commerce and Amherst. The current signalization encourages the weaving on Cumberland and increases traffic on Cumberland and southbound Backlick. Signalization and other improvements are needed to reduce or eliminate elements of the weaving condition and direct traffic to the Commerce/Amherst intersection.

3. Bland Street improvements – Bland Street will serve as an entryway to the Town Center as well as a primary access to the planned joint use public parking facility north of Old Keene Mill Road. As the importance of Bland Street grows, traffic operations should be supported by roadway and intersection designs that provide clear guidance to drivers and pedestrians. The short distance between Amherst Avenue and Backlick Road provides only a limited ability to store stopped traffic at the signalized intersections. Bland Street between Amherst Avenue and Backlick Road should be widened to accommodate through traffic. Turn lanes should be separated from the through lanes to provide sufficient stacking for westbound left turning traffic to southbound Amherst Avenue, and eastbound right-turning traffic to southbound Backlick Road. The intersection of Bland and Amherst should be redesigned to

accommodate two westbound through lanes and a free-flow right turn from the bridge to eastbound Bland. Bland Street should be widened to accommodate 4 lanes of traffic from west of Amherst to Brandon Avenue.

4. Main Street concept in the Town Center – A "main street" concept should be considered for Bland Street, Brandon Avenue, and Backlick Road in the designated Town Center area. Elements of the main street concept should include on-street parking, pedestrian walkways, streetscape design elements, enhanced signage, and traffic calming features. As the Town Center concept is implemented, streets are expected to evolve into active pedestrian-oriented main streets with roadway and intersection designs that provide clear and safe guidance to both drivers and pedestrians.

Pedestrian and Bicycle Circulation

Pedestrian and bicycle travel constitute other forms of circulation in the CBC, providing access between employment, commercial, and residential land uses. Utilization of pedestrian and bicycle modes could provide benefits in reduced traffic congestion.

Coordinated pedestrian networks are recommended for all development in the Springfield CBC. Coordinated walkway networks should provide intra- and inter-parcel pedestrian circulation to and from buildings, parking facilities, recreation facilities and public/civic spaces. Pedestrian crossings, pedestrian activated signals, and pedestrian refuge medians should be incorporated into roadway intersection design. These elements are necessary in order to facilitate pedestrian travel in an area traversed by a number of high volume traffic arteries, which are difficult to cross. Pedestrian circulation should be provided through and from parking lots, and to transit stops.

To encourage the use of bicycles as an efficient mode of commuter transport, support facilities are needed, including designated bicycle paths, long and short term parking and storage, weather protection and security devices such as bike lockers, and bicycle parking racks in convenient locations.

Public Transportation Improvements

The land use concept for the Springfield CBC recognizes that the recommended road and circulation improvements alone would be insufficient to support the development potential. The development concept is predicated on achievement of a 15 percent mode split for public transportation usage. Public transportation is defined in the Policy Plan as consisting of transit and high occupancy vehicle use.

In order to support the revitalization of the CBC, there will be a need for public transportation improvements in the following areas: transit services and facilities, high occupancy vehicle facilities, transportation demand management programs, and commuter parking facilities. These recommended improvements are described next:

Transit

The proximity of the Joe Alexander Transportation Center, located south of the Franconia-Springfield Parkway at Frontier Drive, and the high-occupancy vehicle lanes planned or existing on I-95, the Capital Beltway, and the Franconia-Springfield Parkway, makes the Springfield CBC a favorable location for improved transit usage. In addition to these

facilities, the Transportation Association of Greater Springfield (TAGS) currently provides circulator transit service throughout the Franconia-Springfield area, and connections between the Springfield CBC, Franconia-Springfield metro station and Virginia Railway Express commuter rail facility located at the Joe Alexander Center. TAGS is a public-private venture partially funded through federal grant monies.

High Occupancy Vehicle Facilities

HOV facilities are planned on the Franconia/Springfield Parkway, the Capital Beltway (I-495) and I-95. These facilities will provide incentives for commuters to the CBC to utilize carpools, vanpools and transit buses during peak periods of travel. Over the long term, availability of the HOV lanes during peak periods of travel will help to induce more ridesharing and express bus travel to and from employment sites in the CBC and Franconia-Springfield area. In addition, commuter parking facilities to accommodate carpool formation and transit use are planned in Land Units A and D in the vicinity of Old Keene Mill Road.

Transportation Demand Management Programs

TDM programs are identified as a necessary component to increase the use of public transportation to and from the CBC. Since land use plans for this area assume higher levels of HOV and transit usage than are currently experienced, it will be necessary to adopt rigorous and enforceable TDM programs to achieve this goal. TDM programs should be designed to take advantage of the proximity of the Metrorail, commuter rail, and HOV facilities planned for the area, and should include such activities as the provision of shuttle bus services, alternative work schedules, HOV subsidies, vanpool and carpool matching programs, reduced parking, as well as other features. See Figure 16.

Commuter Parking Facilities

New commuter parking facilities are recommended for several locations in the Springfield CBC. These facilities serve as commuter staging areas for carpool formation as well as potential locations for future transit service connecting to nearby HOV facilities. A joint-use public parking facility is proposed for Land Unit A and/or C, to be located adjacent to Amherst Avenue, south of Bland Street.

Smaller commuter parking facilities have been planned east of Backlick Road on both the north and south sides of the Franconia-Springfield Parkway. These have been funded through the Congestion Mitigation Program of the Springfield Interchange Improvement. To the north of the Parkway, a surface lot of up to 300 spaces is planned. South of the Parkway across from the eastbound exit ramp, a total of 210 spaces are planned south of the Fire Station. These facilities will facilitate use of carpools during the period of construction of the interchange improvement, while also serving longer-term commuter parking demand in the Franconia-Springfield Parkway and I-95 corridors.

Parks and Recreation

Parks and recreation recommendations for this area are shown in Crestwood Community Planning Sector on Figure 15 and Springvale Community Planning Sector on Figure 25. The column "Park Classification" includes existing park facilities. The "Recommendations" column

includes entries for both existing and proposed facilities. Prior to developing parkland, the Fairfax County Park Authority initiates a master planning process to determine the appropriate facilities and design for that park. This process involves extensive citizen review and participation. If an existing park is listed but no recommendation appears on that line, it means the park has been developed in accordance with its master plan.

Public park and recreation facilities are not available in the Springfield Community Business Center. Nearby public park facilities that serve some of the park needs for the CBC include Brookfield, Byron Adams, Hooes Road, Lynbrook and Springvale Parks.

In order to meet park and recreation needs in the CBC, recreation facilities should be provided as part of new residential development with on-site facilities. Contributions should be made by both new residential and non-residential development for off-site public park facilities that serve the CBC. Open space amenities should be provided as part of the pedestrian system by incorporating urban parks such as pocket parks, plazas and courtyards.