



# PROPOSED COMPREHENSIVE PLAN AMENDMENT

ITEM: ST10-IV-MV1  
March 2, 2012

**GENERAL LOCATION:** West of the intersection of Richmond Highway and North Kings Highway, between School Street and the Kings Garden Apartments

**SUPERVISOR DISTRICT:** Lee

**PLANNING AREA:** Area IV

**PLANNING DISTRICT:** Mount Vernon

**SUB-DISTRICT DESIGNATION:** North Gateway and Penn Daw Community Business Center, Sub-unit F-2 and Land Unit H

**PARCEL LOCATION:** 83-3 ((1)) 6, 7, 22A, 22B1; 83-3 ((4)) A, 34, and 35; 83-3 ((11)) 2, 3, 4, 5, and 6

**PLANNING COMMISSION PUBLIC HEARING:** Wednesday, March 21, 2012 @ 8:15 PM

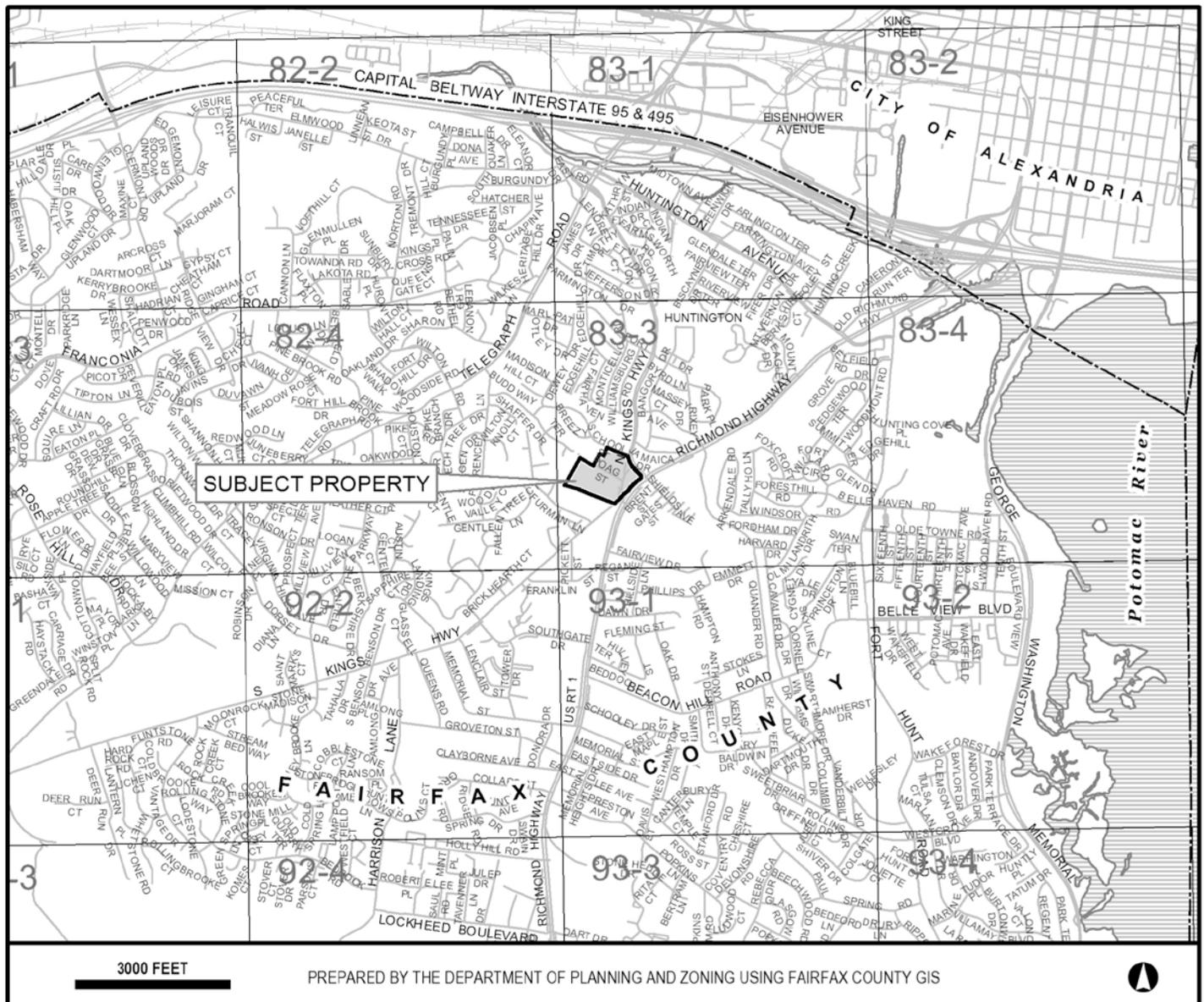
**BOARD OF SUPERVISORS PUBLIC HEARING:** Tuesday, April 10, 2012 @ 3:30 PM

**PLANNING STAFF DOES RECOMMEND THIS ITEM FOR PLAN AMENDMENT**

For additional information about this amendment call (703) 324-1380.



Reasonable accommodation is available upon 48 hours advance notice. For additional information about accommodation call (703) 324-1334.



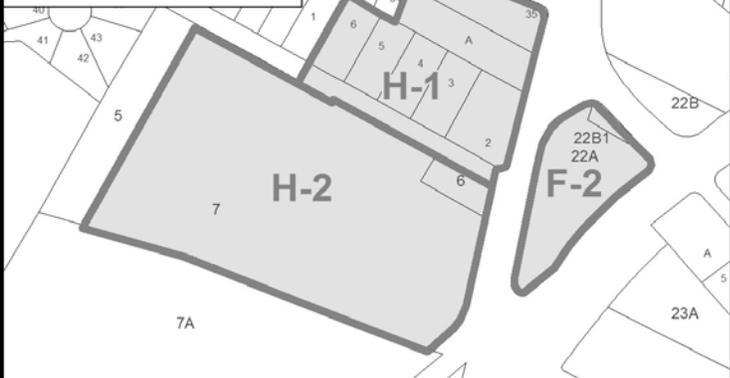
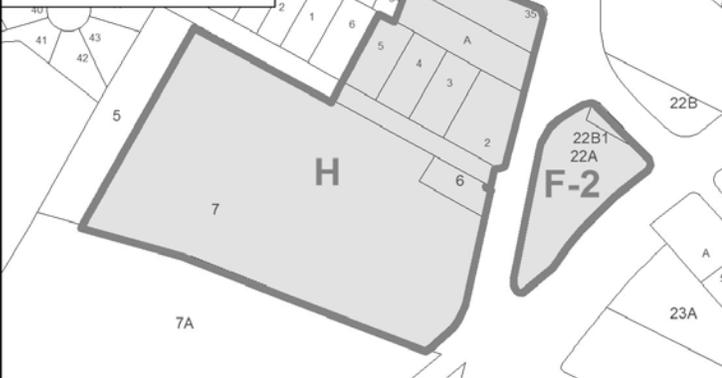
**CURRENT PLAN AND PROPOSED CHANGE**

PARCEL LOCATION MAP SHOWING CURRENT PLAN AND PROPOSED CHANGE FOR SUBJECT PROPERTIES AND CURRENT PLAN MAP FOR ADJACENT AREAS

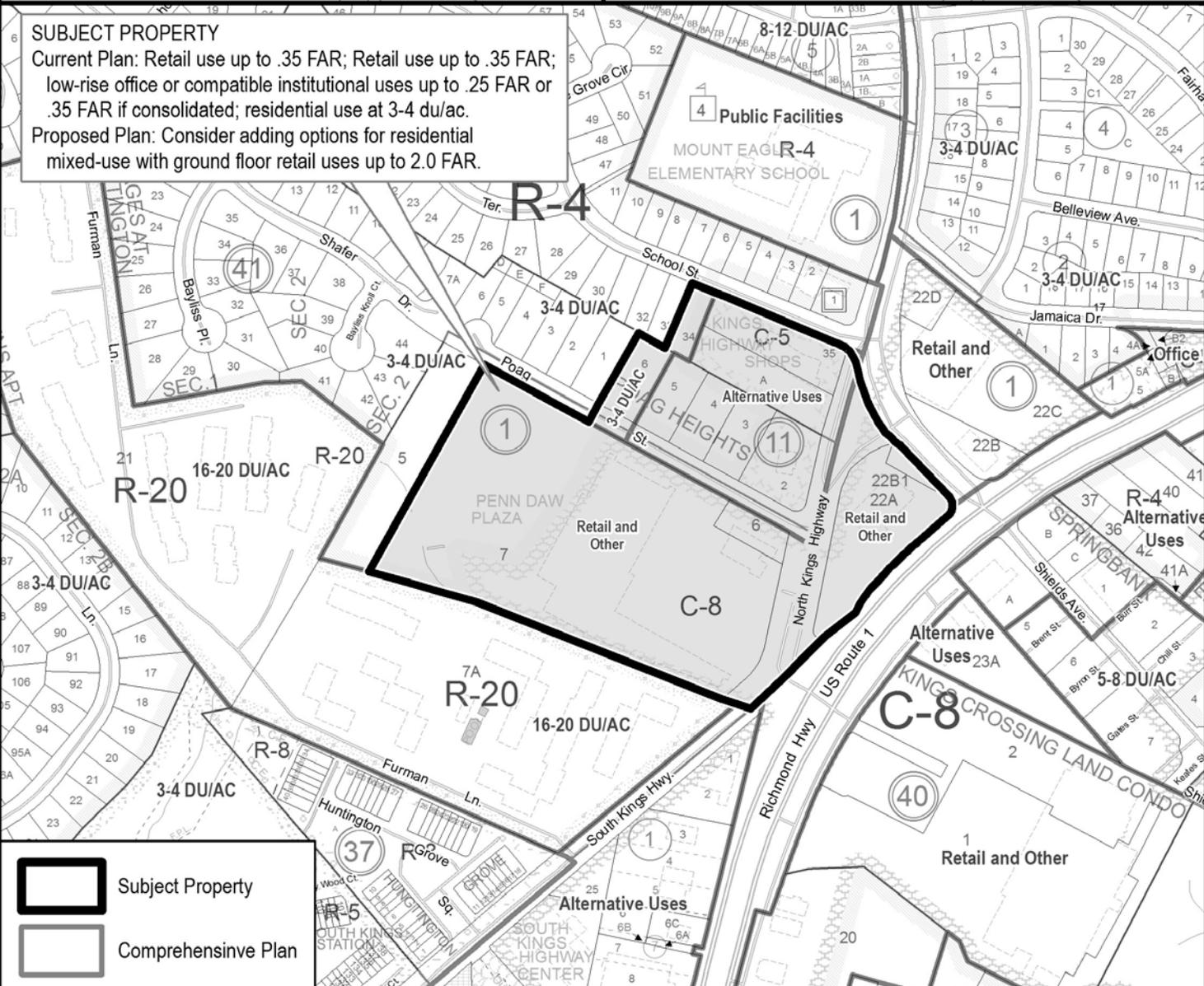
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Current Arrangement of Land Units

Proposed Arrangement of Land Units



**SUBJECT PROPERTY**  
 Current Plan: Retail use up to .35 FAR; Retail use up to .35 FAR; low-rise office or compatible institutional uses up to .25 FAR or .35 FAR if consolidated; residential use at 3-4 du/ac.  
 Proposed Plan: Consider adding options for residential mixed-use with ground floor retail uses up to 2.0 FAR.



-  Subject Property
-  Comprehensive Plan



# **STAFF REPORT FOR PLAN AMENDMENT ST10-IV-MV1**

## **BACKGROUND**

On May 11, 2010, the Board of Supervisors (BOS) authorized Plan Amendment ST10-IV-MV1 for a portion Land Unit H in the Penn Daw Community Business Center (CBC) (Tax Map parcels 83-3 ((1)) 6 and 7). The special study originated from deferred South County Area Plans Review (APR) nomination 09-IV-22MV, which proposed to replan an 11-acre portion of the study area for residential, retail, and/or office uses at an intensity up to 1.5 floor-area ratio (FAR). On November 16, 2010 the BOS expanded the study area to 17.23 acres to include Tax Map parcels 83-3 ((1)) 22A, 22B1; 83-3 ((4)) A, 34, and 35; 83-3 ((11)) 2, 3, 4, 5, and 6, allowing for a more holistic review of the area, including the rest of Land Unit H and Sub-unit F-2. This authorization increased the maximum intensity to be considered to 2.0 FAR. In fall 2010, a task force, representing both Lee and Mount Vernon Supervisor Districts, was formed to discuss a vision for the study area, providing a forum for additional communication between the community, property owners, and county staff.

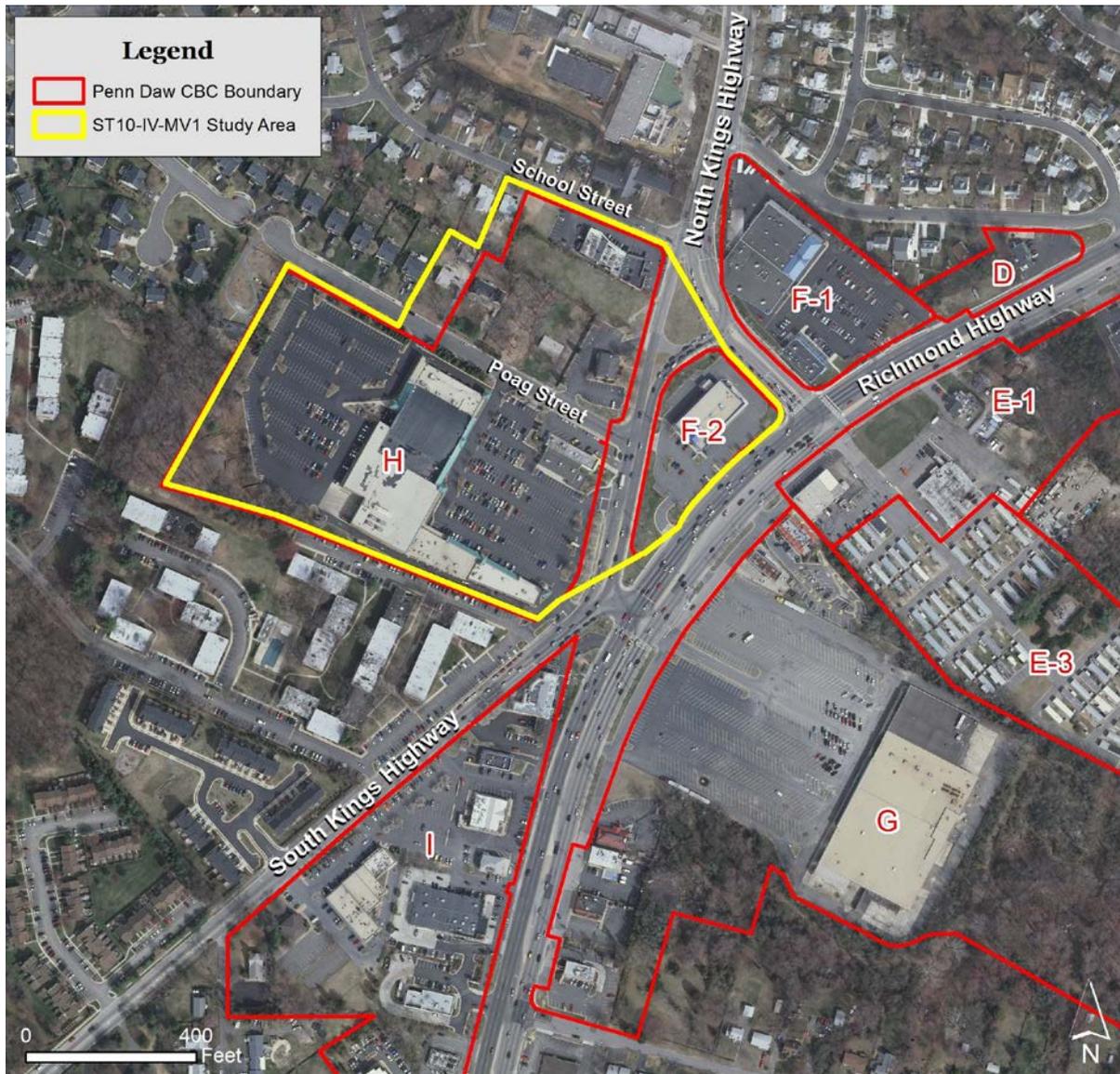
## **CHARACTER OF THE SITE**

The study area is generally located west of the intersection of Richmond Highway and North/South Kings Highway, between School Street and the Kings Garden Apartments, as shown in Figure 1. The study area includes Land Unit H and Sub-unit F-2 of the Penn Daw CBC along the Richmond Highway Corridor, as well as a small portion of the Huntington Community Planning Sector.

Sub-unit F-2, located between North Kings Highway, Richmond Highway, and Shields Avenue, is currently developed with a 13,000-square-foot retail space. This building, formerly the site of a Rite Aid drugstore, and is currently vacant. Land Unit H, west of North Kings Highway, is currently developed with office and retail uses. The northern portion of the land unit, between School Street and Poag Street, is developed with a 9,500-square-foot retail center, a 7,500-square-foot, two-story office building, and two single-family homes. South of Poag Street, the remainder of Land Unit H is developed with the 126,000-square-foot Penn Daw Shopping Center and 8,000 square feet of stand-alone retail use. Portions of this retail center, including the anchor tenant space formerly occupied by Shoppers Food Warehouse, are currently vacant.

The remainder of the study area lies outside of the Penn Daw CBC in the Huntington Community Planning Sector. This area consists of two single-family homes to the west of the CBC, located on Poag Street and School Street.

Figure 1. Aerial View of Study Area



## CHARACTER OF THE SURROUNDING AREA

Properties to the east of the study area are located within Land Units E, F, and G of the Penn Daw CBC. The portion of Land Unit E closest to the study area is currently developed with retail uses along the east side of Richmond Highway, and the Penn Daw Terrace Trailer Park along Shields Avenue. These areas are planned for office and/or retail uses up to an intensity of .50 FAR and residential use at a density of 5-8 du/ac, respectively. As an option, with consolidation, this area may be appropriate for redevelopment with a well-integrated mix of residential, office, retail, and hotel uses at an overall intensity up to an intensity of 1.5 FAR.

Sub-unit F-2 is located to the northeast of the study area, across Shields Avenue. This area is currently developed with retail uses, and is planned for community-serving retail use up to an intensity of .50 FAR with a maximum building height of 50 feet. This area is currently the subject of Board-authorized Plan Amendment S12-IV-MV1, which will consider residential use with ground floor retail up to an intensity of 1.8 FAR.

Land Unit G, located on the east side of Richmond Highway, across from the intersection with North/South Kings Highway, is developed with a big box retail store, gas station, and stand-alone restaurant uses. This area is planned for community-serving retail use up to an intensity of .50 FAR. Tax Map parcel 83-3 ((1)) 20 may be appropriate for redevelopment, subject to a concurrent Comprehensive Plan amendment and rezoning application.

Residential uses predominate in the areas to north, south, and west of the study area, outside of the Penn Daw CBC. The Kings Garden Apartments, located to the south and west of the Penn Daw Plaza, are a garden-style apartment community developed in the 1960s. These apartments, which are planned for a density of 16-20 dwelling units per acre (du/ac) and zoned R-20, serve as a transition between the commercial uses currently in the CBC, and lower-density residential neighborhoods to the west and south. The Penn Daw Village and Villages at Huntington neighborhoods, located to the north and west of the study area along Poag, Shaffer, and School Streets, are planned for residential use at 3-4 du/ac.

## **ADOPTED COMPREHENSIVE PLAN TEXT**

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through June 21, 2011, Richmond Highway Corridor Area, pages 39-40:

### **“Sub-unit F-2**

Parcels within this sub-unit include 83-3((1))22A and parcel 22B1 and are planned for retail use up to .35 FAR. A gateway feature should be provided on the sub-unit to serve as a focal point for the Penn Daw Community Business Center. If a transit center or enhanced transit stop cannot be accommodated in Land Unit E or additional analysis determines that Land Unit F2 is a more appropriate and logical location, a transit center or enhanced transit stop should be accommodated in this land unit to support mixed-use redevelopment in the surrounding area. Safe and convenient vehicular, bicycle, and pedestrian access and connections between Land Unit E and Sub-Unit F2 should be provided to ensure safe operation. Should future study determine that rail is appropriate for the Richmond Highway corridor and that this location warrants a station, a future rail station should be accommodated.

...

## Land Unit H

Land Unit H contains the Penn Daw Shopping Center and adjacent commercial uses between School and Poag Streets along North Kings Highway. The Penn Daw Shopping Center site is planned for retail use up to .35 FAR. Free-standing uses should be discouraged to preserve an opportunity for connections to the proposed "gateway park". Additional parking lot landscaping and the introduction of a landscaped berm between the front parking lot and North Kings Highway is encouraged.

The existing commercial uses between School and Poag Streets along the west side of North Kings Highway are planned for low-rise office or compatible institutional uses up to .25 FAR to serve as a transition between the residential and commercial areas located north and south of the subject property, respectively. As an option, if parcels are completely consolidated and an integrated, well-designed development is proposed, an FAR up to .35 may be appropriate."

Figure 2 lists the parcels, Comprehensive Plan text and Comprehensive Plan Map recommendations, and zoning designations for the study area.

**Figure 2. Comprehensive Plan Recommendations and Zoning**

Parcels	Comprehensive Plan Text	Comprehensive Plan Map	Zoning
83-3((1))22A, 22B1 Sub-unit F-2	Retail use up to .35 FAR. A gateway feature should be provided on the sub-unit to serve as a focal point for the Penn Daw Community Business Center. A transit center or enhanced transit stop should be accommodated with vehicular, bicycle, and pedestrian access.	Retail and Other	C-8
83-3 ((1)) 6, 7 Land Unit H (pt.)	Retail use up to .35 FAR. Free-standing uses should be discouraged.	Retail and Other	C-8; 39% of Parcel 7 is zoned R-4
83-3 ((4)) A, 35; 83-3 ((11)) 2, 3, 4, 5 Land Unit H (pt.)	Existing commercial uses planned for low-rise office or compatible institutional uses up to .25 FAR to serve as a transition. Option for intensity up to .35 FAR if parcels are completely consolidated and an integrated, well-designed development is proposed.	Alternative Uses	C-5, R-4
83-3 ((4)) 34; 83-3 ((11)) 6	No site-specific Plan text.	Residential 3-4 du/ac	R-4

## APPROACH

### Visioning

At the first task force meeting in December 2010, a brainstorming exercise was undertaken to discuss ideas for land use, intensity, site design, placemaking, amenities, transportation, and connectivity. From the ideas generated through the brainstorming exercise, four potential land use options were developed and presented to the task force in January 2011. From this, two alternatives were developed by the full task force and a third option was developed by a partial task force. In April 2011, a community-wide meeting was held, at which the owners shared their vision for redevelopment on the study area to the larger community and received feedback.

### Development of Alternatives

In June 2011, the task force developed two preliminary task force alternatives to be evaluated against the current Comprehensive Plan recommendations. An additional land use alternative was put forth by the property owners, as shown in Figure 3.

**Figure 3. Land Use Alternatives**

Current Comprehensive Plan	Task Force Alternative 1	Task Force Alternative 2	Property Owners' Proposal
194,000 SF retail use	130,000 SF retail	90,000 SF retail	70,000 SF retail
58,000 SF office use	300 mid-rise multi-family units	500 mid-rise multi-family units	780 mid-rise multi-family units
	20 townhomes	20 townhomes	36 townhomes
3 single family units	4 single family units	4 single family units	

The land use alternatives considered redevelopment of the study area by increasing the development intensity and changing the character of the area from a primarily, suburban-style commercial area into an urban-style, residential and retail mixed-use development. The redevelopment options envision orienting and aligning buildings to streets, with the intensity concentrated along Richmond Highway and North/South Kings Highway. Retail uses would be located on the ground-floor of the multifamily residential buildings, in the eastern portion of the study area close to North/South Kings Highway. Building height would taper down toward the existing residential neighborhood, adjacent to the study area. The type of residential use would transition from multi-family to townhouses and/or single-family units as building height tapers to existing neighborhoods.

Along with the land use alternatives that were evaluated, two transportation networks were considered. The adopted Comprehensive Plan network, which would sever the

existing connection between North/South Kings Highway and Richmond Highway and add a new southern connection at a location south of the Kings Garden Apartments (Figure 4a), was analyzed with each land use alternative. A second network (Figure 4b) evaluated shifting North/South Kings Highway to the west, creating a grid-like road system within the study area. This network was also analyzed with each land use alternative. Results of the transportation study are discussed in the Analysis section below.

**Figure 4. Transportation Network Alternatives**

*a. Adopted Comprehensive Plan Network*



*b. Grid-like Transportation Network*



*Note: Concept diagrams are not intended to be used as final engineered plans or construction documents. The exact location of the southern connection in the adopted Comprehensive Plan has not been determined.*

To assist the task force in analyzing the land use alternatives, a county-sponsored consultant conducted a market feasibility study to assess the development feasibility of the land use alternatives. Results of this study, which are discussed in further detail in the Analysis section, were presented to the task force in September 2011. The Executive Summary of the feasibility study can be found in Attachment I.

### **Task Force Outcome**

After 14 months of discussion, the task force was not able to reach a consensus on the intensity of redevelopment and mix of uses to be planned for the study area. Common ground was found with respect to phasing transportation improvements and to development amenities such as improved pedestrian connectivity and public gathering spaces.

## **ANALYSIS**

### **Land Use**

A majority of the subject area is located within the Penn Daw CBC, which has historically developed with auto-oriented retail uses. Land use guidance for the Richmond Highway Corridor text encourages a mix of uses within CBCs, to include office, retail, residential, and institutional uses.

Along the Richmond Highway Corridor, substantial consolidation of contiguous parcels is recommended to provide for well-designed, functional redevelopment. Given the divisions created by the surrounding roadway network, the study area can be organized into three segments: the portion between School Street and Poag Street, the portion south of Poag Street, and the portion east of North Kings Highway (Sub-unit F-2). Redevelopment would offer opportunities for consolidation that would support Comprehensive Plan objectives for improved design. It is recognized, however, that the presence of existing development and multiple property owners may preclude full consolidation. In this case, any existing retail that is not redeveloped can be visually and functionally integrated into redevelopment, allowing for the creation of a consistent streetscape with plazas and other gathering spaces. Given the existing layout of the roadway network, Land Unit H possess more contiguous developable land area than Sub-unit F-2, making higher-intensity redevelopment better able to provide open space and other amenities.

To serve the needs of new residents and surrounding neighborhoods, it would be appropriate to encourage ground-floor retail within the development. Ground-floor retail uses within multifamily residential buildings also would support the goal of retaining accessible, small businesses into commercial centers. Retail uses are envisioned to provide community amenities to residents, consisting of establishments such as coffee shops and sidewalk cafes. To achieve maximum visibility from North/South Kings Highway and Richmond Highway, these uses should be focused within Sub-unit F-2 and along the eastern portion of Land Unit H.

Given the presence of existing residential neighborhoods adjacent to the study area, appropriate buffering and transitions to ensure compatibility is an issue for consideration. Plan guidance for CBCs within the Richmond Highway Corridor states that mid-rise buildings are generally appropriate, provided that building heights taper town to adjacent neighborhoods with screening and buffering. Within Land Unit H, the tallest buildings should be concentrated adjacent to North/South Kings Highway, Buffers and screening, to include fencing or vegetation, would serve to protect the residential edge of the neighborhoods. Such buffer areas could also provide an opportunity for publicly accessible open spaces, such as pocket parks.

## **Urban Design**

To encourage a pedestrian-friendly redevelopment, special attention should be paid to urban design as it relates to the appearance of the buildings and configuration of the streetscape. Comprehensive Plan guidance for the Richmond Highway Corridor identifies urban design objectives that are intended to establish visual continuity, provide user orientation, establish a clear corridor image, improve access and functional amenities, and reduce impact on adjacent residential communities. A complete listing of urban design recommendations for the Richmond Highway Corridor can be found in Attachment II.

High quality site design, architecture, landscaping, and lighting would contribute to the visual appeal of the area. Consistent with the Building/Site Design Elements for the Richmond Highway Corridor, buildings should be oriented to the road, allowing for the creation of an urban street edge. Architectural features at street level should be incorporated to relate to a human scale and increase the pedestrian comfort level. Inclusion of elements such as sidewalks, landscaping, benches, pavement treatments, awnings, and lighting fixtures, is desired to reinforce pedestrian-orientation. These streetscape amenities should be provided throughout and adjacent to the study area, to include needed sidewalk improvements along School Street. Publicly accessible gathering spaces, such as urban parks and plazas, should be included to provide a community amenity to residents and the surrounding community. Inclusion of bus stops will allow for improved access to the Huntington Metrorail Station.

To avoid adverse visual impacts to the surrounding neighborhood and to provide a visually appealing redevelopment, parking should be consolidated into structures and integrated into the streetscape using aesthetically appealing architectural detailing, screening, lighting, and landscaping. If surface parking is provided, lots should be landscaped and screened to allow for integration into the pedestrian environment.

## **Market Analysis**

To assist the task force in analyzing the land use alternatives, a market study<sup>1</sup> was conducted to assess the development feasibility of the alternatives. The feasibility assessment process establishes “reasonable” retail and residential development parameters so that the amount of retail and residential space considered in the study is in line with foreseeable market demand within the next three to five years. Each land use alternative was analyzed, in addition to the current Comprehensive Plan recommendation and the current zoning. The Executive Summary of the market study can be found in Attachment I. A summary of the findings is as follows.

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<sup>1</sup> Alvarez & Marsal Real Estate Advisory Services, LLC. *Penn Daw Market Feasibility Analysis*, October 2011.

From a retail perspective, the Richmond Highway corridor has a mix of strengths and weaknesses. Most of the mid-size and large-size retailers that are absent from the Richmond Highway corridor tend to seek sites with greater regional trade areas. Often, these areas are nodes anchored by a regional shopping center with multiple department stores. Retailers and restaurants that are not present in the Richmond Highway Corridor are those that require large bases of upper-income consumers to achieve threshold sales volumes and retailers that generally prefer locations in regional malls. Along the Richmond Highway Corridor, the center of retail activity is located midway between the Beltway and the Fairfax County Parkway in the Hybla Valley area, where the greatest retail density exists.

The probable trade area to be served by the Penn Daw study area is a 5- to 10-minute drive radius. The amount of space that can be programmed in the Penn Daw study area, either by repositioning the existing shopping center or by constructing an entirely new structure, depends upon the ability of the developer to attract one or more anchor tenants with broad customer appeal. If one or more anchors could be attracted to the Penn Daw site, the most probable candidates would include a specialty supermarket, such as an Asian or Hispanic market, or a nontraditional anchor such as a public library or a health club.

The Penn Daw Plaza is a commercial property that is approaching functional obsolescence. This marginal commercial site will increasingly appeal to tenants that cannot afford high-quality commercial space. Securing strong tenants for the Penn Daw site is likely to be difficult due to site constraints and superior site options elsewhere in the Richmond Highway corridor.

Overall, the study area is constrained for retail development due to its poor visibility and access to Richmond Highway, the intrusiveness of Kings Highway and the dimensions of the subject area. Additionally, the Penn Daw site is not likely to attract anchor tenants due to competition and market saturation of existing anchors, resulting from an overlap of trade areas. Without an anchor use, the recommended gross leasable area (GLA) to be programmed in redevelopment of the study area is 15,000 to 40,000 square feet. This amount reflects reasonable sales capture and sales inflow for a convenience center serving residents within a half-mile radius. With an anchor tenant, the development can accommodate one square foot of small tenant space for each square foot of anchor space. A mix of retail shops, services and food service uses can be anticipated.

The unmet demand for office space in the vicinity of the study area is low, with little market appetite for new Class B or C office space, and virtually none for new Class A office space. The most probable users of office space in the study area would be sole proprietor or small group medical or professional tenants.

To produce acceptable returns, multifamily development within the study area would need rents in the range of \$1,400 to \$2,100 per month. Under this range of monthly rents, the maximum estimated number of supportable units is 748. Adding 335 to 816 new residential units to Penn Daw would generate support for approximately 8,200 to 20,100 square feet of retail development, with a higher number of units supporting the higher end of the range of square footage for retail. A townhouse development could succeed in the study area, but it would require a proper balance of pricing, design and project-funded amenities in order to attract sufficient buyers.

## **Transportation**

A transportation study was completed for the study area to assess the impacts of the task force alternatives on the roadway network and to examine alternative road alignments. Each alternative listed in Figure 3, including the existing Comprehensive Plan recommendation, was tested using the current Comprehensive Plan roadway network and a second, grid-like roadway network shown in Figure 4. Trip generation results are presented below in Figure 5.

The current Comprehensive Plan roadway network was amended in 2006 to remove a grade-separated interchange from Richmond Highway at Shields Avenue. As a result, the intersection of North Kings Highway and Shields Ave/School Street is recommended to be realigned to create a four-way intersection. The existing connection between South Kings Highway and Richmond Highway, across from the Penn Daw Shopping Center, is planned to be severed under this scenario. In its place, a new connection to the south of the study area, between South Kings Highway and Richmond Highway, would be constructed. An exact location of this connection has not yet been determined, but would be offset from Fairview Drive.

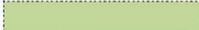
Under a grid-like roadway alignment, North/South Kings Highway was assumed to be realigned to the west to provide larger, more developable blocks along Richmond Highway. Other assumptions include realigning the intersection of North Kings Highway and Shields Ave/School Street to create a four-way intersection and extending Poag Street to Richmond Highway as a right-in, right-out intersection.

From a trip generation perspective, the proposed land use alternatives would result in a decrease in average daily trips when compared to trips generated under the current Comprehensive Plan land use recommendations. Reductions in AM and PM peak hour trips occur under each land use alternative, with the exception of AM peak hour trips under the Property Owners' Proposal. The current Comprehensive Plan recommendation for the study area has the highest impact on the surrounding roadway network, generating 800 more average daily trips than the Property Owners' Proposal.

**Figure 5. Land Use and Trip Generation Comparison**

	CURRENT COMPREHENSIVE PLAN	TASK FORCE ALTERNATIVE 1	TASK FORCE ALTERNATIVE 2	DEVELOPER OPTION
<b>LAND USE COMPARISON</b>				
RETAIL (SF)	194,000	130,000	90,000	70,000
OFFICE (SF)	58,000	0	0	0
MULTIFAMILY (DU)	0	300	500	780
TOWNHOUSE (DU)	0	20	20	36
SINGLE FAMILY (DU)	3	4	4	0
<b>TRIP GENERATION COMPARISON</b>				
DAILY TRIPS	8,741	7,495	7,113	7,941
AM PEAK HOUR TRIPS	ENTER	196	86	93
	EXIT	80	166	244
	TOTAL	276	252	337
PM PEAK HOUR TRIPS	ENTER	391	388	448
	EXIT	500	339	304
	TOTAL	891	727	695

SF = SQUARE FEET  
 DU = DWELLING UNIT

 LOWEST IMPACT  
 HIGHEST IMPACT

*NOTE: INTERNAL SYNERGY & RETAIL PASS-BY REDUCTIONS ASSUMED WHERE APPROPRIATE*

To bring the surrounding roadway links and intersections to an acceptable Level of Service (LOS), mitigation measures would be necessary under all land use alternatives, including the current Comprehensive Plan recommendation. The traffic study examined two levels of mitigation. Low mitigation would consist of adding turn lanes and traffic signals at selected intersections in addition to roadway improvements planned under

both roadway alignments. High mitigation would include most of the improvements required under low mitigation, and would add additional lanes along North Kings Highway and Richmond Highway. Details of these mitigation measures can be found in Attachment III.

If mitigation is not possible or does not occur for a number of years, the Comprehensive Plan roadway network provides the best unmitigated results in terms of total delay, average travel speed and total travel time. If low mitigation occurs, performance of the grid-like network improves; however, the Comprehensive Plan roadway network provides better results. If high mitigation occurs, the grid-like roadway network would provide slightly better results than the current Comprehensive Plan network; however, high mitigation improvements have significantly higher costs and impacts than those made under low mitigation.

Given the increased difficulty and cost of achieving high mitigation, the current Comprehensive Plan roadway alignment is the preferred network as the study area redevelops. Key improvements recommended as a component of this network include a realignment of the North Kings Highway and Shields Avenue/School Street intersection and the addition of a connector road between Richmond Highway and South Kings Highway, coupled with the severing of the existing intersection between those two roads. While a complete realignment of the roadway network in the study area to a more grid-like network is not feasible, the possibility for a slight realignment of North/South Kings Highway westward is desirable.

## **Schools**

The subject area is within the Mount Eagle Elementary School, Twain Middle School, and Edison High School boundaries. Figure 6 shows the existing school capacity and projected enrollment.

The chart represents a snapshot in time for student enrollments and school capacity balances. Student enrollment projections are updated annually on a six year timeframe, currently through school year 2016-17. At this time, if development occurs within the next six years, Mount Eagle Elementary is projected to have a capacity deficit and new students are anticipated to increase this projected capacity deficit. Twain and Edison are projected to have sufficient capacity. Beyond the six year projection horizon, enrollment projections are not available.

**Figure 6. Existing School Capacity and Projected Enrollment**

School	Capacity	Enrollment (9/30/10)	2011-2012 Projected Enrollment	Capacity Balance 2011-2012	2016-17 Projected Enrollment	Capacity Balance 2016-17
Mount Eagle ES	352	300	317	35	434	-82
Twain MS	1,031	813	869	162	966	65
Edison HS	1,800/2,000*	1,658	1,574	226	1,579	421

*Capacity and enrollment are based on the FCPS FY 2012-16 CIP and spring update.*

*\*Note: Renovations at Edison are anticipated to be completed for the 2012-13 school year.*

Of the three scenarios analyzed, the Property Owners' Proposal would generate the highest number of students. A total of 81 new students (44 elementary, 12 middle, and 25 high school) is estimated from 780 mid-rise multi-family residential units and 36 townhouses. Task Force Alternative 1 would yield a total of 35 new students (19 elementary, 5 middle, and 11 high school) from 300 mid-rise multi-family residential units, 20 townhouses, and 4 single-family detached units, while Task Force Alternative 2 would yield a total of 54 new students (29 elementary, 8 middle, and 17 high school) from 500 mid-rise multi-family residential units, 20 townhouses, and 4 single-family detached units.

## Environment

The study area spans the watershed divide between the Pike Branch Watershed Management Area in the Cameron Run watershed and Hunting Creek in the Belle Haven watershed, which are divided by North Kings Highway. The health of these watersheds is characterized as "Very Poor" in the county's Stream Protection Strategy Baseline Study and subsequent annual monitoring events for overall site condition. These scores are most likely the result of the development of the watershed before current stormwater management regulations were enacted. A privately owned dry pond in the Penn Daw Shopping Center is located in the southwest corner of Land Unit H. This is an older facility that should be retrofitted to provide both water quality and quantity control to improve the health of receiving waters. There is no stormwater management on the remainder of Land Unit H or Sub-unit F-2.

Stormwater management and water quality controls and practices should be optimized for any redevelopment in the study area as recommended in the Policy Plan and county regulations governing new development, including a 40 percent phosphorus removal requirement for water quality and enhanced stormwater management measures. Low Impact Development and other design methods for road corridors, parking areas and buildings should be implemented to offset the losses and minimize the long-term impacts of the development. Landscaping, removal of unnecessary impervious surface and re-vegetation of the site with native vegetation should visually enhance new development and improve water and air quality.

The western portion of the site contains Marumsco Soils. These soils are classified as a problem soil. A geotechnical study may be required in order to determine the extent of these problem soils and any remediation measures which might be required for development/redevelopment of the subject property.

## **Noise**

As recommended by Objective 4 of the Environment element of the Policy Plan, residential development should not occur in areas with a projected noise level above 75 decibel Day-Night Loudness (dBA DNL). Additionally, residential development in areas with noise levels between 65 and 75 dBA DNL will require structural mitigation, and interior noise within residential units should be reduced to 45 dBA DNL or lower. Finally, outdoor activity areas should not exceed 65 dBA DNL. Transportation generated noise exceeding 75 dBA DNL may impact this site from Richmond Highway. It is possible that this issue could be avoided based on the location of any residential development. If residential development is either shielded by other structures, located an adequate distance from the noise source(s) or by topography, then the noise might be adequately mitigated at this location. However, it should be noted that a noise study may be necessary in order to determine noise impacts for any proposed residential or other noise sensitive uses.

## **Green Buildings**

Fairfax County policy encourages green building practices as a way to provide a holistic approach to reduce adverse environmental impacts associated with buildings and related facilities and landscapes. Consistent with Objective 13 of the Environment element of the Policy Plan, green building measures should be included as part of any redevelopment in the study area, due to its location within a CBC. For any new residential development, green building measures may include the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED<sup>®</sup>) for Homes, Earthcraft or ENERGY STAR<sup>®</sup> certification.

## **Parks and Recreation**

The Comprehensive Plan includes both general and specific guidance regarding parks and resources. Objective 6 of the Parks and Recreation Element of the Policy Plan describes the need to mitigate adverse impacts to park and recreation facilities caused by growth and development; it also offers a variety of ways to offset those impacts, including contributions, land dedication, development of facilities, and others. The Park Classification System, located in the Parks and Recreation Element of the Policy Plan also cites differing needs for more urban development and presents Urban Park Development guidance. Additionally, the Park Authority's Urban Parks Framework provides an urban parkland standard and more detailed guidance for the development of urban parks.

Public parks serving the study area are shown in Figure 7 below. The study area is well-served by district parks, but not by local serving parks that ideally are within walking or a short driving distance from users. The existing nearby parks meet only a portion of the demand for park facilities generated by residential development in this area. In addition to parkland, the recreational facilities in greatest need in the Mount Vernon Planning District include courts, playgrounds, athletic fields, picnic shelters, a small-scale skate park and trails.

**Figure 7. Nearby Public Parks**

Park Name	Park Type	Facilities
Jefferson Manor	Local Park	Playground, picnic, courts, trails
Mount Eagle	Local Park	Playground, picnic, volleyball and open play area, historic features
Belle Haven	Resource Based	Steep slopes and RPA, no facilities; limited access
Fort Willard	Resource Based	Historic site, benches, trail
Lenclair	Local Park	Off Leash Dog Park (2012)
Bucknell Manor	Local Park	Playground, athletic fields, picnic, courts and trails
Mount Vernon District	District	RECenter and Ice Rink
Lee District Park	District	RECenter, fields, courts, playgrounds, picnic areas, family recreation area

As stated in the Mount Vernon Planning District overview, “Development of new Urban Parks in the Community Business Centers should be an integral component of revitalization efforts, as should be the provision of Neighborhood Park facilities in conjunction with new residential development.” The study area is located within a Community Business Center in a Revitalization Area that is envisioned to have a more urban form than the suburban areas located between these nodes along Richmond Highway. As such it is appropriate that urban parks be incorporated within the development. An urban park service level standard of 1 acre per 1,500 persons plus 1 acre per 10,000 employees is used to quantify the appropriate amount of open space to be integrated in urban developments. The proposed Plan amendment would result in a potential increase in residents ranging from 630 to 1,630 persons plus a small number of retail employees. The proposed population increases generate a need for between .95 and 2.45 acres of urban park land. This quantitative measure will be used to evaluate development proposals if the proposed design tends toward a more urban form. If a suburban form is proposed, the higher suburban parkland standard of 5 acres per 1,000 will be used for evaluation.

The nature of urban parks also require a higher quality design with amenities and should be well integrated into the overall development design and located in areas of

high pedestrian activity rather than leftover spaces in the development. Inclusion of high quality integrated urban park spaces is critical to enhancing the desirability of the project, supporting localized leisure needs and contributing to redevelopment efforts and a sense of place.

## **CONCLUSION**

The density and type of land uses in each of the land use alternatives generally conforms to the broad goals established for CBCs along the Richmond Highway Corridor. Additionally, the majority of the study area is located within the Richmond Highway Commercial Revitalization District, a zoning overlay district. The purpose of overlay district is to encourage the improved economic viability, appearance and function of the corridor through quality new development, rehabilitation and/or redevelopment. The proposed redevelopment would support the goal of directing growth along the corridor to a CBC, and would promote the economic stability of the corridor and the Penn Daw area, limiting commercial encroachment into the surrounding, stable neighborhoods. Additional residential use, to include multifamily residential buildings and townhouses, will add to the diversity of housing stock in the vicinity of the Penn Daw CBC. Therefore, staff recommends that the Comprehensive Plan be amended to add options for redevelopment within the study area.

Based upon the outcome of the market and transportation analyses, staff supports a land use mix that is generally consistent with the Property Owners' Proposal, with a modest reduction in the overall number of residential units. The proposed Plan text would allow for flexibility in redevelopment by setting a maximum number of residential units, while indicating minimum levels of retail square footage. Pedestrian-orientation is emphasized with guidance related to streetscape and urban design, and building heights, buffering, and tapering are discussed to address impacts on neighboring stable residential neighborhoods.

The proposed options would be added to Land Unit H, which would be split into two Sub-units, H-1 and H-2. Tax Map parcel 83-3((11))6 would be added to Sub-unit H-1 within the Penn Daw CBC. Tax Map parcel 83-3((4))34 would remain outside of the Penn Daw CBC, as consolidation with the rest of Sub-unit H-1 is less likely. Inclusion of this parcel within Sub-unit H-1 would change the base plan for the property from residential use at 3-4 du/ac to retail, low-rise office and/or compatible institutional uses up to .25 FAR. Should this parcel remain unconsolidated, its planned use would differ from its existing or zoned use, potentially allowing for an intrusion of commercial uses into a stable residential neighborhood.

Due to roadway network constraints, Sub-unit F-2 would retain its current Plan recommendation for retail use up to an intensity of .35 FAR. Text related to a transit center or enhanced transit stop would be removed, as further analysis has indicated that this recommendation will likely not be implemented. Additional guidance stating that

site design should be coordinated with redevelopment in Sub-units H-1 and H-2 would be added, in order to establish aesthetic relationships between these areas.

Existing Comprehensive Plan guidance related to the transportation network would be retained, with the addition of language stating that a slight realignment of North/South Kings Highway should be considered. Intersection improvements within the study area, including the improvement of the North Kings Highway/School Street intersection, are recommended to be completed concurrent with redevelopment.

## **PROPOSED PLAN TEXT**

Additions are shown underlined and deletions are shown with ~~strikethrough~~.

**MODIFY:** Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through 6-21-2011, Richmond Highway Corridor, North Gateway and Penn Daw Community Business Centers, page 36:

### **“Penn Daw Community Business Center**

...

Planned ~~road~~ highway improvements will impact some uses at the intersection of Richmond Highway and Kings Highway creating an opportunity for a special landscaped area or other identifying landmark at this intersection. The Penn Daw Shopping Center is planned to be redeveloped with residential mixed-use including community-serving retail uses, ~~remain as a community-serving retail center~~ while the east side of Richmond Highway is planned to be redeveloped into a larger single use or as a mixed-use project comprised of residential, retail and office uses. Additional office uses are planned for the western side of Richmond Highway adjacent to the Fairhaven community.”

**MODIFY:** Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through 6-21-2011, Richmond Highway Corridor, North Gateway and Penn Daw Community Business Centers, pages 39-40:

### **“Sub-unit F-2**

Parcels within this sub-unit include 83-3((1))22A and parcel 22B1 and are planned for retail use up to .35 FAR. Efforts should be made to coordinate site design with any redevelopment plans on Sub-units H-1 and H-2 to maximize visibility and aesthetic relationships. A gateway feature should be provided on the sub-unit to serve as a focal point for the Penn Daw Community Business Center. ~~If a transit center or enhanced transit stop cannot be accommodated in Land Unit E or additional analysis determines that Land Unit F2 is a more appropriate and logical location, a transit center or enhanced transit stop should be accommodated in this land unit to support mixed-use redevelopment in the surrounding area.~~ Safe and convenient vehicular, bicycle, and

pedestrian access and connections between Land Unit E and Sub-Units F-2, H-1 and H-2 should be provided ~~to ensure safe operation~~. Should future study determine that rail is appropriate for the Richmond Highway corridor and that this location warrants a station, a future rail station should be accommodated.

...

### **Land Unit H**

The land unit is envisioned to be a visually and functionally cohesive pedestrian-oriented environment. Necessary improvements and amenities such as road and sidewalk enhancements, useable open space, plazas, and bus shelters are expected to be phased with development in support of this goal.

The development concept for Land Unit H reflects up to a maximum of 735 dwelling units and a minimum of 40,000 square feet of retail use provided that an appropriate pattern and character of development is achieved. New retail use should be located on the ground floor of buildings and not in freestanding buildings. Service uses such as professional offices may be included in this category. Specific recommendations are provided in the sections that follow.

The land unit is divided into Sub-units H-1 and H-2. Within Sub-unit H-1, residential use is recommended to be in the form of multi-family units with neighborhood serving retail use (new and/or existing). In Sub-unit H-2, a mixture of multi-family units and townhouses is recommended to provide variety in dwelling types.

~~Land Unit H contains the Penn Daw Shopping Center and adjacent commercial uses between School and Poag Streets along North Kings Highway. The Penn Daw Shopping Center site is planned for retail use up to .35 FAR. Free-standing uses should be discouraged to preserve an opportunity for connections to the proposed "gateway park". Additional parking lot landscaping and the introduction of a landscaped berm between the front parking lot and North Kings Highway is encouraged.~~

~~The existing commercial uses between School and Poag Streets along the west side of North Kings Highway are planned for low-rise office or compatible institutional uses up to .25 FAR to serve as a transition between the residential and commercial areas located north and south of the subject property, respectively. As an option, if parcels are completely consolidated and an integrated, well-designed development is proposed, an FAR up to .35 may be appropriate.~~

## **Sub-unit H-1**

The existing commercial uses between School and Poag Streets along the west side of North Kings Highway are planned for retail, low-rise office and/or compatible institutional uses up to .25 FAR.

As an option, redevelopment with a mix of predominately residential use and ground-floor retail at an overall intensity up to 1.40 FAR may be appropriate. The following conditions should be met:

- Full consolidation of Sub-unit H-1 is desired. At a minimum, however, consolidation should be achieved for Tax Map parcels 83-3((4))A, 83-3((11))2-6. If full consolidation cannot be achieved, the existing 9,500-square-foot retail building on School Street may be retained as all or a portion of the retail use recommended for this sub-unit provided that functional and aesthetic coordination of design is demonstrated, such as the relocation of parking on Tax Map parcel 83-3((4))35 away from the North Kings Highway and School Street frontages to allow for improvements to School Street; outdoor amenities, such as plazas or seating areas are provided; coordinated façade treatments and signage are provided; and improved streetscape to include continuous sidewalks, lighting, and landscaping is provided.
- Site design and high-quality architecture should be provided. Design should be coordinated throughout Sub-units H-1 and H-2, especially if redevelopment is phased.
- Buildings should align with roadways along Poag Street and North Kings Highway, and should be built close to the street to create an urban street edge.
- Any new retail uses should be located on the ground floor of the residential buildings. The location of retail uses should maximize visibility along the frontage of North/South Kings Highway and School Street. Retail uses should offer community amenities, such as sidewalk cafés or restaurants, to the surrounding residential uses.
- Building height should be limited to a maximum of four stories. The tallest buildings should be concentrated along North/South Kings Highway, with building height tapering down toward single-family residential neighborhoods to the west. Townhouse-style residential units should be used to provide a transition to the neighborhoods to the west.
- Adequate buffering should be provided to minimize the visual impact of redevelopment on existing single-family neighborhoods. Buffer areas should be appropriately landscaped with year-round vegetation to aid in the transition to

single-family neighborhoods. All or a majority of Tax Map parcel 83-3((11))6 should be utilized as a buffer to existing single-family homes. This buffer area should include publicly accessible open space.

- Well-designed, publicly accessible urban plazas and parks should be integrated to enhance recreational options and a sense of place for the development, consistent with the Urban Park Framework document, as modified by the Fairfax County Park Authority. Redevelopment of this sub-unit should provide a pocket park or plaza. To the extent possible, these open spaces should be contiguous to on-site retail uses. Landscaping improvements to the triangular piece of land at the intersection of Shields Avenue and North Kings Highway, such as a gateway feature or public art, should be considered as a short-term improvement.
- Parking facilities should be designed to avoid adverse visual impacts to the streetscape and neighboring properties. Parking should be consolidated into structures that are integrated into the development using aesthetically appealing architectural detailing, screening, lighting, and landscaping. Limited convenience surface parking may be appropriate provided need is demonstrated and such spaces are appropriately integrated into the pedestrian environment.
- Development should dedicate adequate right-of-way for planned transportation improvements in the vicinity of Sub-units H-1 and H-2, as shown in Figures 13, 30, 37, and 44. A minor realignment of North/South Kings Highway, that minimizes impacts to the Kings Garden Apartments, to the west in the vicinity of the existing connection of Route 1 should be considered to enhance traffic flow on North/South Kings Highway and to create a pedestrian refuge for improved crossing of Richmond Highway and North/South Kings Highway. Dedication of right-of-way would be needed for this realignment to occur. If deemed appropriate, this realignment should take place concurrent with the severing of the Route 1 connection.
- The intersection of North Kings Highway with School Street should be improved concurrently with redevelopment to facilitate the realignment of North Kings Highway and Shields Avenue. If complete consolidation is not achieved in Sub-unit H-1, individual properties should work cooperatively during redevelopment to achieve this realignment.
- Design and/or construction of other planned transportation improvements, on-site and off-site, should be provided. A financial contribution may be provided towards facilitating implementation of off-site planned transportation improvements, as deemed appropriate.
- In the interim period prior to severing the connection between North/South Kings Highway and Richmond Highway, the entrance to Penn Daw Plaza south of

Poag Street, which is currently offset, should be realigned with the existing connection to Route 1. This realignment, along with an internal network of well-connected streets, is intended to improve access to the site, provide adequate circulation, and more evenly distribute trips with Poag Street.

- Efforts should be made to enhance the walkability and multi-modal connectivity of the land unit, through the addition of sidewalks, streetscaping, and bicycle facilities. Multi-modal connectivity between this land unit and the Huntington Metrorail Station should be enhanced to improve bicycle/pedestrian access through the incorporation of bus shelters and enhanced transit service.
- No new vehicular access should be provided to School Street.
- The county and community should work together to address traffic and safety concerns on School Street with traffic-calming and/or anti-cut-through measures, where warranted.
- Shaffer Drive and Poag Street should not be connected, as shown in Figure 13.
- Stormwater quality control measures that are more extensive than minimum requirements should be provided. The emphasis should be on low impact development (LID) techniques and best management practices (BMPs) that evapotranspire water, filter water through vegetation and/or soil, and return water to the ground or reuse it and should include such features as rooftop landscaping on the proposed parking structures. Stormwater design-quality control credit of the most current version of the Leadership in Energy and Environmental Design for New Construction (LEED<sup>®</sup>-NC) or Leadership in Energy and Environmental Design for Core and Shell (LEED<sup>®</sup>-CS) rating system (or third party equivalent of these credits) should be provided. If this goal is demonstrated not to be achievable, all measures should be implemented to the extent possible in support of this goal.

## **Sub-unit H-2**

Sub-unit H-2 is located south of Poag Street along North Kings Highway and contains the Penn Daw Shopping Center and other commercial uses. The sub-unit is planned for retail use up to .35 FAR. Free-standing uses should be discouraged to preserve an opportunity for connections to the proposed gateway park in Sub-unit F-2. Additional parking lot landscaping is encouraged.

As an option, redevelopment with a mix of predominately residential use and ground-floor retail at an overall intensity up to 1.15 FAR may be appropriate. There is a desire to accommodate as much retail in the sub-unit as possible. The following conditions should be met:

- Full consolidation should be achieved for Sub-unit H-2. If full consolidation cannot be achieved, functional and aesthetic coordination of design should be demonstrated.
- Site design and high-quality architecture should be provided. Design should be coordinated throughout Sub-units H-1 and H-2, especially if redevelopment is phased.
- Buildings should align with roadways along Poag Street and North Kings Highway, and should be built close to the street to create an urban street edge.
- Retail uses should be located on the ground floor of the residential buildings. The location of retail uses should maximize visibility along the frontage of North/South Kings Highway, with additional retail sited along Poag Street near North/South Kings Highway. Retail should offer community amenities, such as sidewalk cafés or restaurants, to the surrounding residential uses.
- Building height should be limited to a maximum of five stories. The tallest buildings should be concentrated along North/South Kings Highway, with building height tapering down toward single-family residential neighborhoods to the west. Townhouses should be used to provide a transition to the neighborhoods to the west.
- Adequate buffering should be provided to minimize the visual impact of redevelopment on existing single-family neighborhoods. Buffer areas should be appropriately landscaped with year-round vegetation to aid in the transition to single-family neighborhoods. This buffer area should include publicly accessible open space.
- Well-designed, publicly accessible urban plazas and parks should be integrated to enhance the recreational options and a sense of place for the development, consistent with the Urban Park Framework document, as modified by the Fairfax County Park Authority. Redevelopment of the sub-unit should provide a central gathering space or plaza. To the extent possible, these open spaces should be contiguous to on-site retail uses.
- Parking facilities should be designed to avoid adverse visual impacts to the streetscape and neighboring properties. Parking should be consolidated into structures that are integrated into the development using aesthetically appealing architectural detailing, screening, lighting, and landscaping. Limited convenience surface parking may be appropriate provided need is demonstrated and such spaces are appropriately integrated into the pedestrian environment.

- Development should dedicate adequate right-of-way for planned transportation improvements in the vicinity of Sub-units H-1 and H-2, as shown in Figures 13, 30, 37, and 44. A minor realignment of North/South Kings Highway, that minimizes impacts to the Kings Garden Apartments, to the west in the vicinity of the existing connection of Route 1 should be considered to enhance traffic flow on North/South Kings Highway and to create a pedestrian refuge for improved crossing of Richmond Highway and North/South Kings Highway. Dedication of right-of-way would be needed for this realignment to occur. If deemed appropriate, this realignment should take place concurrent with the severing of the Route 1 connection.
- Design and/or construction of other planned transportation improvements, on-site and off-site, should be provided. A financial contribution may be provided towards facilitating implementation of off-site planned transportation improvements, as deemed appropriate.
- In the interim period prior to severing the connection between North/South Kings Highway and Richmond Highway, the entrance to Penn Daw Plaza south of Poag Street, which is currently offset, should be realigned with the existing connection to Route 1. This realignment, along with an internal network of well-connected streets, is intended to improve access to the site and provide adequate circulation to more evenly distribute trips with Poag Street.
- Efforts should be made to enhance the walkability and multi-modal connectivity of the land unit, through the addition of sidewalks, streetscaping, and bicycle facilities. Multi-modal connectivity between this land unit and the Huntington Metrorail Station should be enhanced to improve bicycle/pedestrian access through the incorporation of bus shelters and enhanced transit service.
- Shaffer Drive and Poag Street should not be connected, as shown in Figure 13.
- Stormwater quality control measures that are more extensive than minimum requirements should be provided. The emphasis should be on low impact development (LID) techniques and best management practices (BMPs) that evapotranspire water, filter water through vegetation and/or soil, and return water to the ground or reuse it and should include such features as rooftop landscaping on the proposed parking structures. Stormwater design-quality control credit of the most current version of the Leadership in Energy and Environmental Design for New Construction (LEED<sup>®</sup>-NC) or Leadership in Energy and Environmental Design for Core and Shell (LEED<sup>®</sup>-CS) rating system (or third party equivalent of these credits) should be provided. If this goal is demonstrated not to be achievable, all measures should be implemented to the extent possible in support of this goal.”

NOTE: The Comprehensive Plan Map would change for Tax Map parcel 83-3((11))6 from residential use at 3-4 du/ac to alternative uses. Land Unit H would be split into two sub-units, H-1 and H-2. The Penn Daw CBC would expand to include Tax Map parcel 83-3((11))6 within Sub-unit H-1.

**REPLACE FIGURE:** Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through 6-21-2011, Richmond Highway Corridor, North Gateway and Penn Daw Community Business Centers, Figure 8, “Boundaries for North Gateway and Penn Daw Community Business Centers (CBCs) and Adjacent Route 1 Suburban Neighborhoods,” page 32:

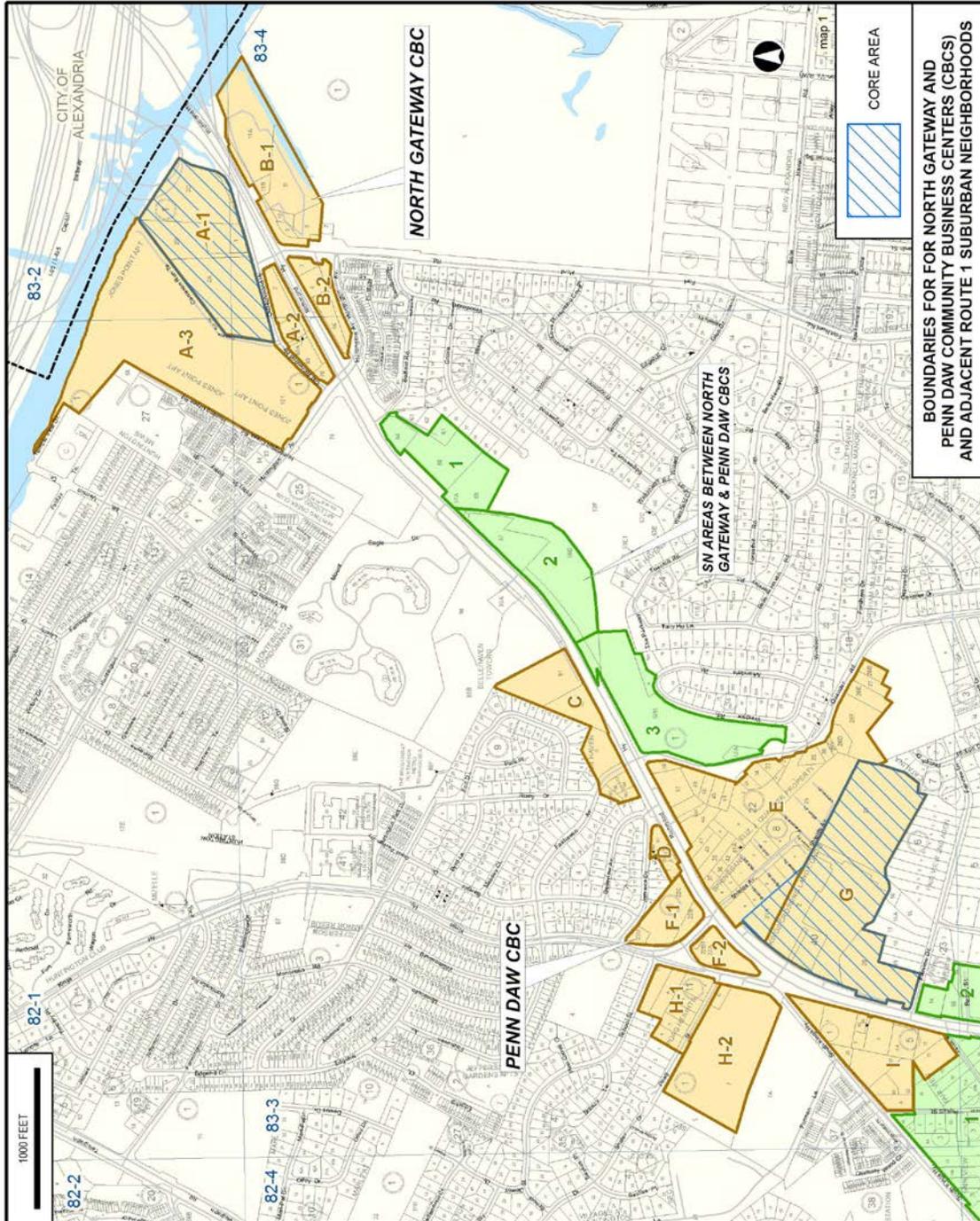
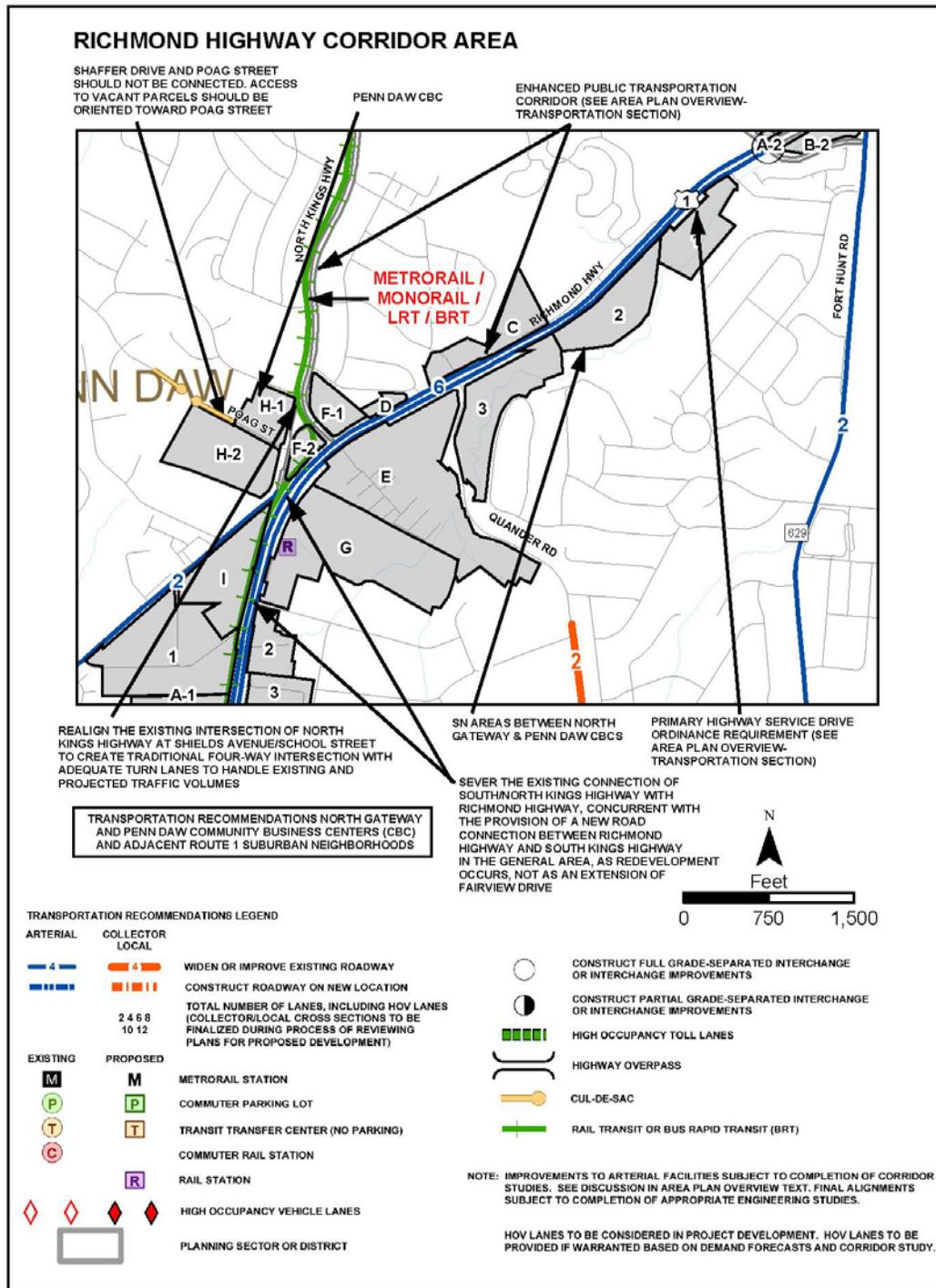
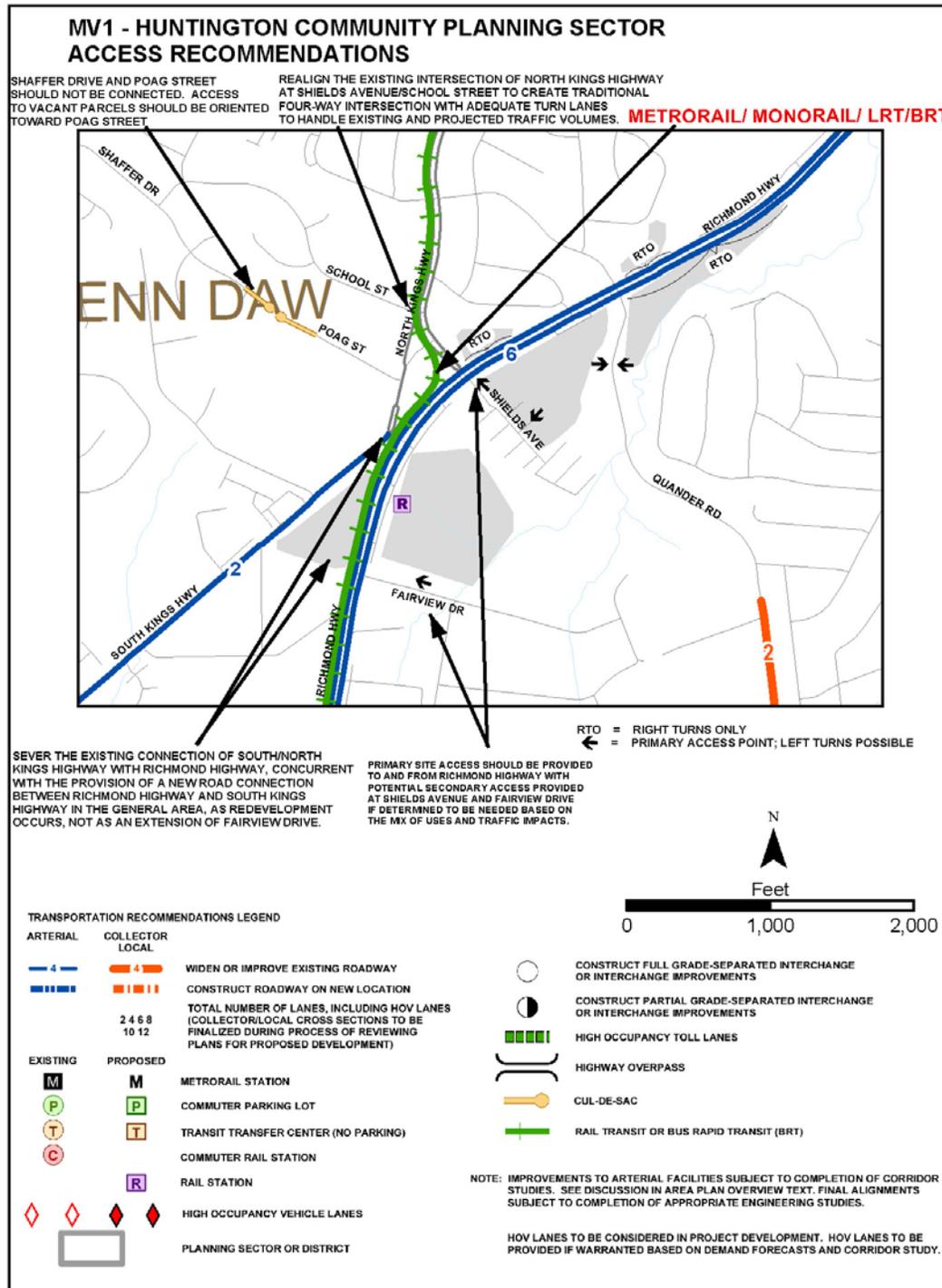


Figure 8 revised for ST10-IV-MV1

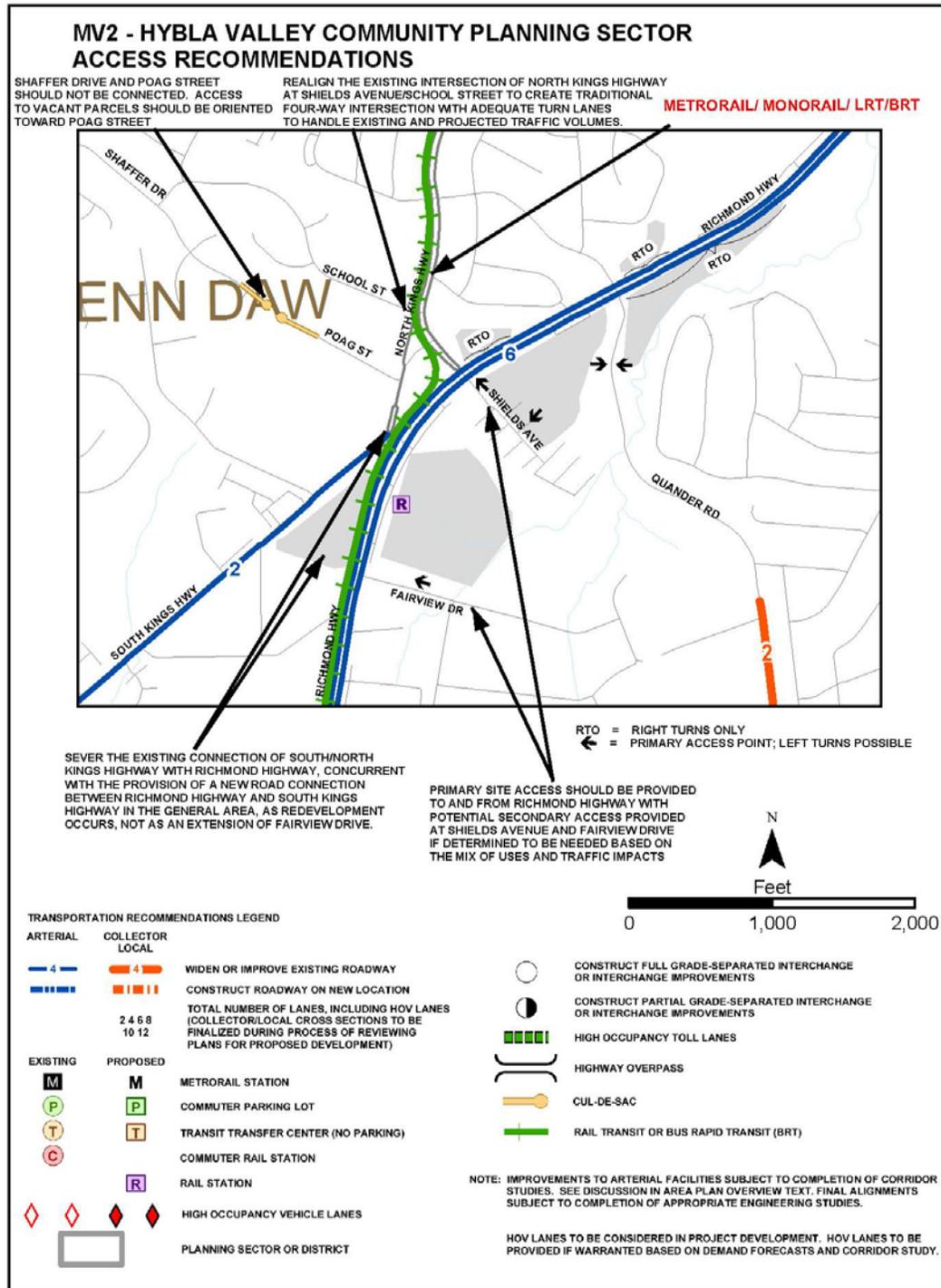
**REPLACE FIGURE:** Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through 6-21-2011, Richmond Highway Corridor, Figure 13, "Transportation Recommendations North Gateway and Penn Daw CBCs and Adjacent Route 1 Suburban Neighborhoods," page 74:



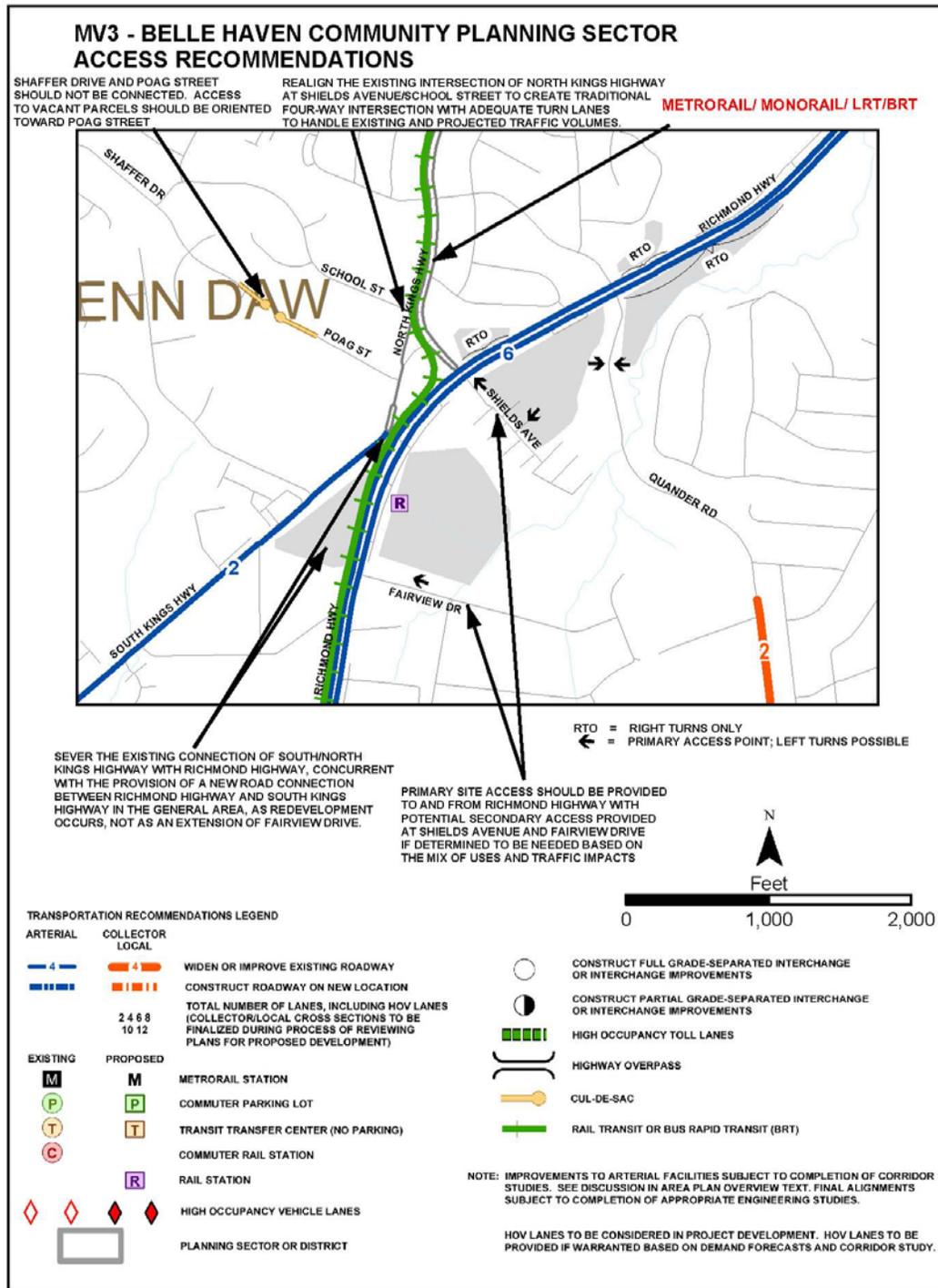
**REPLACE FIGURE:** Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through 6-21-2011, MV1 – Huntington Community Planning Sector, Recommendations, Transportation, Figure 30, “Access Recommendations MV1 Huntington Community Planning Sector,” page 115:



**REPLACE FIGURE:** Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through 6-21-2011, MV2 – Hybla Valley Community Planning Sector, Recommendations, Transportation, Figure 37, “Access Recommendations MV2 Hybla Valley Community Planning Sector,” page 129:



**REPLACE FIGURE:** Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through 6-21-2011, MV3 – Belle Haven Community Planning Sector, Recommendations, Transportation, Figure 44, “Access Recommendations MV3 Belle Haven Community Planning Sector,” page 138:



Attachment I

FINAL REPORT

Penn Daw Market Feasibility  
Analysis

LEADERSHIP • PROBLEM SOLVING • VALUE CREATION



OCTOBER 20, 2011

Submitted by:

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RESEARCH



ALVAREZ & MARSAL

## EXECUTIVE SUMMARY

### Background

The approximately 17-acre study area is located in the Richmond Highway corridor in southeastern Fairfax County. The Penn Daw study area is located at the intersection of Richmond Highway and South Kings Highway, and consists of parcels under ownership by five distinct entities. The majority of the study area is fully developed, with existing utilities including water, sewer, and natural gas service. The study area includes a shopping center property, the Penn Daw Plaza, as well as several adjacent parcels. With the exception of the unoccupied Rite Aid pharmacy, all of the structures within the study area were built in 1960 or earlier. The surrounding area is characterized by retail and multifamily housing along and in close proximity to Richmond Highway, with single family detached housing further removed from Richmond Highway.

The Penn Daw Special Study originated from deferred Area Plan Review (APR) nomination 09-IV-22MV. The APR nomination proposed to replan an 11-acre portion of the study area for residential, retail, and/or office uses at an intensity of up to 1.5 floor-area ratio (FAR). The land area of the study was expanded by the Board of Supervisors to approximately 17.25 acres to include adjacent property and allow for a more holistic review of the area. Below is a diagram depicting the Penn Daw study area. A task force with representatives from the Lee and Mt. Vernon Districts has been established to assist with the Penn Daw Study. The task force developed two land use alternatives for the study area. Each option also has an alternative roadway configuration that realigns Kings Highway to create a grid of streets and four developable blocks. Property owners of the subject area also have provided a land use alternative for consideration.

Figure 1. Penn Daw Study Area



Source: Fairfax County

**Study Purpose**

The Penn Daw study area could become the site of a mixed-use redevelopment that would include residential units along with offices and retail space. The purpose of this study is to assess the development feasibility of scenarios that have emerged from community discussions. Below is a summary of the development options under consideration.

Figure 2. Summary of Development Options

Development Option	SFD Units	TH Units	MF Units	Retail SF	Office SF	Total Non-Res. SF	Total Res. Units
<b>Current Zoning</b>	24	0	0	221,341	0	221,341	24
<b>Current Comp. Plan</b>	3	0	0	194,270	57,792	252,062	3
<b>Task Force Option 1</b>	4	20	300	130,000	0	130,000	324
<b>Task Force Option 2</b>	4	20	500	90,000	0	90,000	524
<b>Developer Option</b>	0	36	780	70,000	0	70,000	816

Source: Fairfax County

The feasibility assessment process establishes “reasonable” retail and residential development parameters so that the amount of retail and residential space added as part of the Penn Daw redevelopment is in line with market demand for the next three to five years.

**Overview**

Richmond Highway is a strategic asset in light of its proximity to Washington, DC. Richmond Highway offers direct access to Fort Belvoir—one of the region’s largest military installations—as well as major tourist destinations, including Mount Vernon.

Richmond Highway is a venerable commercial corridor in Fairfax County. Piecemeal development over many decades has resulted in an uncoordinated assortment of commercial uses intertwined with residential neighborhoods. Over time, Richmond Highway has become a major commuter corridor with links to Interstate 495 near the Woodrow Wilson Bridge. The Huntington Metro stop is located near the study area and long-range plans call for an expansion of transit in the Richmond Highway corridor.

Fairfax County’s Comprehensive Plan established the general concept of “Community Business Centers” (CBCs). Penn Daw is one of several designated CBCs in the Richmond Highway corridor. These commercial nodes encourage a mix of uses at a community scale in order to promote pedestrian activity and economic stability. The Penn Daw redevelopment has been discussed and influenced by the following planning principles as expressed in the Comprehensive Plan and specific studies of the Richmond Highway corridor:

- Encourage appropriate in-fill development which is compatible in use, type and intensity with surrounding uses
- Limit commercial encroachment into stable residential neighborhoods and establish well-defined edges between commercial and residential uses
- Allocate an appropriate mix of land uses and intensities in CBCs
- Encourage pedestrian access to commercial areas and improve the appearance/image of Richmond Highway

Residents of the Lee and Mt. Vernon communities have participated in visioning meetings with representatives of county government (staff and elected officials), as well as representatives of the property owners and a potential developer. Requests and suggestions have been compiled into a “wish list” and several development options as summarized in Figure 2.

A specific proposal by a developer for a mixed-use development on a portion of the Penn Daw study area may trigger interest among the several property owners in aggregating their contiguous parcels. Similar infill redevelopment opportunities may occur elsewhere along the Richmond Highway corridor as demand grows for close-in housing with transit access. Increased density can be expected as a function of economic pressure and market demand. Rising land values will force land use changes, especially where buildings are reaching functional obsolescence and where existing development density is low. The Comprehensive Plan anticipates increased density. Prudent development requires an evaluation of feasibility for various project elements as specific developments are proposed.

The overall pattern of retail development in the Richmond Highway corridor can be characterized as disjointed with areas of viable contemporary retailing along with pockets of blighted or obsolete retail space. The Richmond Highway corridor lacks a sense of organizational structure; this is typical of unplanned development that has occurred over a span of many years. This high traffic volume corridor contains many auto-dependent businesses that literally “turn their backs” to adjacent residential areas.

The corridor’s retail base evolved over several decades, beginning at a time when organized shopping centers were not the norm. Much of the retail base is situated on shallow lots that are bordered by residential uses. Parcel size and configuration were not supportive of traditional shopping center development. Prevailing conditions within the Richmond Highway corridor include a mix of commercial and residential uses that have no unifying architectural or landscape theme. Businesses along the corridor are highly dependent upon automobile access as there has been a large number of curb cuts and parking lots serving individual businesses with little pedestrian access or cross-patronage by foot.

The retail content of the Richmond Highway corridor reflects a broad mix of business types. There are organized shopping centers as well as freestanding stores and restaurants. There are several concentrations of “shoppers’ goods” retailing. The corridor’s center of retail gravity is located midway between the Beltway and the Fairfax County Parkway where the greatest retail

density currently exists. Retailers here have excellent access to residents of the Gum Springs, Mount Vernon, Fort Hunt, Penn Daw, Belle Haven, Belleview, Groveton, and Hybla Valley.

Major retail locations include:

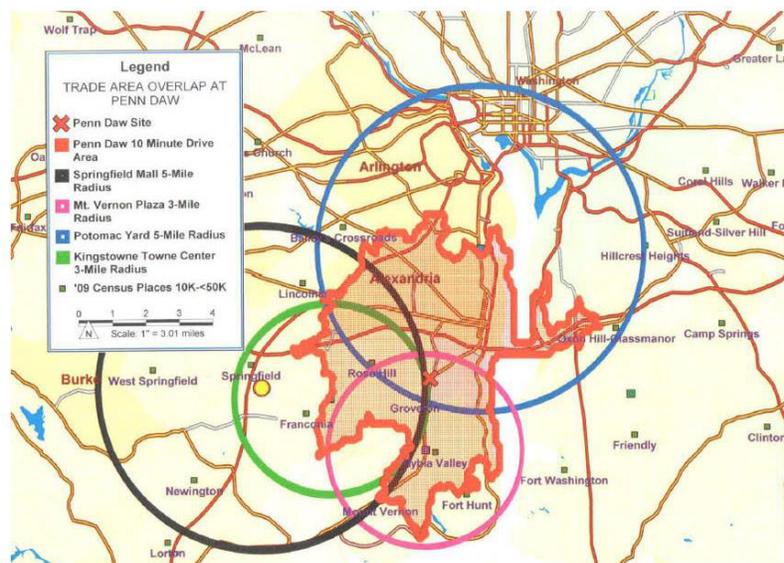
- Walmart Super Center (Gum Springs)
- Mt. Vernon Crossroads (Home Goods)
- Mt. Vernon Plaza (The Home Depot, T.J. Maxx, Bed Bath & Beyond, PetSmart, Shoppers Food & Pharmacy, Staples, Michael's Crafts)

### ***Retail Conclusions and Recommendations***

The shopping center portion of the Penn Daw study area lost its core reason for being when Shoppers Food & Pharmacy departed prior to the opening of a new Walmart. It is doubtful that another supermarket will back-fill the former Shopper's Food & Pharmacy space in light of the competition from Walmart, which is located across the street.

The probable trade area to be served by the Penn Daw site is a 5- to 10-minute drive radius. Residents of this trade area will generate demand to support up to 200,000 square feet of retail/restaurant space by 2015. The Penn Daw site is not likely to attract anchor tenant(s) that would enable a retail development of this scale. Constraints include the site's dimensions, the intrusiveness of Kings Highway, and weak exposure and access from Richmond Highway. In addition, retail sites exist that have trade areas that overlap Penn Daw's probable trade area, as shown in Figure 3.

**Figure 3. Retail Trade Area Overlap at Penn Daw**



Sources: H. Blount Hunter Retail & Real Estate Research Co.; Scan/US, Inc.

The Penn Daw study area is constrained and compromised by the path of Kings Highway and access points from Richmond Highway. Roadway improvements could enhance access from

Richmond Highway, but it is unlikely that any realignment of Kings Highway would benefit the Penn Daw site from a retail perspective, unless the roadways are realigned so as to provide direct frontage to Richmond Highway. Otherwise, because of its traffic volume, Kings Highway will continue to divide the Penn Daw redevelopment site and isolate the front parcel (between Kings Highway and Richmond Highway) from the remainder of the site.

The Comprehensive Plan incorporates 220,000 square feet of retail in the Penn Daw study area. While this amount of space in the general vicinity of Penn Daw can be supported by residents within a 10-minute drive, it is unlikely that the Penn Daw study area itself will attract retail development of this magnitude because of site constraints and the availability of superior site alternatives. The Comprehensive Plan may need to be changed to allow for a scale of retail development that matches the realities of the market including competitive alternative sites that could tap into the 200,000 square feet of supportable retail space identified within Penn Daw’s probable retail trade area.

A series of four conceptual massing studies were prepared that reflected community input. These four concept plans represent two development options for retail space: 90,000 and 130,000 square feet. While these amounts of retail space are below the level projected as supportable by residents of the trade area, the concept options contain physical design flaws and should be reviewed by an experienced retail site planner. These concepts need to be able to accommodate one or more anchor tenants to proceed with 90,000 to 130,000 square feet of retail space. The recommended ratio of anchor space to small tenant space is 1-to-1.

The developer proposal has 70,000 square feet of retail space in a mixed-use development containing a total of 816 residential units. The addition of new residential units as part of a mixed-use development at Penn Daw will support only a modest amount of new retail and restaurant space even when aggressive “capture rates” are applied. Assuming that new residents have household incomes that are comparable to the average for the area surrounding Penn Daw, the addition of 816 new residential units will support up to 20,100 square feet of retail space. This modest amount of space is less than the amount of retail space programmed by the developer and in the four conceptual plans prepared following community discussions. Below is a summary of supportable retail square footage from new residential units.

Figure 4. Supportable Retail Square Footage at Penn Daw from New Residential Units

<b>SUPPORTABLE RETAIL SQUARE FOOTAGE AT PENN DAW FROM NEW RESIDENTIAL UNITS</b>			
<b>New Residential Units</b>	335	524	816
<b>Total New Household Income</b>	\$33 - \$42 million	\$52 - \$66 million	\$82 - \$102 million
<b>Supportable Retail Square Footage</b>	8,200 – 10,200	12,800 – 16,000	16,100 – 20,100

Source: H. Blount Hunter Retail & Real Estate Research Co.

Development of more than approximately 20,000 square feet will require support from a surrounding residential trade area with inflow from transient motorists. This proposed scope of retail development is “feasible” in that it is less than the level of supportable retail space associated with the probable retail trade area. From a practical perspective, leasing 70,000

square feet of space will require at least one anchor tenant. The developer would be wise to canvass the market for anchor candidates before extensive site planning begins. An initial evaluation of store coverage of the most likely mid-box and large-format retailers did not identify any strong anchor candidates. Without an anchor, the recommended retail element would be 15,000 to 40,000 square feet. With or without anchor(s), the developer is likely to treat the retail element of the project as an amenity that will support the strategy of generating above-market rents.

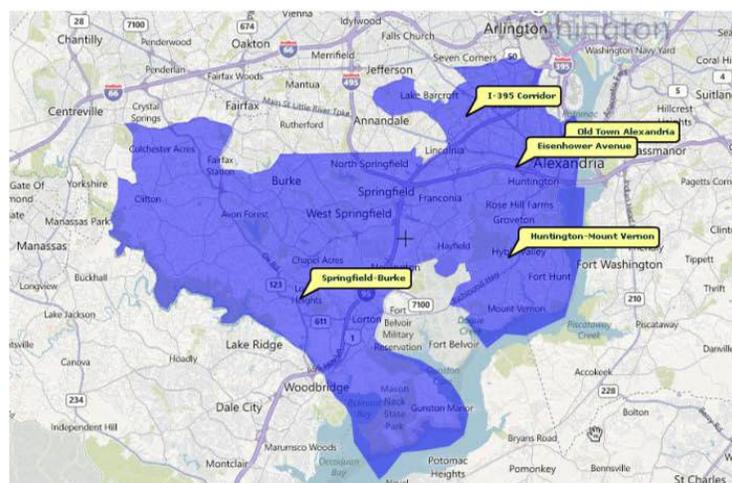
Leasing 70,000 to 200,000 square feet of unanchored retail space at this site is highly improbable. The list of probable anchor candidates is short. Obtaining at least one anchor tenant will be necessary if the amount of retail space in any of the development options exceeds 40,000 square feet.

The site is not compelling solely as a retail site. Retailers seeking locations in the Richmond Highway corridor will naturally gravitate to the existing “critical mass” of retailing near Mount Vernon Plaza or can be expected to respond positively to opportunities to join future developments that have better Richmond Highway access and exposure, larger amounts of surface parking, and fewer site constraints. A site option meeting these criteria exists across Richmond Highway from the study area to the north of the Walmart-anchored center.

### ***Multifamily Conclusions and Recommendations***

The multifamily analysis included a market assessment of apartments, townhouses and condominiums in the Penn Daw area. The predominant market area for multifamily at Penn Daw are residents in the Mt. Vernon and Lee Districts (the Huntington-Mt. Vernon area). Secondary market areas for multifamily at Penn Daw include the I-395 Corridor, Old Town Alexandria, Eisenhower Avenue and Springfield-Burke. Capture rates from these areas are estimated to be significantly less than those from the Huntington-Mount Vernon area. Below is a map depicting the potential market area for multifamily at Penn Daw.

**Figure 5. Potential Market Area for Multifamily at Penn Daw**



Source: Environmental Systems Research Institute (“ESRI”)

The total stock of existing apartment units in the southeast Fairfax County submarket, which includes Penn Daw, numbers approximately 35,000. Vacancy, at approximately 4.0%, reflects a strong demand for apartment housing in the area, with southeast Fairfax County outperforming both the broader DC Metro area and the national multifamily market as a whole. The apartment properties studied include a mix of garden-style and mid- to high-rise apartments. The majority of properties within the immediate vicinity of Penn Daw are of an older (pre-1970) vintage, with some exceptions. In general, newer multifamily properties among those studied have a tendency for higher density configurations. Although there is a cluster of properties located near the Braddock Road Metro Station, and to a lesser extent, near the Huntington Metro Station, there appears to also be a market appetite for properties not within immediate proximity of fixed public transportation; this may be a function of availability of parking, which seems to be a near-universal option for tenants at the properties studied.

The Washington, DC, regional economy, less affected by the recent economic downturn than most other markets in the nation, has supported a recovery of the condominium market throughout the region's submarkets. However, increased sales activity and a decrease of inventory of available condo units has been due, at least in part, to downward re-pricing as developers have worked to offload both new construction and apartment conversion condos. Additionally, a "shadow market" of planned condominiums currently being rented as multifamily apartments, is difficult to define (i.e. to determine whether current owners will keep the assets as rental apartments indefinitely or reposition them once attractive sales prices are believed to be attainable) and could discourage substantial development of new condo product. The Fairfax/Falls Church condominium submarket, which includes the Penn Daw study area, is roughly on par with DC metropolitan averages in terms of its inventory-to-sales ratio. However, both within this and adjacent submarkets and within the region as a whole, an apparent preference exists for condo developments located in close proximity to fixed public transportation and with significant amenities. Given Penn Daw's location, only limited condominium development would be supportable.

The townhouse style of owner-occupied single family housing is popular throughout the Washington, DC, Metro region. In addition, large populations of individuals thought to have a preference for townhouses, particularly baby-boomers on the cusp of retirement, have driven development of townhouses throughout the region, with the southeastern Fairfax County region being no exception. However, those relocating into townhouses tend to prefer transit-oriented, amenity-rich living environments. Therefore, proximity to convenient transportation, especially rail, carries a significant premium in the valuation of townhouses. Within the vicinity of Penn Daw, this is demonstrated by the appreciably higher asking prices of townhouses near the Huntington Metro Station versus townhouses a mile or more away. Even more telling, listings for townhouses at the very edge of practical walking distance still generally advertise themselves as Metro accessible. In addition to easy access to transportation, local amenities differentiate top-flight townhouse communities from others in terms of pricing. The competitive position of townhouses developed in the Penn Daw vicinity would vary greatly depending on the developer's willingness and ability to compensate for a lack of community

amenities (walkable streets, fixed rail access) with amenities that will be made available to residents and the overall quality of design and construction; however, townhouses in Penn Daw would likely still be out-priced by competing developments in more amenity-rich areas, such as near the Huntington Metro, Old Town Alexandria, or within the District of Columbia. Therefore, although a townhouse development could succeed in Penn Daw, to do so would require a proper balance of pricing, design, and project-funded amenities in order to attract sufficient buyers.

Feasibility analyses of the multifamily development portions of Task Force Option 1 (300 units), Task Force Option 2 (500 units), and the Developer Option (780 units) indicate that a monthly rental rate range of \$1,400-\$2,150 will be necessary to achieve acceptable returns. This rental rate range represents the upper end of possible rental rates for a new multifamily development on the Penn Daw site. This rental rate range prices out certain income levels, thereby reducing the base of potential users. The estimated supportable units under a rental rate range of \$1,400-\$2,150 are 748, based on a capture rate analysis, which falls slightly short of the developer option. Below is a summary of multifamily feasibility based on number of units and rental rate range. Areas shaded in red indicate insufficient or negative returns. Areas shaded in yellow indicate potentially acceptable returns. The area shaded in green (500 units at \$1,400-\$2,150 monthly rental rate range) indicates the highest estimated return and sufficient units capture.

Figure 6. Multifamily Feasibility Summary

		Monthly Rental Rate Range		
		\$1,000 - \$1,750	\$1,200 - \$1,950	\$1,400 - \$2,150
Number of Multifamily Units	300	IRR: -9.30% Units Capture: 872	IRR: 3.07% Units Capture: 814	IRR: 11.92% Units Capture: 748
	500	IRR: -8.74% Units Capture: 872	IRR: 3.49% Units Capture: 814	IRR: 12.28% Units Capture: 748
	780	IRR: -8.45% Units Capture: 872	IRR: 3.71% Units Capture: 814	IRR: 10.39% Units Capture: 748

### Office Conclusions and Recommendations

The unmet demand for office space, both in the immediate vicinity of Penn Daw and throughout the Springfield office submarket, is low, with little market appetite for new Class B/C office space, and virtually none for new Class A office space. The most probable users of office space developed at the study area would be tenants who tend to utilize smaller Class B/C office stock. Among that group, medical office space is one of the strongest candidates for uses within this property type. The likely tenants would be sole proprietorships or small groups of primary care physicians and/or specialists, dentists/optometrists, and ophthalmologists. Other potential tenants are small-scale professional service providers, such as certified public accountants and independent financial advisors. In addition to matching appropriate office space with suitable tenants, the positioning of these types of practices and businesses within

Attachment II

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Mount Vernon Planning District, as amended through 6-21-2011, Richmond Highway Corridor, pages 81-88:

***STREETSCAPE ELEMENTS***

Attractive streetscape includes a well designed road edge with street furniture and other features and provides an improved identity, visual continuity and user safety. In order to establish a uniform roadway edge on major and minor arterials, a consistent landscape corridor is prescribed which includes coordinated areas for landscaping, sidewalks and landscaped parking lot edges or browsing areas. Figures 18 and 19 visually display a cross section of the roadway edge plans as envisioned on major and minor roadways.

**LANDSCAPE CORRIDOR**

A landscape corridor consists of the total landscape treatments placed parallel to the road edge and property line between the curb and the building or parking lot. The following landscape corridor treatments are recommended:

**A. Streetscape treatments for Richmond Highway, Kings Highway and Mount Vernon Memorial Highway:**

As depicted in Figure 18, on these prominent roadways located within the Richmond Highway Corridor area, a 20'-25' total landscape corridor width should be provided and comprised of :

**1. Off-site improvements:**

- a. On east side of Richmond Highway and both sides of Kings Highway and Mount Vernon Highway:
  - 1) a 9' wide curb edge landscape strip and
  - 2) a 6' wide masonry sidewalk
- b. On west side of Richmond Highway:
  - 1) a 8' wide curb edge landscape strip and
  - 2) a 10' asphalt trail on the west side of the roadway; and

**2. On-site improvements:**

- a. On the east side of Richmond Highway and both sides of Kings Highway and Mount Vernon Highway provide either a 5' wide paved browsing area where a building abuts the landscape corridor or a 10' wide landscaped screening strip if a parking lot or other non-building edge types abuts the landscape corridor.
- b. On the west side of Richmond Highway provide either a 4' wide paved browsing area where a building abuts the landscape corridor or a 7' wide landscaped screening strip if a parking lot or other non-building edge types abuts the landscape corridor.

**B. Streetscape treatments on all other streets intersecting Richmond Highway:**

As depicted in Figure 19, on other streets that intersect Richmond Highway and are within the Richmond Highway Corridor area, a 15' total landscape corridor width should be provided and comprised of:

**1. Off-site improvements:**

- a. 5' wide curb edge landscape strip;
- b. 5' wide sidewalk; and

**2. On-site improvements:**

- a. either a 5' wide paved browsing strip where a building abuts the landscape corridor or a 5' wide landscaped screening strip when a parking lot or other non-building edge types abuts the landscape corridor.

<p><b>BROWSING STRIP</b> A browsing strip is an important part of the landscape corridor in areas where buildings are oriented toward the street and have little or no front setback. In these cases, a minimum 5' wide masonry surface between the sidewalk and building front should be provided to encourage pedestrian activity especially where retail stores are located on the first level of a building.</p>										
<p><b>CENTER HIGHWAY MEDIAN</b> Along Richmond Highway, a 16'-20' raised median is planned as part of the highway improvements. This median should be planted with groups of flowering trees or large deciduous trees and underplanted with groundcovers and shrubs. Sight lines should not be obscured by plantings at initial installation or at maturity.</p>										
<p><b>BICYCLE LANE</b> Along the Richmond Highway streetscape, a bicycle lane should be accommodated in the wider outside roadway lanes in each direction. In addition, bicycles will be accommodated in a 10' multi-purpose trail on the west side of Richmond Highway.</p>										
<p><b>STREET FURNITURE</b> Provide some or all of these features in a coordinated style, where feasible and/or appropriate, both in streetscape and other areas:</p> <table border="0"> <tr> <td>Trash receptacles</td> <td>Bollards</td> </tr> <tr> <td>Benches</td> <td>Planters</td> </tr> <tr> <td>Kiosks</td> <td>Water Fountains</td> </tr> <tr> <td>Tree Grates/Guards</td> <td>Bus Shelters</td> </tr> <tr> <td>Bicycle Racks</td> <td></td> </tr> </table>	Trash receptacles	Bollards	Benches	Planters	Kiosks	Water Fountains	Tree Grates/Guards	Bus Shelters	Bicycle Racks	
Trash receptacles	Bollards									
Benches	Planters									
Kiosks	Water Fountains									
Tree Grates/Guards	Bus Shelters									
Bicycle Racks										
<p><b>STREETLIGHTING</b> Provide flat lens streetlight fixtures mounted on black painted poles with all wiring placed underground. In areas of significant pedestrian activity, uniform pedestrian-scale lampposts are more appropriate and can supplement the aforementioned overhead streetlights. All lighting fixtures should be well placed within the streetscape and have full cut-off lighting that is directed downward in an effort to reduce glare and provide uniform directed illumination.</p>										
<p><b>UTILITIES</b> Place all utility distribution lines underground.</p>										
<p><b>LANDMARKS</b> Provide distinctive major and minor features that contribute to a sense of place (i.e. clock towers, distinctive architecture, fountains, furnished open space, public art, arcades, plazas, etc.), where feasible and/or appropriate.</p>										
<p><b>OPEN SPACE</b> Preserve existing natural features or create attractive open space where people can gather and/or view in a pleasant environment.</p>										
<p><b>GATEWAYS/ENTRY AREAS</b> At locations identified in the Plan as gateways to the Corridor or Community Business Centers, provide distinctive features to identify entry into the Corridor and/or the individual Community Business Centers. Utilize special landscape and other treatments to identify and reinforce entry areas.</p>										
<p><b>PAVEMENT TREATMENTS</b> Provide surface treatments in pedestrian areas and on crosswalks that contrast with the roadway surface to enhance the appearance and clearly identify areas of pedestrian walkways.</p>										
<p><b>ENVIRONMENTAL PRESERVATION</b> Preserve sensitive environmental features and existing quality vegetation.</p>										

***PARKING ELEMENTS***

The provision of adequate parking is essential to commercial activities. Poorly designed parking lots dominate the Richmond Highway Corridor. These recommendations provide guidance for visually and functionally improving existing and new parking facilities.

**INTERPARCEL ACCESS** Provide vehicular and pedestrian connections between adjacent developments instead of service drives, where feasible.

**PARKING LOT DESIGN**

1. Divide lots into smaller sections using landscaped medians to avoid large expanses of parking areas.
2. Ensure adequate visual clearance at intersections.
3. Provide internal circulation which is efficient, yet attractive and user-friendly.
4. Consolidate access points.
5. Use clear and legible signs and other techniques to direct the flow of vehicular and pedestrian traffic.
6. Provide sidewalks or walkways for safe pedestrian access that connect to adjacent street sidewalks and/or trails.

**PARKING LOT LIGHTING**

1. Locate or screen parking lot lighting, with respect to spatial design and fixture height, to minimize impacts on adjacent neighborhoods.
2. When replacing or installing new lighting, eliminate direct glare through the use of fully-shielded luminaires that direct the light downward.
3. Lighting fixtures should be positioned, with respect to spatial design and fixture height, to give adequate uniformity of the illuminated area.
4. Place lighting for signs and/or buildings above and in front of the object to be illuminated and keep the light restricted to that area.
5. All lights should be directed downward and shielded to create less glare impact to drivers, pedestrians, neighbors and other users.
6. Placement of light fixtures should not conflict with landscape treatments, especially trees.

**PARKING LOT LANDSCAPING**

**A. Interior Parking Lot Landscaping**

When there is a proposed expansion or enlargement of an existing development which involves the addition of 20 or more parking spaces, provide at least 1 shade tree per 8 parking spaces in the new or expanded parking areas and exceed Zoning Ordinance requirements for parking lot landscaping by 5%. To achieve these ratios, the following alternatives or a combination of these alternatives should be considered:

1. Provide a continuous landscape strip between every four rows of parking. This should be a minimum of eight feet in width to accommodate a low hedge and shade trees, and/or
2. Create large planting islands (over 600 square feet) to be located throughout the lot and planted with shade trees, low shrubs, and/or ground cover. These should preferably be located at the ends of parking rows, and/or
3. Provide planting islands (a minimum of nine feet wide) between every 10 to 15 spaces to avoid long rows of parked cars. Each of these islands should provide at least one shade tree having a clear trunk height of at least six feet.

**B. Peripheral Parking Lot Landscaping**

1. When a parking lot abuts land not in a right of way, provide peripheral parking lot landscaping as follows:

- a. For expansions or enlargements of existing developments which involve the addition of less than 100% of the total gross floor area of all existing buildings on a lot, no peripheral landscaping should be required.
  - b. For redevelopments involving the total removal of all buildings on a lot and the construction of new buildings or the addition of 100% or more of the total gross floor area of all buildings on a lot or new developments on vacant land, a landscaping strip at least four feet in width should be located between the parking lot and the abutting property lines, except where driveways or other openings may necessitate other treatment. Within that landscape strip at least one tree for each fifty linear feet should be planted.
2. For new development and expansions, enlargements or redevelopment of existing developments as described above, and when a parking lot property line abuts the right of way, a landscaping strip ten (10) feet in width on the east side of Richmond Highway and both sides of Kings Highway and seven (7) feet in width on the west side of Richmond Highway, exclusive of sidewalk, trail or parallel utility easements, should be located on the lot where it abuts the right of way. On other streets intersecting Richmond Highway, a five (5) foot parking strip shall be required where a parking lot property line abuts the right of way. This landscaping strip should be planted in accordance with the landscape treatments section recommended in the landscape elements section of these urban design recommendations.

Flexibility in the application of the preceding parking lot landscaping guidance may be necessary if it is not feasible to meet these requirements in the case of expansions or enlargements of existing developments.

**C. Structured Parking**

The visual impacts of structured parking should be reduced by:

1. Rooftop Landscaping. On the top level, landscape areas should be provided, and planted with shade trees and shrubs. These should be provided at a minimum at the end of each row of parking.
2. Landscaped Setbacks. The perimeter of the parking structure should be landscaped at ground level.
3. Multilevel Plantings. The use of planting boxes and trellises should be considered on the exterior parapet of parking structures.
4. All of the above landscaping applications will need to have special detailed designs developed to ensure proper drainage within the landscaped areas.

**D. Parking Lot Entry Landscaping**

Provide distinctive landscape treatments at parking lot entry points.

***LANDSCAPE ELEMENTS***

The provision of well placed, selected and maintained plant materials will improve visual and environmental conditions and make the Richmond Highway corridor more attractive to users.

**PLANTINGS WITHIN THE LANDSCAPE CORRIDOR**

**Tree Planting Patterns within Landscape Strips Along Richmond Highway**

Within Community Business Centers, a linear planting pattern along Richmond Highway is recommended within the landscape strips. A minimum of 1 canopy tree per 25-30 linear feet with regular spacing should be provided depending on tree species selected, whether overhead utility lines exist and VDOT requirements.

Within Suburban Neighborhood Areas, a random or clustered planting pattern along Richmond Highway is recommended within landscape strips. A minimum of 3 trees per cluster with clusters spaced at least every 30 to 40 feet should be provided depending on the tree species selected, whether overhead utility lines exist and VDOT requirements.

#### **Parking Lot Planting Strips**

In parking lot planting strips that abut a right of way, in addition to the tree plantings recommended in the Parking Elements section above, provide a hedge row underplanting to screen vehicles from view.

#### **Landscape Corridor Trees**

Within the landscape corridor landscape and planting strips, if there are no existing or proposed overhead utility lines, there should be at least one (1) large deciduous tree planted in the landscaping strips for each thirty (30) feet of length. If there are overhead utility lines, there should be at least one (1) small to medium deciduous tree planted in the landscaping strips every twenty-five (25) feet of length. Trees planted in the landscaping strips beneath overhead utility lines should be of a shape and character so as not to interfere with the utility lines.

### **TREE SELECTION CRITERIA**

The following criteria should be used in the selection of trees:

- 1) Drought resistant
- 2) Tolerant of site light conditions
- 3) Must not exceed 30' tall at maturity if placed under utility lines
- 4) Minimum 2 ½" caliper at time of planting
- 5) 5-6' branch clearance, when planted, for street and peripheral parking lot trees
- 6) Requires low maintenance
- 7) Bears no objectionable fruit
- 8) Species is readily available
- 9) Single stemmed along streets and either single stemmed or multi-stemmed in interior parking lots or other appropriate landscape areas
- 10) Road salt tolerant
- 11) Disease resistant
- 12) Insect resistant

### **RECOMMENDED TREE SPECIES**

The following species are choices to consider. Other species may be appropriate as determined by the Urban Forester.

- |  |  |   |
|--|--|---|
| <b>a. Large Deciduous Trees</b><br>red oak<br>green ash<br>willow oak<br>London planetree<br>zelkova<br>red maple<br>silver linden | <b>b. Medium Deciduous Trees</b><br>Sargent or kwanzan cherry<br>goldenrain tree<br>crabapples<br>downy serviceberry<br>kousa dogwood<br>saucer/star magnolia<br>hedge maple<br>flowering plum<br>hawthorn | <b>c. Columnar Trees</b><br>hedge maple<br>red maple<br>gingko (columnar varieties)<br>English oak (columnar varieties) |
|--|--|---|

<p><b>d. Evergreen Trees</b>          eastern white pine          eastern red cedar          leyland cypress</p> <p><b>f. Shrub Hedges</b>  <b>4'-6' at maturity</b>          Manhattan euonymus          dwarf burning bush          pfitzer juniper          densiformis yew          glossy abelia          sea green juniper          compact inkberry</p>	<p><b>e. Groundcover/Grass</b>          horizontal juniper species          lirioppe          fountain grasses          red meidiland rose</p> <p><b>2'-3' at maturity</b>          andorra juniper          gold coast juniper          William Penn barberry          helleri holly          bonica rosa</p>
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**TREE AND PLANT MAINTENANCE** Property owners and/or managers shall agree during the development process to maintain and replace plant materials and trees placed in the adjacent right of way and on the property to ensure the long term viability of trees and plants.

***BUILDING/SITE DESIGN ELEMENTS***

Quality architectural and site design provide a sense of identity to the corridor. Coordinated and compatible architectural and site design are essential to achieve a well-designed corridor.

**EXISTING BUILDING IMPROVEMENTS**

1. Replace unsightly elements, including signs, siding and artificial materials with more appropriate features and/or materials.
2. Where original quality building materials are to be retained, new building materials should match the original as closely as possible in material, color and texture.
3. Mechanical equipment and other elements located on the roof of a building should be effectively screened.

**MASS OF NEW BUILDINGS** Create building mass that minimizes adverse impacts on adjacent neighborhoods and is compatible with other surrounding uses through the use of tapered building heights, appropriate setbacks, and transitional screening and barriers.

**SCALE AND SITING OF NEW BUILDINGS** Where feasible, incorporate architectural features at the street level that relate to human size and increase the pedestrian comfort level. Incorporate urban design elements, such as trees, benches, special pavement treatments, awnings, setbacks, tapered building heights, browsing areas, lighting and plant materials to visually soften the harder architectural features of the building and create an attractive pedestrian-friendly environment that will reinforce retail activities.

The following guidelines should be used to determine the appropriate scale and site location of new buildings:

1. Where feasible, orient commercial buildings toward the road with parking lots to the side and rear to create an urban atmosphere. Where buildings are oriented to the road, no minimum front yard is required except as needed for the streetscape treatments described above.
2. Site buildings to discourage large expanses of parking adjacent to and visible from roadways.
3. Cluster buildings to reinforce a neighborhood style or ambience, where appropriate.
4. Site buildings with respect to natural topography and other environmental and historic features

<b>UTILITIES</b> Place all on-site utility service lines underground.
<b>FUNCTION/USE</b> Where appropriate and within large developments and core areas, use interior circulation patterns and public plazas to foster increased pedestrian and social activity.
<b>DETAILING</b> Create interest through appropriate and coordinated architectural details of building facades.
<b>COMPATIBLE ARCHITECTURAL DESIGN</b> Where feasible, provide architectural design that is visually coherent, respects the surrounding neighborhood style, scale and character.
<b>COORDINATED DESIGN</b> Provide an overall compatible design for all units in a development. For instance, colors, sign types, awnings, lighting, architectural features and materials should be coordinated to unify blocks and storefronts.
<b>IMAGE IDENTIFICATION</b> Provide distinctive design and architectural details to provide a sense of identity to a particular site, building or location.
<b><i>SIGNAGE ELEMENTS</i></b> Well coordinated and designed signage provides a greater sense of orientation to users.
<b>DIMENSIONS AND DESIGN</b> Demonstrate a coordinated sign size, design, style, materials and height through a comprehensive sign plan.
<b>NONCONFORMING SIGNAGE</b> Replace existing nonconforming signs.
<b>SPECIAL AREAS IDENTIFICATION</b> Provide coordinated signage to identify CBCs and gateways as distinctive areas.
<b>CLUTTER</b> Reduce sign clutter especially along the highway edge.
<b>PLACEMENT</b> Install building or ground mounted, coordinated signage rather than pole mounted signage.
<b>CONSOLIDATION</b> Consolidate signage for multiple uses within a single development with coordinated color, materials, lettering and design.
<b>SIGN LIGHTING</b> Minimize sign lighting impacts on adjacent neighborhoods. Minimize glare impacts from sign lighting by placing lighting above and in front of signs and directing the light downward.
<b>PUBLIC SIGNAGE</b> Consolidate public safety, directional, highway identification and other public signage to the extent possible. Place cross street name and block number signs on Richmond Highway traffic light masts. Visibility of public signage should be sized to be readable from vehicles moving at posted speeds on adjacent roadways.
<b>ENTRY SIGNS</b> Provide well-designed commercial and residential development entry signs. Coordinate all landscaping in the vicinity of the sign to compliment, but not obscure, signage.
<b>TEMPORARY SIGNS</b> Prohibit the use of temporary commercial advertising signs and movable signs with flashing lights along street edges. However, banners announcing district-wide events, but not individual businesses or products, shall be allowed on utility or light poles if securely affixed at the top and bottom so as to preclude any fluttering or rotation by the rotation of the atmosphere.
<b>BUILDING NUMBER SIGNAGE</b> Coordinate building numbers and address signage at each address for public safety and identification purposes. Visibility of building numbers should be sized to be readable from vehicles moving at posted speeds on adjacent roadways.

Attachment III

INTERSECTION / NETWORK	Current Comprehensive Plan	Grid-like Network
GENERAL MITIGATION	<ul style="list-style-type: none"> <li>• New Southern Connection</li> </ul>	<ul style="list-style-type: none"> <li>• Realigned N Kings Highway</li> </ul>
N KINGS HIGHWAY @ SCHOOL ST/SHIELDS AVE	<ul style="list-style-type: none"> <li>• Realign Intersection – 4-Way</li> <li>• Exclusive NBL (to School St)</li> <li>• Dual SBL</li> <li>• Exclusive EBL (from School St)</li> <li>• Dual WBR</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• 3<sup>rd</sup> NBT (High) ← LOS E without</li> </ul>	<ul style="list-style-type: none"> <li>• Realign Intersection – 4-Way</li> <li>• Exclusive NBL (to School St)</li> <li>• Dual SBL</li> <li>• Exclusive EBL (from School St)</li> <li>• Dual WBR</li> </ul>
RICHMOND HIGHWAY @ SHIELDS AVE	None	<ul style="list-style-type: none"> <li>• Restripe EBTR as EBT</li> <li>• 2<sup>nd</sup> EBR</li> </ul>
N KINGS HIGHWAY @ POAG ST	<ul style="list-style-type: none"> <li>• Install Traffic Signal</li> <li>• Exclusive EBL</li> </ul>	<ul style="list-style-type: none"> <li>• Install Traffic Signal</li> <li>• Exclusive EBL</li> </ul>
S KINGS HIGHWAY @ PENN DAW ENTRANCE	<ul style="list-style-type: none"> <li>• Remove Traffic Signal</li> <li>• Exclusive EBL</li> </ul>	<ul style="list-style-type: none"> <li>• Dual NBR</li> <li>• Exclusive SBL</li> <li>• Exclusive EBL (Penn Daw Drive)</li> <li>• Dual WBR</li> </ul>
RICHMOND HIGHWAY @ WALMART ENTRANCE	<ul style="list-style-type: none"> <li>• Dual SBL (to Walmart)</li> </ul>	<ul style="list-style-type: none"> <li>• Dual NBL</li> <li>• Dual SBL (to Walmart)</li> <li>• 2<sup>nd</sup> EBL (Shared EBLT)</li> <li>• Dual EBR</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• 4<sup>th</sup> NBT (High) ← LOS F without</li> <li>• 4<sup>th</sup> SBT (High) ← LOS F without</li> </ul>
S KINGS HIGHWAY @ NEW SOUTHERN CONNECTOR	<ul style="list-style-type: none"> <li>• Install Traffic Signal</li> <li>• Dual NBR</li> <li>• Exclusive WBL</li> </ul>	N/A
RICHMOND HIGHWAY @ NEW SOUTHERN CONNECTOR	<ul style="list-style-type: none"> <li>• Install Traffic Signal</li> <li>• Dual NBL</li> <li>• Exclusive SBR</li> <li>• Exclusive EBL</li> </ul>	N/A
RICHMOND HIGHWAY @ POAG ST EXTENSION	N/A	<ul style="list-style-type: none"> <li>• Right-In, Right-Out</li> </ul>

**LEGEND**

EBR = Eastbound Right	EBT = Eastbound Through	EBL = Eastbound Left
WBR = Westbound Right	WBT = Westbound Through	WBL = Westbound Left
NBR = Northbound Right	NBT = Northbound Through	NBL = Northbound Left
SBR = Southbound Right	SBT = Southbound Through	SBL = Southbound Left