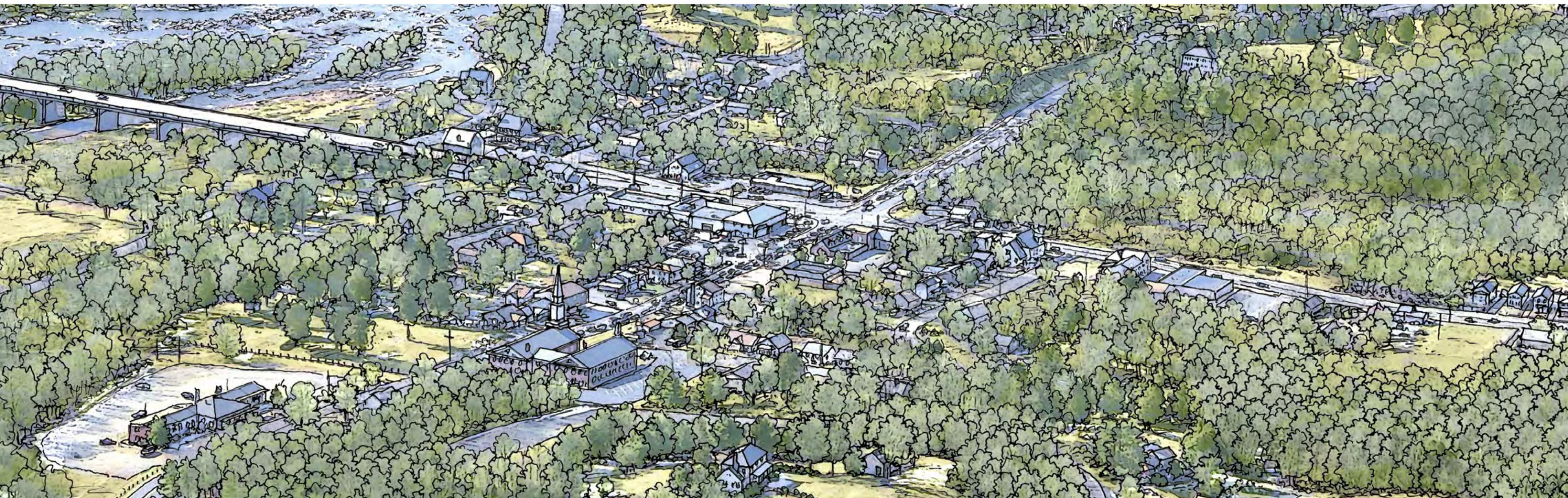


STAFFORD COUNTY

MASTER REDEVELOPMENT PLAN



VOLUME IV: FALMOUTH VILLAGE

OCTOBER 2009 | ADOPTED MAY 17, 2011



CMSSARCHITECTS

BOARD OF SUPERVISORS
COUNTY OF STAFFORD
STAFFORD, VIRGINIA

RESOLUTION

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, Stafford County Administration Center, Stafford, Virginia, on the 17th day of May, 2011:

<u>MEMBERS:</u>	<u>VOTE:</u>
Mark Dudenhefer, Chairman	Yes
Paul V. Milde III, Vice Chairman	No
Harry E. Crisp II	Yes
Gary F. Snellings	No
Cord A. Sterling	Yes
Susan B. Stimpson	Yes
Robert "Bob" Woodson	Yes

On motion of Mr. Sterling, seconded by Mr. Crisp, which carried by a vote of 5 to 2, the following was adopted:

A RESOLUTION TO AMEND THE STAFFORD COUNTY COMPREHENSIVE PLAN IN ACCORDANCE WITH SECTION 15.2-2229 AND SECTION 15.2-2230 OF THE CODE OF VIRGINIA (1950), AS AMENDED, BY ADOPTING THE PROPOSED AMENDMENT, AS ADVERTISED, INCLUDING A NEW ECONOMIC DEVELOPMENT ELEMENT, ENTITLED "STAFFORD COUNTY MASTER REDEVELOPMENT PLAN," DATED OCTOBER, 2009, AS REVISED BY THE PLANNING COMMISSION AT ITS MEETING ON MARCH 15, 2011

WHEREAS, under Section 15.2-2229 of the Code of Virginia (1950), as amended, the Board may amend its Comprehensive Plan; and

WHEREAS, under Section 15.2-2229 of the Code of Virginia (1950), as amended, the Planning Commission (the Commission) has been directed by the Board to prepare and consider Comprehensive Plan amendments; and

WHEREAS, under Section 15.2-2230 of the Code of Virginia (1950), as amended, the Commission can review the Stafford County Comprehensive Plan to determine whether it is advisable to amend the Comprehensive Plan; and

WHEREAS, the proposed amendment to the Comprehensive Plan would amend the Comprehensive Plan by adopting a new economic development element entitled "Stafford County Master Redevelopment Plan," dated October, 2009, with recommendations for changes to existing County ordinances, policies, and procedures to serve as a framework to guide the coordinated and harmonious development of the County's four Redevelopment Areas: Boswell's Corner, the Courthouse area, Falmouth Village, and the Southern Gateway, as revised by the Commission at its meeting on March 15, 2011; and

WHEREAS, the Commission duly advertised and held a public hearing on April 20, 2011, on the proposed Comprehensive Plan Amendment, received a recommendation of County staff supporting approval of the proposed Amendment, received public testimony, decided on a 4-3 vote to recommend approval of Volume II and decided on a 5-2 vote to recommend approval of Volumes I, III, IV, V, VI, VII, VIII, IX, and X, and has forwarded its recommendation of approval of the proposed Comprehensive Plan amendment to the Board; and

WHEREAS, the Board duly advertised and held a public hearing on the proposed Comprehensive Plan Amendment on May 17, 2011, at which time public testimony was received and the above-referenced Comprehensive Plan Amendment was considered by the Board; and

WHEREAS, the Board has carefully considered the recommendations of the Commission, the recommendations of County staff, and the public testimony at the public hearing; and

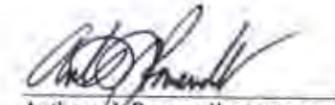
WHEREAS, the Board concludes that the adoption of the proposed Comprehensive Plan Amendment, as advertised, will guide a coordinated and harmonious development of the County's four Redevelopment Areas: Boswell's Corner, the Courthouse area, Falmouth Village, and the Southern Gateway which will, in accordance with the present and probable future needs and resources of Stafford County, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the citizens of Stafford County, Virginia, including the elderly and persons with disabilities; and

WHEREAS, the Board concludes that the adoption of the proposed Comprehensive Plan Amendment, as advertised, is consistent with good planning practices.

NOW, THEREFORE, BE IT RESOLVED by the Stafford County Board of Supervisors on this the 17th day of May 2011, hereby adopts the proposed Comprehensive Plan Amendment, as advertised, by approving a new economic development element, entitled "Stafford County Master Redevelopment Plan," dated October, 2009, as revised by the Commission at its meeting on March 15, 2011.

BE IT FURTHER RESOLVED that the maximum allowed dwelling units in the Boswell's Corner Redevelopment Area is modified to a maximum of 744 units.

A Copy, teste:


Anthony J. Romanello, ICMA-CM
County Administrator

AJR:WJ/f

RESEARCH & PROGRAM DEVELOPMENT

FALMOUTH VILLAGE CULTURAL & HERITAGE TOURISM AREA3

ECONOMIC & MARKET ANALYSIS OVERVIEW5

 Cultural & Heritage Tourism 6

 Heritage Tourist Characteristics 6

 Challenges of Heritage Tourism 6

 Analysis of Falmouth Village as a Cultural Heritage Tourism Destination . . 6

 Strengths 6

 Weaknesses 6

 Opportunities 7

 Threats 7

 Falmouth Village Cultural, Heritage and Recreation Resource Concept . . . 7

REAL ESTATE MARKET & DEMAND8

 Office Demand 8

 Retail Demand 8

INFRASTRUCTURE & STORM WATER MANAGEMENT (SWM) ANALYSIS . . .9

 Storm Water Management (SWM) Analysis 9

 Existing Impervious Analysis 10

 Regional SWM Opportunities 11

 Water/Sewer Analysis 12

 Existing Water Service 12

 Existing Sewer Service 12

 Comprehensive Plan Elements 13

 Chesapeake Bay Preservation Area (CBPA) Plan 13

 Capital Improvement Program (CIP) 13

 Falmouth Plan 14

 Groundwater 14

 Shoreline 14

 Stormwater 14

 Water Supply Plan 14

TRANSPORTATION & TRAFFIC ANALYSIS15

 Existing Roadway Network 15

 Existing Transit Services 16

 Current Planned Network 16

 FAMPO Constrained Long Range Plan (CLRP) 16

 VDOT State Highway Plan 16

 Belmont-Ferry Farm Trail Project 16

 Existing Traffic Volumes 16

 Capacity of Roadway Network 17

 Levels of Service 17

 Volume to Capacity (V/C) Ratios 17

 Traffic Control Systems 18

 Accidents & Safety 18

CULTURAL & HISTORIC RESOURCES ANALYSIS20

 History of the Falmouth Village Redevelopment Area 20

 Architectural Design Guidelines 21

 Archaeology 21

 Belmont-Ferry Farm Trail 21

 The Counting House 21

 Other Projects 21

FALMOUTH VILLAGE REDEVELOPMENT AREA:

SUMMARY & CONCLUSIONS23

 Economic & Market Analysis 23

 Infrastructure & Storm Water Management (SWM) Analysis 23

 Transportation & Traffic Analysis 24

 Cultural & Historic Resources Analysis 24

MOVING FORWARD25

CONCEPT MASTER REDEVELOPMENT PLAN & RECOMMENDATIONS

PUBLIC PROCESS & COMMUNITY INPUT29

 Public Workshop # 1 Conclusions 29

 Public Input: Dot Maps 30

 Visual Preference Survey 31

 Vision & Goals 31

 Vision Statement 31

 Public Workshop # 2 Conclusions 32

 Public Input Map 32

PROPOSED MASTER PLAN33

 Master Plan Highlights 33

 Open Space & Circulation 34

 Street Sections 35

 Specific Recommendations to the

 Elements of the Comprehensive Plan: Infrastructure 37

 Specific Recommendations to the

 Elements of the Comprehensive Plan: Transportation 38

CORE DEVELOPMENT AREA IMPLEMENTATION39

 Rationale for Defining This Area as the Core Development Area 39

 Action Plan 39

 Other Key Elements & Recommendations 39

 Core Development Area Financial Feasibility 40

APPENDICES

APPENDIX I

 Rugby, Tennessee: Heritage Tourism Case Study 43

APPENDIX II

 Additional Cultural & Historic Resources: History, Growth, & Historic Preservation of the Redevelopment Area 43

APPENDIX III

 Frequently Used Acronyms 44

APPENDIX IV

 Research & Program Development Bibliography 45

APPENDIX V

 Public Workshop #1 Results 46

APPENDIX VI

 Public Workshop #2 Results 57

APPENDIX VII

 Financial Feasibility: Assumptions & Methodology 62

APPENDIX VIII

 Concept Master Redevelopment Plan Acknowledgments 70

LIST OF MAPS

Map 1: Falmouth Village Redevelopment Boundaries 3
 Map 2: Falmouth Village Critical Resource Protection Areas (CRPAs) 9
 Map 3: Falmouth Village FEMA 100-Year Floodplain Limit. 10
 Map 4: Falmouth Village Potential SWM/BMP Facilities 11
 Map 5: Falmouth Village Existing Water Facilities 12
 Map 6: Falmouth Village Existing Sewer Facilities. 13
 Map 7: Falmouth Village Existing Road Network. 15
 Map 8: Falmouth Village Existing Average Daily Traffic Volumes 16
 Map 9: Falmouth Village Peak Hour Traffic Turning Volumes 17
 Map 10: Architectural Resources Within Falmouth Village – Priorities 22
 Map 11: Areas with Potential Cultural Resources
 Within Falmouth Village 22
 Map 12: Falmouth Village Existing Conditions – Challenges 30
 Map 13: Falmouth Village Existing Conditions – Strengths 30
 Map 14: Falmouth Village Existing Conditions – Opportunities 30
 Map 15: Falmouth Village Preliminary Master Plan – Public Input 32
 Map 16: Falmouth Village Open Space & Circulation Plan 34

LIST OF TABLES

Table 1: Falmouth Village Demographics, 2006–2028 5
 Table 2: Stafford Venue-Specific Visitation, 2007 6
 Table 3: Falmouth Village Supportable Office Space, 2007–2020 8
 Table 4: Falmouth Village Supportable Retail Space, 2007–2012 8
 Table 5: Falmouth Village Existing Impervious Analysis 10
 Table 6: Falmouth Village Typical
 Link Level of Service Threshold Values 18
 Table 7: Falmouth Village Existing Capacity Analysis Summary 18
 Table 8: Falmouth Village Accident Analysis: Expected Values 19
 Table 9: Falmouth Village Estimated Demand 33
 Table 10: Falmouth Village Core Development Area
 Program Assumptions 40
 Table 11: Falmouth Village Core Development Area
 Residual Land Value Overview 40
 Table 12: Summary of Core Development Area Annual & Construction
 Period Fiscal Benefits 40
 Table 13: Summary of Property Tax Benefits by Redevelopment Area 40
 Table 14: Summary of Core Development Area Annual and
 Construction Period Fiscal Benefits 63
 Table 15: Summary of Property Tax Benefits by Redevelopment Area 63
 Table 16: On-Site Sales and Use Tax Revenue 64
 Table 17: Resident, Office Worker, & Hotel Guest Sales Tax Revenue
 from Off-Site Spending 65
 Table 18: Core Development Area Construction Costs
 for Materials and Labor 66
 Table 19: Sales and Use Tax Revenues from Construction Period 66

LIST OF FIGURES

Figure 1: Falmouth Village, Aerial 4
 Figure 2: Falmouth Village Population & Households, 2007 5
 Figure 3: Falmouth Village TAZ-Based Employment Data, 2006 5
 Figure 4: Stafford County Monthly Venue-Specific Visitors, 2007. 7
 Figure 5: Falmouth Village Section & Plan –
 Warrenton Road (US-17) 35
 Figure 6: Falmouth Village Street View looking east –
 Warrenton Road (US-17): Before 35
 Figure 7: Falmouth Village Street View looking east –
 Warrenton Road (US-17): After 35
 Figure 8: Falmouth Village Section & Plan –
 Cambridge Street/Jefferson Davis Highway (US-1) 36
 Figure 9: Falmouth Village Street View looking south –
 Cambridge Street/Jefferson Davis Highway (US-1): Before 36
 Figure 10: Falmouth Village Street View looking south –
 Cambridge Street/Jefferson Davis Highway (US-1): After 36

STAFFORD COUNTY MASTER REDEVELOPMENT PLAN

The efforts of the *Phase I: Research & Program Development* and *Phase II: Concept Master Development Plan* have been combined into five separate volumes. In addition, three additional volumes contain the detailed Cultural Resources Report on each of the four redevelopment areas, as well as examples of Cultural Resources Legislation. Each volume, on each of the four redevelopment areas, stand alone along with the overall Stafford County General Research & Planning section. Each of the four redevelopment area's respective volume integrates the specific Phase I research and Phase II planning efforts. The volumes do not refer separately to Phase I or II efforts, since they are now combined into a book specific to the corresponding redevelopment area.

The volumes have been separated as follows:

VOLUME I

Stafford County: General Background Research & Planning Concepts

VOLUME II

Boswell's Corner

VOLUME III

Courthouse Area

VOLUME IV

Falmouth Village

VOLUME V

Southern Gateway

VOLUME VI

- A. Cultural Resources Report for Falmouth Village
- B. VDHR Forms for Falmouth Village

VOLUME VII

- A. Cultural Resources Report for Boswell's Corner, Courthouse Area, & Southern Gateway
- B. VDHR Forms for Boswell's Corner, Courthouse Area, & Southern Gateway

VOLUME VIII

Examples of Cultural Resources Legislation

VOLUME IX

Stafford County Traffic Data

VOLUME X

Stafford County Infrastructure Analysis

Following groundwork from the 2006 Stafford County Economic Development Strategic Plan, and using the Cunningham + Quill Architects Vision plans as a springboard, the Planning Team proposed redevelopment plans for the four areas that include: a comprehensive redevelopment plan with urban street grids, open space and parks, pedestrian friendly environments and streetscape improvements, preparing the strategic areas for increased quality commercial investment.

This Master Redevelopment Plan has been designed from the beginning as a possible addition to the Stafford County Comprehensive Plan. As such, the study and analysis needed to address a large cross section of issues including: land use patterns, regional economical support, transportation, architecture, archaeology and historic resources, civil infrastructure and flood hazards. Since each of these subjects is also included in the Comprehensive Plan, this study included assessments of all 18 elements of the Comprehensive Plan. Of these elements, two were found to be of particular significance to redevelopment: the Land Use Plan and the Transportation Plan.

The land uses presented herein are not meant to supercede land uses identified in the Stafford County Land Use Plan. The land uses and layouts depicted herein are notational and are offered as one possible layout for Comprehensive Plan uses. Residential densities are offered as potential targets for the creation of more urban environments conducive to pedestrian friendly, community based and appropriately scaled, commercial development. In no way do the residential densities referenced constitute endorsement of those densities, or endorsement at the exact locations depicted, by the governing body.

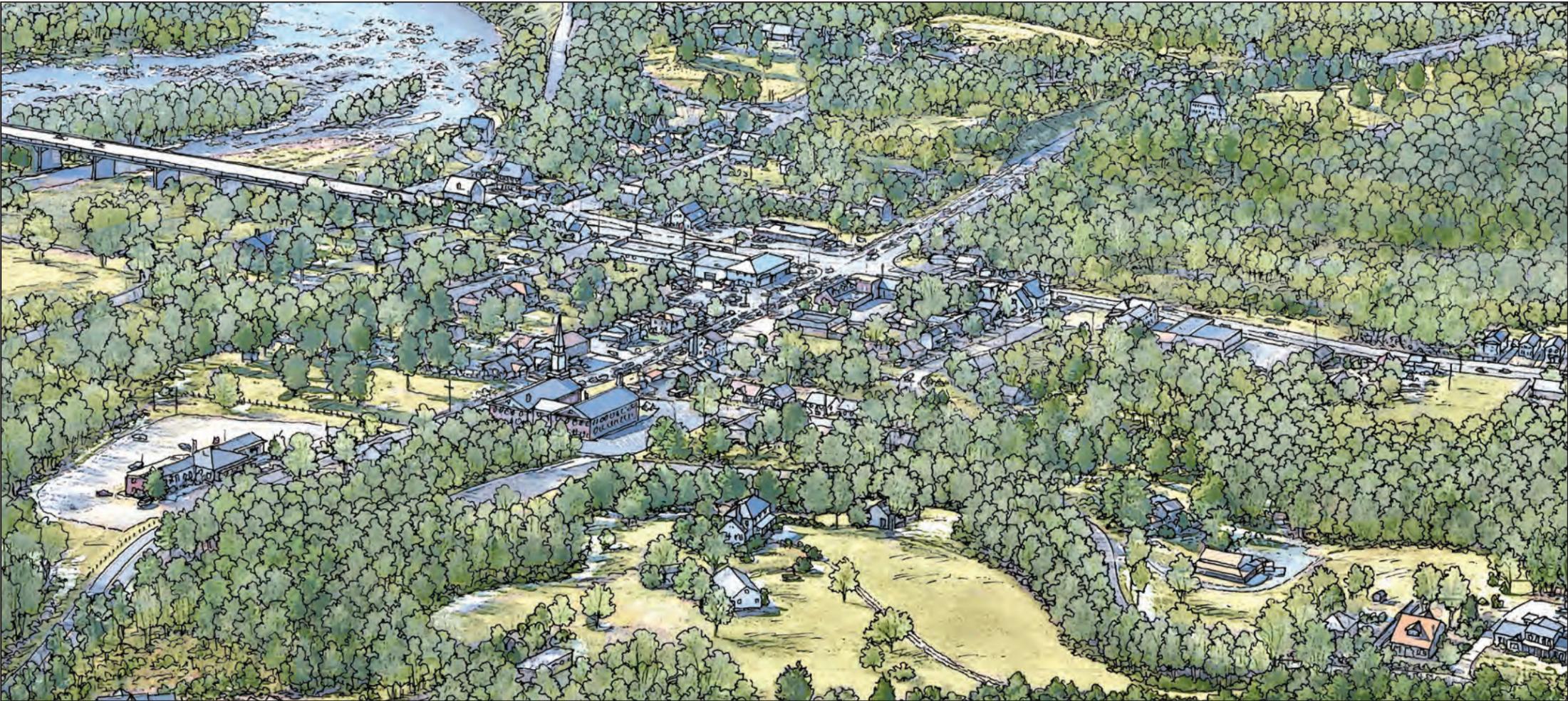
INTERIM IMPLEMENTATION STRATEGY AND REVIEW STANDARDS

Stafford County's historic development pattern has been of a low-rise suburban scale. In the recent past, individual development projects have approached mid-rise scale and form. Therefore, an interim strategy for review and approval of development projects within the Redevelopment Areas is outlined below to facilitate implementation of the recommendations contained within the Redevelopment Plans, but within a context of historical development patterns and current market dynamics. Until such time as adequate public infrastructure is in place to establish the core framework needed to realize the redevelopment visions, all rezoning or conditional use permit development proposals will be reviewed to determine if they meet the following standards for development during the interim phase:

- the development proposal either constructs or makes accommodation for planned infrastructure identified in the Redevelopment Plans.
- the development proposal includes parcels that are subdivided in a manner to accommodate the creation of blocks and the potential consolidation of properties as recommended by the Plans.
- architectural design themes contained in the development proposal will not conflict with those suggested in the Redevelopment Plans. Franchise architecture should be modified to meet Redevelopment Plans' visions.
- the development proposal is cognizant of the need for public and private open spaces that benefit private properties as well as the public.
- the development proposal uses street furniture and other pedestrian features as recommended by the Redevelopment Plans.
- the location, placement, and design of signs included in the development proposal are done in such a manner as to not detract from building architecture.

Additionally, as development codes are reviewed and modified to ensure there are limited regulatory impediments to implementing the Redevelopment Plans, incentives for by-right developments to incorporate architectural and design recommendations of the redevelopment plans will be considered.

FALMOUTH VILLAGE: RESEARCH & PROGRAM DEVELOPMENT



FALMOUTH VILLAGE CULTURAL & HERITAGE TOURISM AREA

The heart of Falmouth Village, located at the southern portion of Stafford County, is generally defined as the crossroads of Warrenton Road (US-17) and Cambridge Street (US-1). The redevelopment area is generally bounded by Truslow Road (VA-652) to the north, the Rappahannock River to the south, Colonial Avenue to the east and Melcher Drive to the west as shown on Map 1 (*Falmouth Village Redevelopment Boundaries*). This redevelopment area generally consists of roughly 200 parcels that contain approximately 120 acres of land area. The total land area, including street and road right-of-way is about 138 acres, representing ±0.08% of Stafford County’s area. The southern boundary of this area is the Rappahannock River. (Refer to Figure 1: *Falmouth Village Aerial and Map 1: Falmouth Village Redevelopment Boundaries*.)

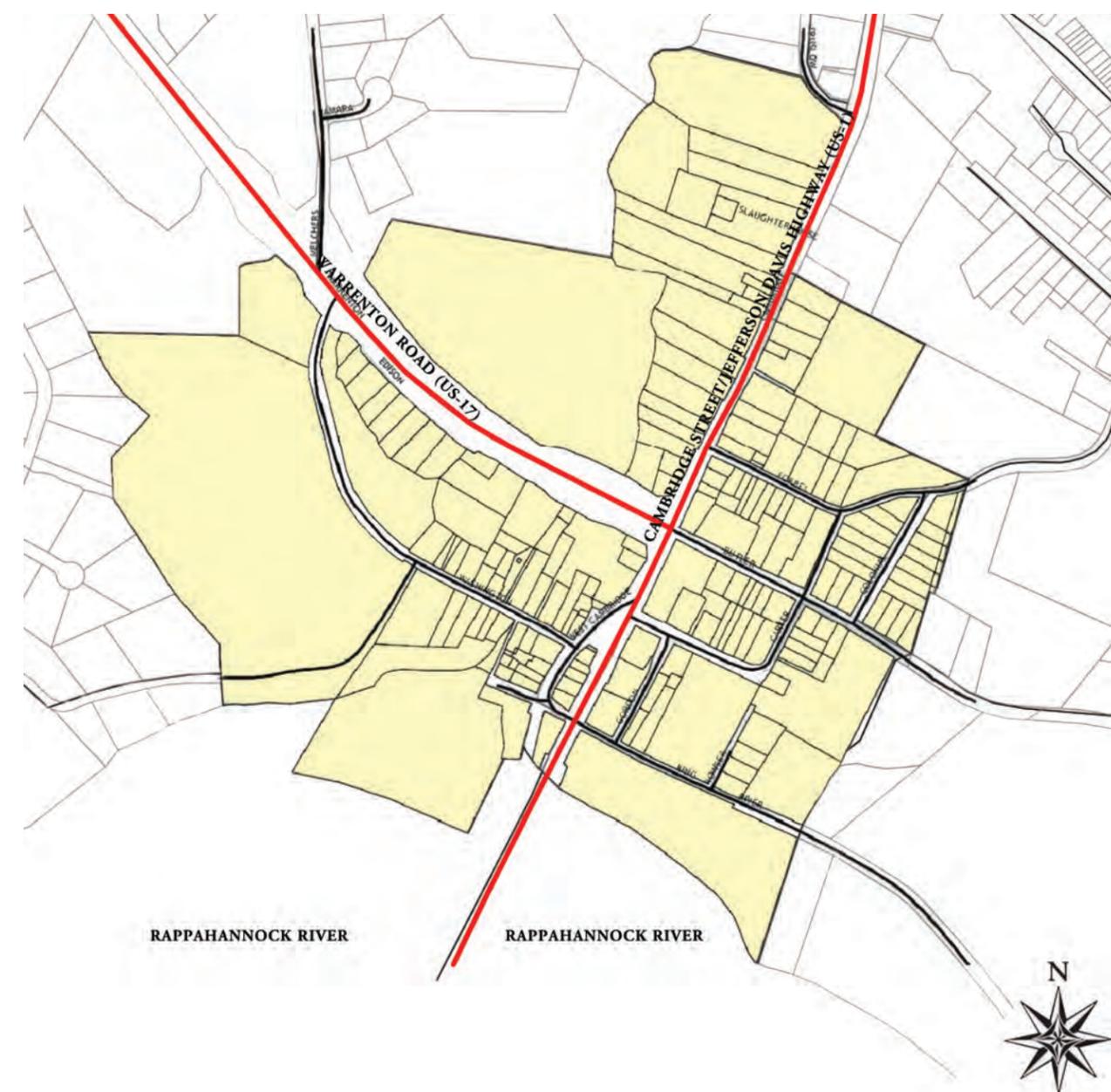
One of the earliest colonial settlements in the area, historic Falmouth Village presents a unique opportunity to preserve, enhance and develop a cultural attraction in Stafford County. This village setting adjacent to the Rappahannock River is already recognized as a National Register Historic District and contains some of the most significant historic sites and buildings in Stafford County.

Relatively easy to reach from Interstate 95 (I-95) and Warrenton Road (US-17), Falmouth Village is becoming a notable attraction for the County. Stafford’s 2006 Economic Development Plan recommended to “*Plan and Develop new opportunity sites at the new Interstate interchange at Falmouth Village and Warrenton Road in line with Identified Clusters.*”

Falmouth Village contains some of the most historic sites in Stafford County. The redevelopment area is currently developed with a mix of commercial uses intermixed with residential communities.

Much needed access improvements were identified as vital to its potential to provide another center to foster economic opportunity that could add to Stafford County’s strength. A Cultural Management Team was encouraged to outline an implementation plan to develop the Historic Port of Falmouth into a tourist attraction. The area was recently designated as an economic redevelopment site, and will be treated on par with other similar areas in the proposed redevelopment plans.”¹

Map 1: *Falmouth Village Redevelopment Boundaries*



Map ©2008 Stafford County.

¹ Recent discoveries at Ferry Farm, George Washington’s boyhood home, have increased interest in the area and links Stafford sites to other Washington-connected sites. Equally, Falmouth Village’s Civil War history attracts visitors and creates opportunities for events. It also links Falmouth Village to Civil War heritage visitors going to Fredericksburg, Chancellorsville and other nearby sites.

ECONOMIC & MARKET ANALYSIS OVERVIEW

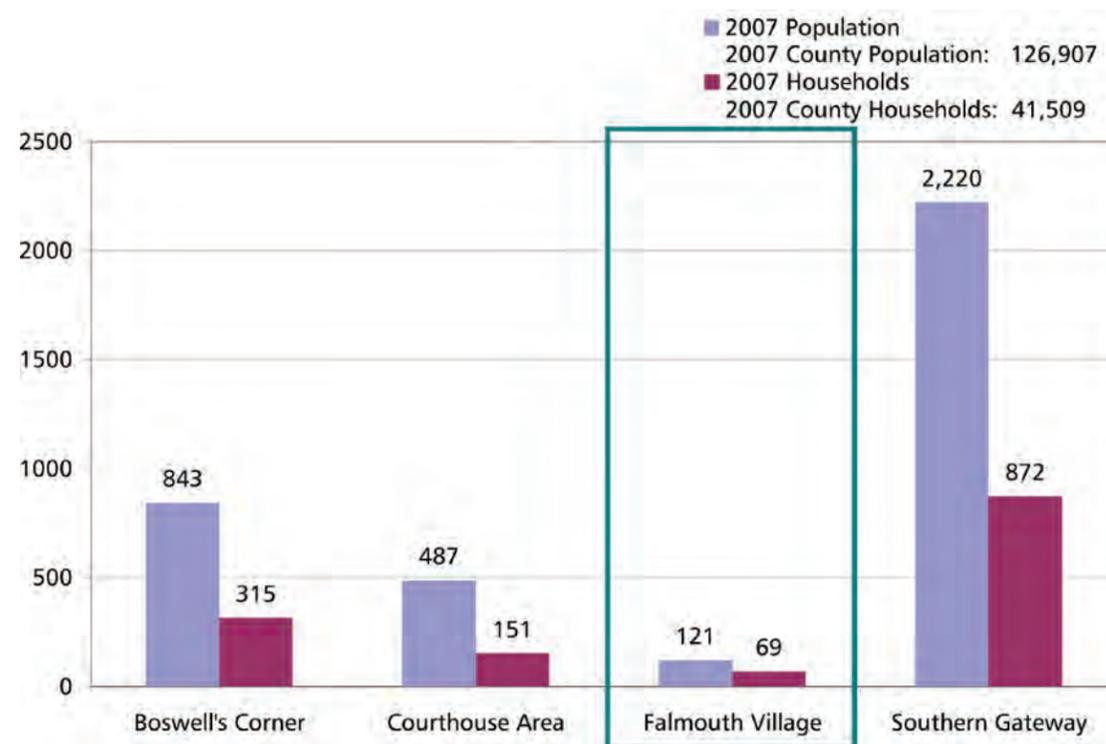
Again, both ESRI and TAZ data were examined for Falmouth Village. According to ESRI data, as of 2007, Falmouth Village had a population of 121 in 69 households (refer to Figure 2: *Falmouth Village Population & Households, 2007*). Stafford County’s TAZ data has the 2006 population at 230, though household estimates from both sources are fairly close: 77 in the 2006 TAZ data and 69 in ESRI’s 2007 data (refer to Table 1: *Falmouth Village Demographics, 2006–2028*). (See Methodology section for a description of these two sources.)

Table 1: Falmouth Village Demographics, 2006–2028

	2006	2028
Population	230	449
Households	77	164

Source: 2006 and 2008 data from Stafford County TAZ; Table by Economics Research Associates, 2008.

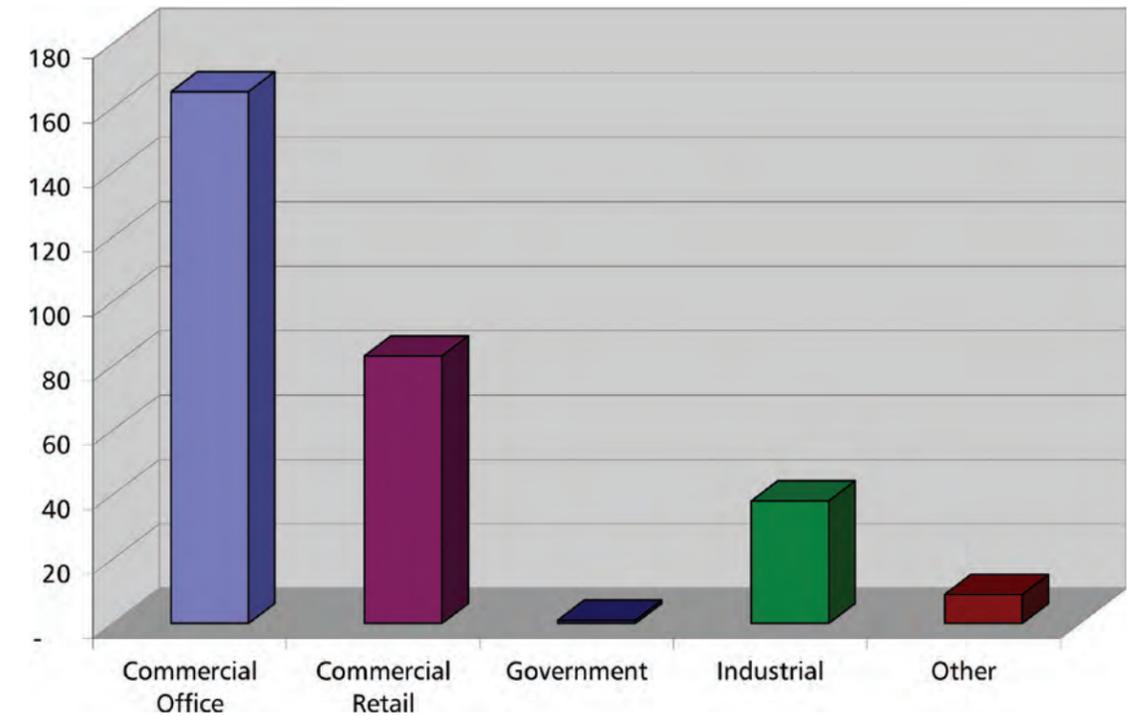
Figure 2: Falmouth Village Population & Households, 2007



Source: ESRI; Economics Research Associates, 2008.

According to Stafford County’s TAZ data, in 2006 (refer to Figure 3: *Falmouth Village TAZ-based Employment Data, 2006*), Falmouth Village had just under 300 employees, with the majority (55%) of those in professional office jobs. This number of employees reflects under a 0.5% (0.4%) of Stafford County’s 73,870 reported employees.

Figure 3: Falmouth Village TAZ-based Employment Data, 2006



Source: 2006 Stafford County TAZ; Economics Research Associates, 2008.

The Falmouth Village Area has been the focus of a number of plans and initiatives, many of which have identified the need to preserve the village and integrate it within the existing network of open space, cultural heritage and recreational trails. The Planning Team examined potential scenarios for optimizing the cultural heritage tourism potential of the village within a context that does not overload the resource. Because of the relatively small building scale, historic setting and sensitive architectural, archeological, and natural resources at the site, development in Falmouth Village should be selectively added, focusing on visitor-related businesses that may also serve the resident population. The Warrenton Road (US-17) corridor between Southern Gateway and Falmouth Village may also receive some of the identified development, but will need to do so in a way that allows for a physical and economic transition between a modern, developing economic center at Southern Gateway and an historic visitor and recreation cultural attraction in the Village.

CULTURAL & HERITAGE TOURISM

As the tourism industry has grown, there has been an increasing specialization of travel. One such specialized travel category is called “cultural heritage tourism.” Cultural tourism is defined as “...visits from outside the host community motivated wholly or in part by interest in the historical, artistic, scientific or lifestyle/heritage offerings of a community, region, group or institution.”²

Cultural heritage tourism generally includes traveling to experience the places and activities that authentically represent the stories and people of the past and present. In addition to historic and natural landscapes and structures, heritage tourism attractions may also include visual attractions, performing arts and festivals, and other related attractions. Cultural tourism often creates travel-related business activities such as restaurants, hotels/motels/ inns and bed-and-breakfasts, tour guide services, manufacturing (arts and crafts, souvenirs, publications), and agriculture (specialty gardens or farmers’ markets). Support businesses include historic building rehabilitation construction arts and trades and individual artisan and crafts persons.

HERITAGE TOURIST CHARACTERISTICS

The characteristics of cultural and heritage tourists follow similar patterns across the country. Generally, this group of travelers has been identified as persons who: earn more household income and spend more money while on vacation than the average visitor; spends more time in an area while on vacation; is more highly educated than the general public; is more likely to be female than male, and tends to be in older age cohorts. In a recent study of visitors of the Virginia “Heritage Triangle” of Jamestown-Williamsburg-Yorktown, survey measuring the correlation of demographic and travel behavior characteristics verified that most visitors had a high level of education and usually spent two to four days at the destination.³

CHALLENGES OF HERITAGE TOURISM

Promoting and managing heritage tourism sites bring inherent challenges, including:

- Cost of maintenance of historic structures;
- Potential degradation of the resources by large group use;
- Maintaining authenticity among historic structures, sites and landscapes under private-ownership;
- Providing visitor resources and amenities (restrooms, motor coach and automobile parking, ADA accessibility, roads and other transportation networks than do not intrude on resources or the visitor experience);
- Maintaining engaging programming and interest for repeat visitation for relatively static resources and exhibits.

² Silberberg, T. (1995). Cultural tourism and business opportunities for museums and heritage sites. *Tourism Management* magazine, 16 (5).

³ Huh, J. (2002). *Tourist Satisfaction with Cultural/Heritage Sites: The Virginia Historic Triangle* masters’ thesis at Virginia Polytechnic Institute and State University.

ANALYSIS OF FALMOUTH VILLAGE AS A CULTURAL HERITAGE TOURISM DESTINATION

As a first step in determining potential for enhancing Falmouth Village’s position as a cultural heritage tourism site, the Planning Team identified strengths, weaknesses, opportunities and threats (SWOT) to realizing such a market posture.

Strengths

- Falmouth Village is one of the most historic areas in Stafford County, with a National Register Historic District and structures individually-listed on the National Register of Historic Places.
- A recent archeological assessment and architectural survey confirmed that many existing structures are eligible for listing as a “contributing element” of the Falmouth Village Historic District.
- Historic Belmont and the Stafford Visitor Center provide an historic house and studio attraction, an orientation to the historic resources in the area, and ongoing arts programming.
- Recent discoveries at Ferry Farm, George Washington’s boyhood home, have increased interest in the area and links Stafford sites to other Washington-connected sites.
- Falmouth Village’s Civil War history attracts visitors and creates opportunities for events. It also links Falmouth Village to Civil War heritage visitors going to Fredericksburg, Chancellorsville and other nearby sites.
- Falmouth Village is relatively easily to reach from Interstate 95 (I-95) and from Jefferson Davis Highway (US-1) and Warrenton Road (US-17).

Weaknesses

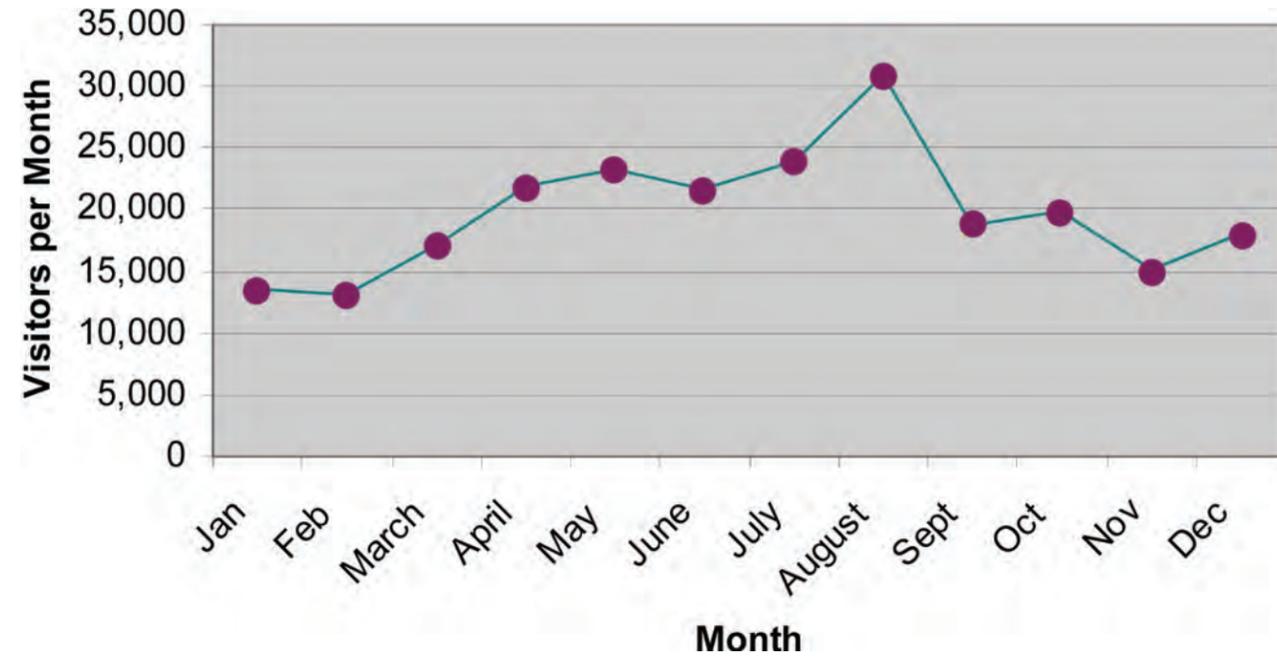
- The Warrenton Road (US-17) corridor from Southern Gateway to Falmouth Village is unattractive and does not reflect the historic resource or site.
- Many of the historic structures in Falmouth Village have been altered to a point where they are no longer eligible for listing as “contributing” to the historic district. This reduces the value of the village as a complete, authentic historic attraction.
- Most of the properties are in private ownership, so site development control is limited.
- Poor signage leading to Falmouth Village; better wayfinding needed.
- Visitation in Stafford County is relatively low in comparison to area attractions and events. Most sites are viewed as add-on visits to other area sites. It will be necessary to link Falmouth Village to other area sites and events in order to increase visitorship and increase length-of-stay.

Table 2: Stafford Venue-Specific Visitation, 2007

	Annual Visitors
Sites	153,352
Wineries	10,823
Golf	47,919
Festivals and Events	23,839
Other	1,778
	237,711

Source: Stafford County

Figure 4: Stafford County Monthly Venue-Specific Visitors, 2007



Source: Stafford County

Opportunities

- Visitor linkage opportunities from Ferry Farm linking to Mount Vernon or archeological interests; Civil War trail visitors to Fredericksburg, Chancellorsville, and other area battle sites; recreational uses on the river and trails network.
- Economic opportunities using federal and state historic rehabilitation tax credits for income-producing, eligible properties as a way to encourage higher preservation standards.
- Expansion of resident arts program connecting to Belmont using a model similar to conference and resident meeting programs in village setting (see Rugby, Tennessee case study).

Threats

- The proposed Falmouth Village intersection improvements at Jefferson Davis Highway (US-1) and Warrenton Road (US-17) have been identified as having the most intrusive impact upon historic resources and can potentially diminish the authentic visitor experience at the village site.
- Degradation of historic structures and landscapes through inappropriate alterations, deterioration due to natural aging or inappropriate changed uses.

FALMOUTH VILLAGE CULTURAL, HERITAGE AND RECREATION RESOURCE CONCEPT⁴

Research suggests that a critical mass of activities, resources and programming is needed in order to expand visitor numbers and enhance visitor experience satisfaction. A proposed Falmouth Village redevelopment program would feature a Cultural Arts-in-Residence program associated with Mary Washington University’s Gari Melchers Home and Studio at the Belmont Estate featuring historic guesthouses. The concept is based on an objective of increasing Stafford-based overnight stays to increase opportunities for tourist visitation at Falmouth Village and other Stafford sites, to take advantage of the excellent facilities at the Belmont Estate and to offer individual property owners and businesses to participate. Key components of the concept would include:

1. Development of an arts program for visitors staying in Falmouth Village and working with Mary Washington University’s Department of Art and Art History and its Studio Art program.
2. Rehabilitation of three-to-five small houses in Historic Falmouth Village as guest houses that could be rented to participants in the resident arts program, as well as other potential programs, business conferences and symposia that could use the facilities at Belmont, as well as visitors during special events such as Civil War reenactments and festivals.

The houses would ideally be owned and managed by a single entity, but could be individually owned by private interests but managed through a cooperative marketing agreement. In order for the guest houses to attain a minimum required occupancy, the cluster of properties should be marketed broadly and heavily programmed. Guests would patronize Falmouth Village restaurants, but would also be able to go into Fredericksburg for additional dining options. Coordination with Fredericksburg sites, businesses and marketing entities will be necessary to provide potential guests with a clear linkage between Falmouth Village and Fredericksburg.

3. Supportive infrastructure would include, but not be limited to:
 - a. A wayfinding signage system in Falmouth Village and along major corridors leading to the site (Jefferson Davis Highway (US-1) and Warrenton Road (US-17)).
 - b. Physical improvements (landscaping, screening and berms, billboard management & removal, etc.) along entry corridors.
 - c. Small business support programs and financial assistance (loans and grants) for Falmouth Village businesses while program and attendance are evolving. Such funds would need to be available for business start-up, physical improvements, and short-term operating support.

⁴ See Appendix I: Rugby Tennessee Heritage Tourism Case Study to compare to Falmouth Village Cultural, Heritage and Recreation Resource Concept.

REAL ESTATE MARKET & DEMAND

Because of its position as a historic asset, the potential for significant new real estate development in Falmouth Village is constrained, particularly in the historic area close to the river. The Planning Team performed a projection of supportable office and retail space, keeping in mind these constraints.

OFFICE DEMAND

Falmouth Village currently has approximately 5,000 square feet of office space, or 0.3% of County-wide office space. Based on County-wide office space demand based on employment projections from Woods and Poole, the area could support up to 8,000 square feet of additional office space. This is likely to be best placed either in new construction along Jefferson Davis Highway (US-1) or in existing structures in the historic area. (Refer to Table 3: *Falmouth Village Supportable Office Space, 2007–2020*.)

Table 3: Falmouth Village Supportable Office Space, 2007–2020

	Stafford County	Falmouth Village			
Total Inventory (SF)	1,674,518	4,879			
Share of Stafford County	100%	0.3%			
Employment-Based Demand	Avg Ann'l	2007-2012	2012-2015	2015-2020	
Stafford County	227,277	1,034,381	679,376	1,240,844	
Existing Share	0.3%	0.3%	0.3%	0.3%	
	662	3,014	1,979	3,615	

Source: Woods & Poole; CoStar Property Research; ERA AECOM, 2008.

RETAIL DEMAND

Currently, there are several retailers within Falmouth Village, including Amy's Café, Cockeye Cox's Crab Co., Blazes Hearth and Patio, and retailers in the Falmouth Shopping Center including the Schmidt's Bakery Thrift Shop, Napoleta Café, Chica's Market, and Koon's Auto Sales. The Planning Team estimates the area in total having approximately 20,000 square feet of retail space, with 10,000 of that in the shopping center. The Planning Team has examined the potential for additional retail square footage for Falmouth Village's primary focus as a destination location with restaurant and visitor attractions. Based on that retail strategy, using Stafford County as the residential trade area and looking at the spending of visitors already visiting Stafford cultural attractions, and an inflow (for example, for Fredericksburg residents or other visitors) of 5%, there is the potential for a total of between 11,000 and 14,000 square feet of this type of destination, visitor-oriented space. (Refer to Table 4: *Falmouth Village Supportable Retail Space, 2007–2012*.) This square footage could support one to two additional restaurants in addition to Amy's and one to two small boutiques/gift shops/galleries.

Table 4: Falmouth Village Supportable Retail Space, 2007–2012

2012	Total Potential Sales	Productivity		Square Feet	
		Low	High	Low	High
Shoppers Goods	\$1,035,157	\$207	\$259	4,000	5,000
Eating and Drinking	\$2,355,545	\$262	\$337	7,000	9,000
	\$3,390,702	\$242	\$308	11,000	14,000

Source: ESRI Business Analyst, 2007; ULI Dollars and Cents of Shopping Centers, 2007; ERA AECOM, 2008.

INFRASTRUCTURE & STORM WATER MANAGEMENT (SWM) ANALYSIS

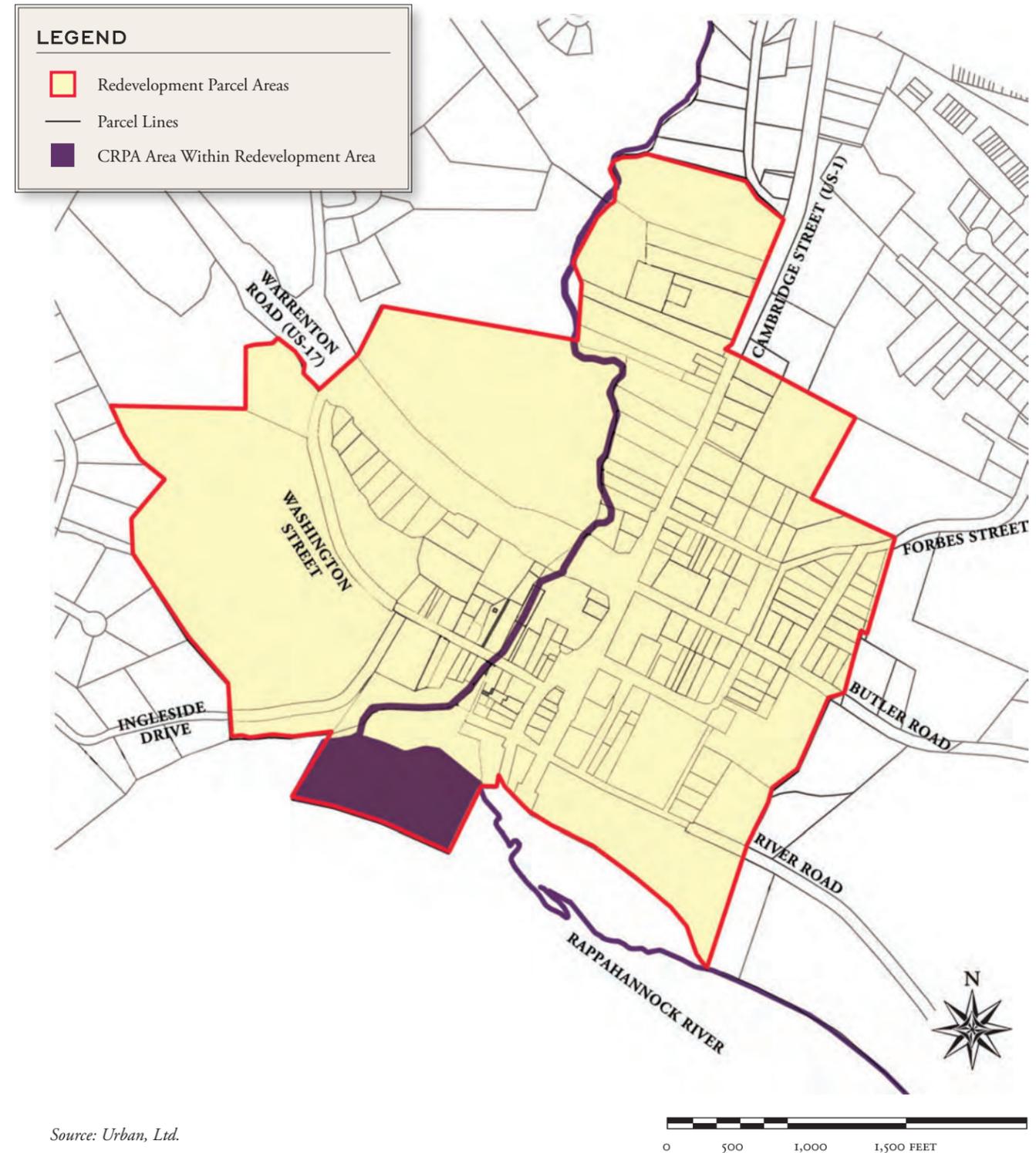
STORM WATER MANAGEMENT (SWM) ANALYSIS

The Rappahannock River represents a significant drainage way within the redevelopment area. This point in the river lies at the foot of the falls area and represents the limits that commercial boats could historically navigate. At this terminus, Falmouth Village thrived as a shipping center. Many of the older buildings from these days have since been destroyed from flooding in this area. Accordingly, 100-year floodplain areas present the single biggest challenge in this planning area.

By our estimate, almost 50% of the parcels within the redevelopment area are covered within floodplain limits established by both Stafford County and the Federal Emergency Management Agency (FEMA). The 100-year floodplain areas are concentrated along the southern parcels adjacent to the Rappahannock as well as the central core of the parcel areas where Falls Run besets the redevelopment area. As such, development throughout the region will be deeply limited. Redevelopment within the 100-year floodplain should be limited to those uses and improvements permitted in Stafford County Ordinances as well as the Chesapeake Bay Protection Ordinance. Suggestions include adaptive reuse of existing structures within the 100-year floodplain area. (Refer to Map 3: Falmouth Village FEMA 100-Year Floodplain Limit.)

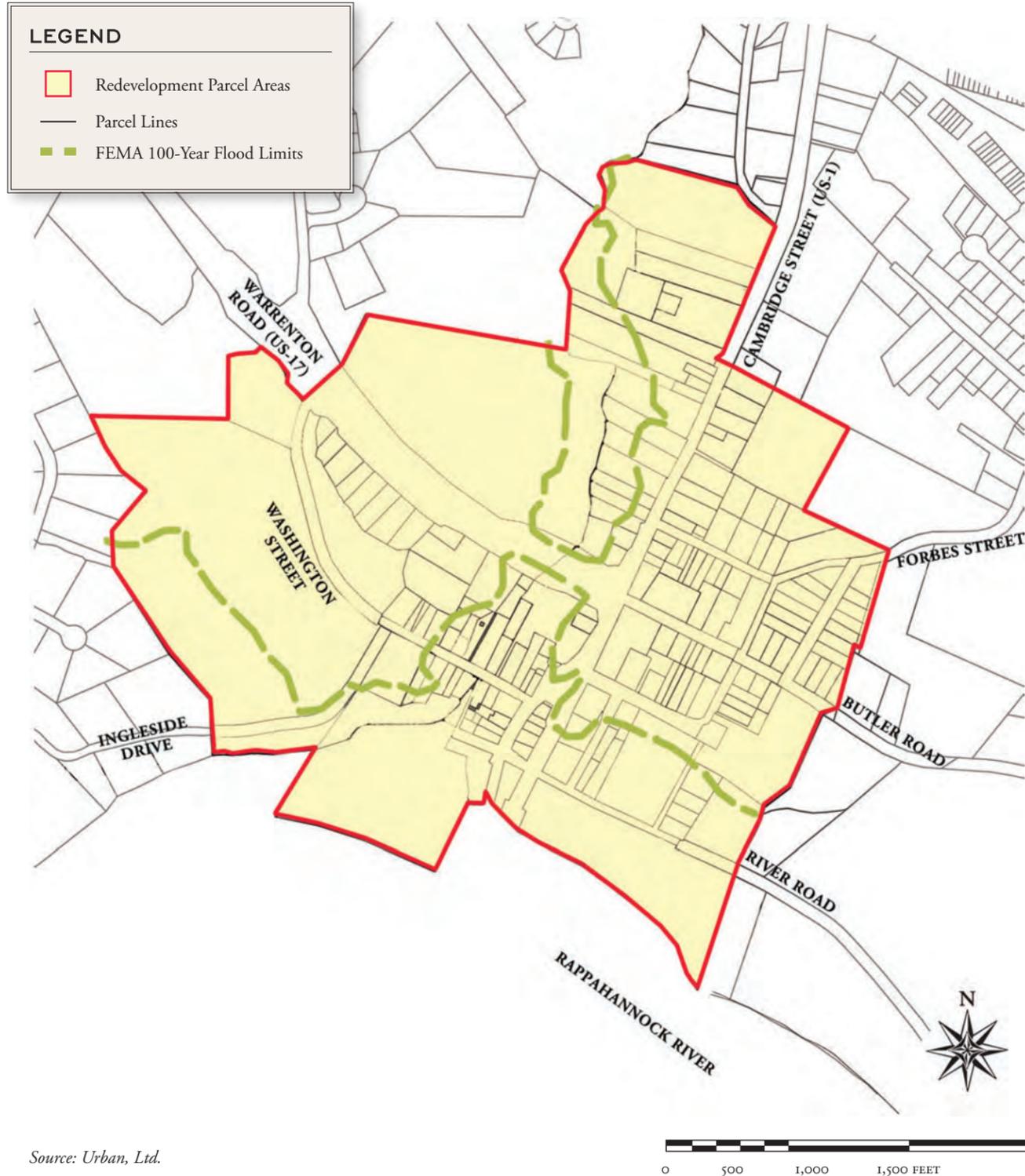
Stafford County has significant mapped CRPA's in the southern portions that negatively affect potential redevelopment. The CRPA extends landward for 100-feet from any tidal or non-tidal wetlands or water bodies with perennial flow. Within the CRPA, limited development can take place. Per Zoning Ordinance Section 28-62(f) (1)(e), SWM facilities are allowed uses within CRPA's, though there are significant limitations. (Refer to Map 2: Falmouth Village Critical Resource Protection Areas (CRPAs).)

Map 2: Falmouth Village Critical Resource Protection Areas (CRPAs)



Source: Urban, Ltd.

Map 3: Falmouth Village FEMA 100-Year Floodplain Limit



Source: Urban, Ltd.

Existing Impervious Analysis

Falmouth Village consists of parcels primarily zoned R-1 (Suburban Residential) and B-2 (Urban Commercial) with a few scattered instances of B-1 (Convenience Commercial), B-3 (Office), and A-1 (Agricultural). (Refer to Table 5: Falmouth Village Existing Impervious Analysis.)

Table 5: Falmouth Village Existing Impervious Analysis

EXISTING USE	ACRES	% IMPERVIOUS	IMPERVIOUS AREA
Agricultural	34.2	15	5.13
Convenience Commercial	0.4	90	0.36
Office	63.2	90	0.36
Suburban Residential	63.2	35	22.12
Urban Commercial	22.6	90	20.34
Subtotal	120.8		
Road Right-of-Way	17.2	95	16.34
Total	138.0		64.65

Based on the land uses above, the maximum existing impervious area within the redevelopment assuming full development and utilization of the land area is about 47%. A review of Stafford County’s Land Use Map for this area, as well as aerial images of the area, indicates that the proportion of agricultural, recreation, and undeveloped uses is significant within Falmouth Village. Therefore, the existing impervious area calculated above represents a higher than actual quantity. Taking this into consideration, the Planning Team believes a more appropriate figure for the amount of existing impervious area within the redevelopment area is approximately 39%.

Regional SWM Opportunities

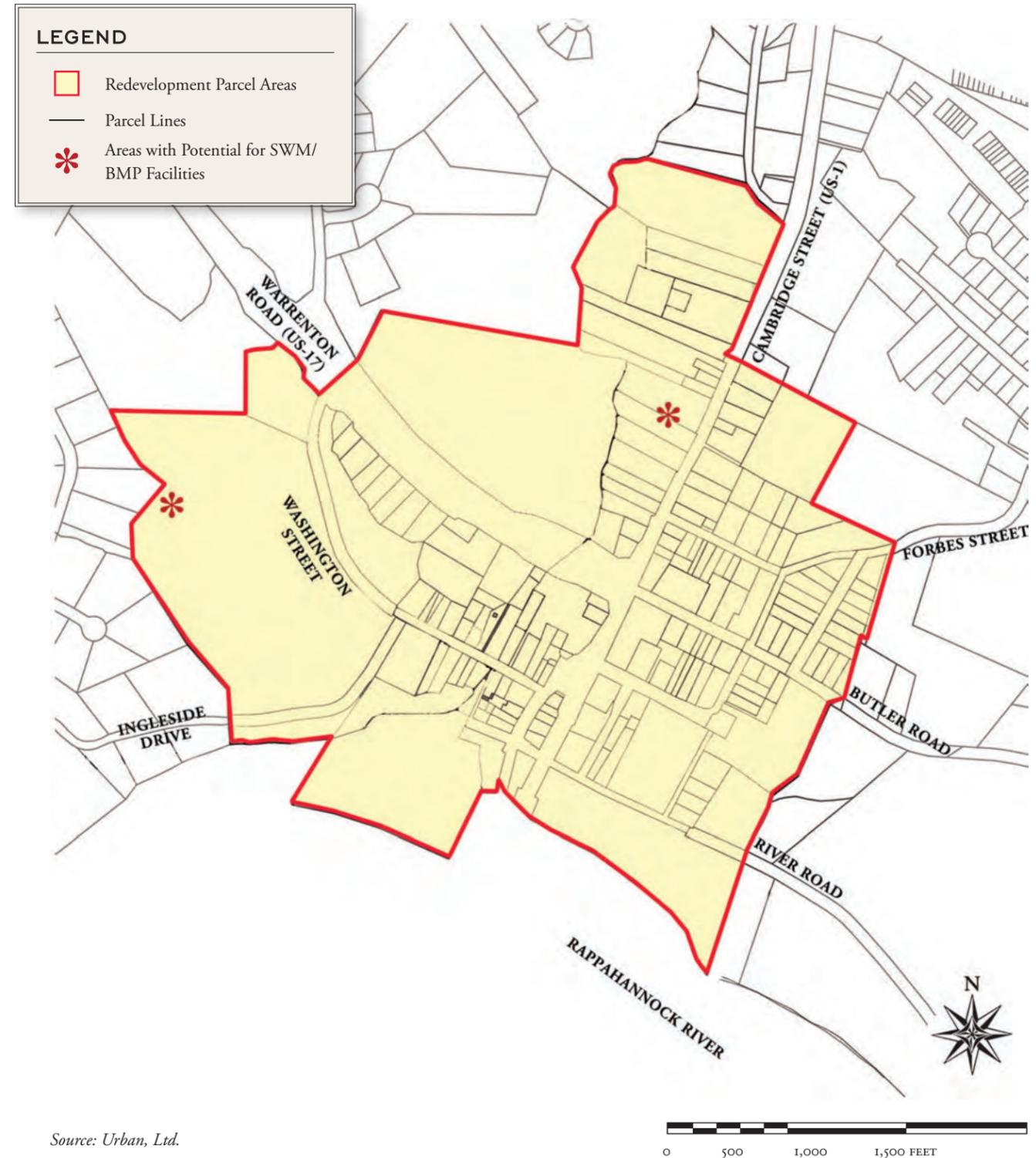
Given the floodplain and CRPA encumbrances within the planning sector, as well as steep topography in some of the undeveloped areas, we anticipate that added impervious area from parcel development will be kept to a minimum. Most likely, any increases in impervious area will come from road improvements at the Jefferson Davis Highway (US-1) and Warrenton Road (US-17) intersection. The tight network of streets also breaks this area up into smaller planning blocks.

Given this information, the Planning Team expects few opportunities to incorporate regional SWM facilities within the redevelopment area. The SWM map shows a few places where this approach could work, however redevelopment should focus instead on providing additional water quality measures with each development plan. The area presently has very few, if any, water quality treatment measures. The addition of these measures as development occurs will help reduce the chemical and sediment runoff to the Rappahannock River. Within the 100-year floodplain area, we would expect to see structural type measures, such as underground filter chambers or at grade water quality inlets instead of ponds and larger bio-retention areas due to the spatial constraints of the block network created by the existing street grid.

While it may prove difficult for any individual property owner to implement a regional SWM facility due to timing and cooperation of adjacent developers whose land would drain to a proposed facility, it is in Stafford County’s interest to help facilitate this approach. Stafford County may establish a mechanism by which Stafford County can implement a regional approach to SWM. Other jurisdictions have instituted a “pro-rata share” fee which is paid by the land owners or developers for increases in impervious area within a watershed. The proceeds would be used to construct new SWM facilities in the watershed or improvements along the tributary. Another option is for Stafford County to create incentives, reimbursements and/or additional concessions to land owners who elect to implement a regional storm water management design which takes into consideration the future development potential of the upstream drainage area.

The Planning Team has included a map (refer to Map 4: Falmouth Village Potential SWM/BMP Facilities) with suggested locations where regional SWM measures may make sense. Both locations are on the west side of Cambridge Street (US-1). These locations have been selected based on their ability to serve several development parcels as well as their proximity to the major drainage ways. The one north of Warrenton Road (US-17) has the best potential and could be designed to be a significant amenity to consolidated development in this area.

Map 4: Falmouth Village Potential SWM/BMP Facilities



Source: Urban, Ltd.

WATER/SEWER ANALYSIS

Existing Water Service

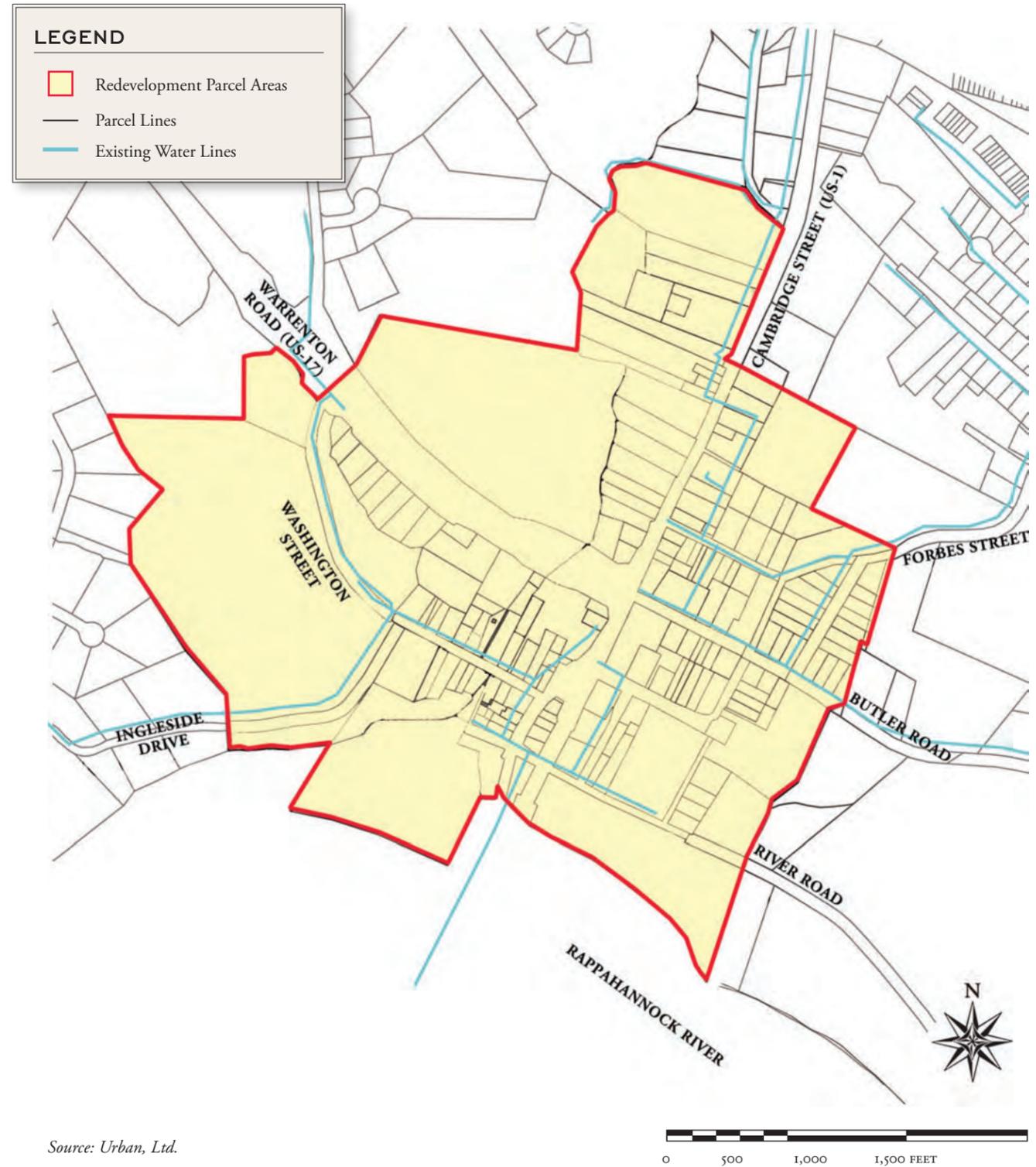
According to the Stafford County water model, the majority of Falmouth Village is served with public water. The existing lines are either 6" diameter or 8" diameter lines and the area lies within the 342 pressure zone. The existing water facilities are shown on the provided water map. (Refer to Map 5: Falmouth Village Existing Water Facilities.)

Existing Sewer Service

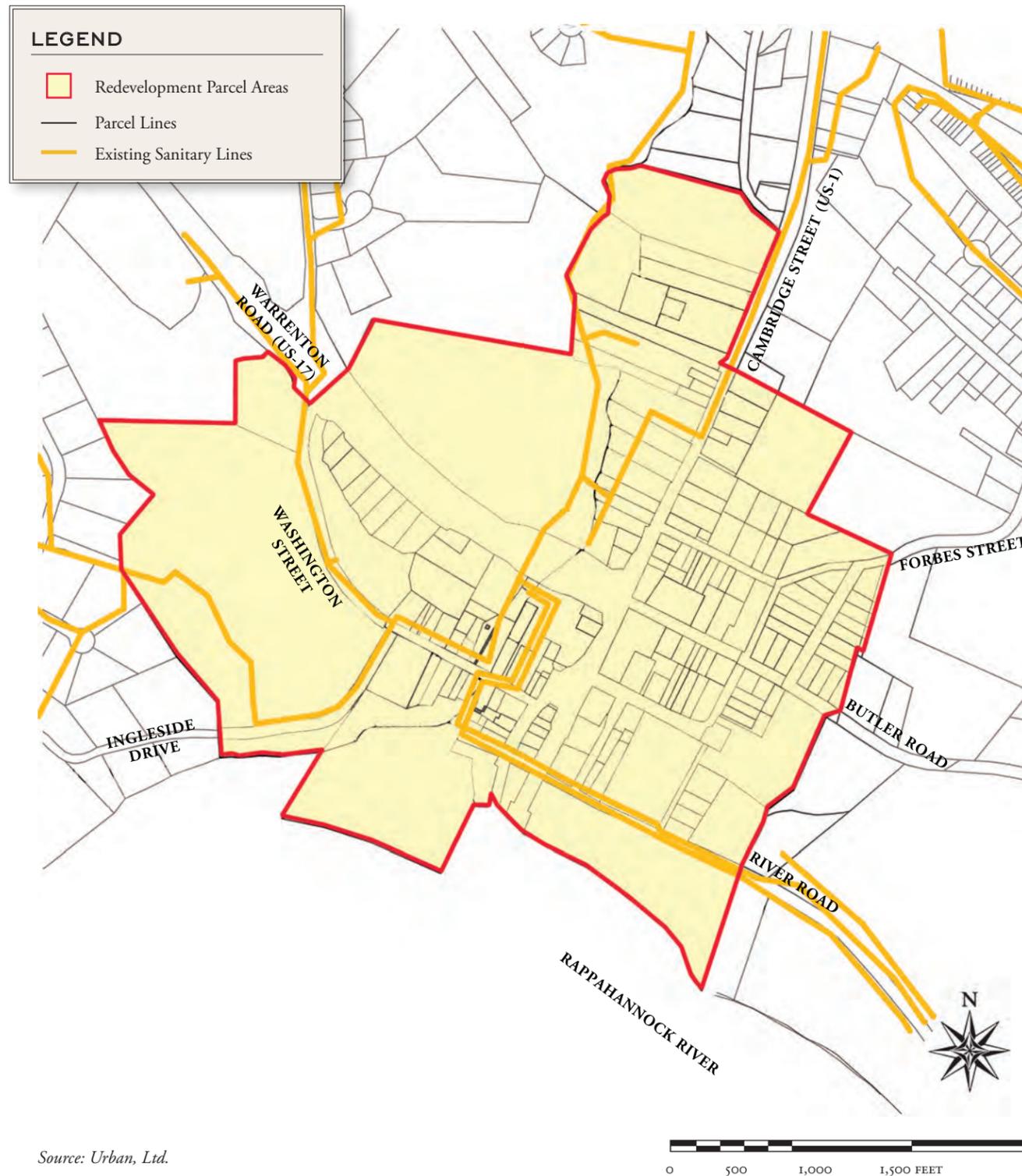
According to the Stafford County sewer model, the majority of Falmouth Village is served with public sewer. There is an existing 16" force main which carries sewage flows from this sector to the Little Falls Run Waster Water Treatment Plan. There is also a major 18" sanitary sewer interceptor along Falls Run through this area. Reference the provided sewer map which shows the existing sewer facilities.

There is an existing 10" gravity main which is over capacity where the 6" force main from Ingleside joins the flow coming down Washington Street (VA-1001). There are also several 18" pipes along the rear of the parcels which front on Cambridge Street (US-1) which are operating at capacity. This is addressed with CIP improvements later in this section. In general, the existing sewer service is absent within the blocks along the eastern side of the redevelopment area. (refer to Map 6: Falmouth Village Existing Sewer Facilities.)

Map 5: Falmouth Village Existing Water Facilities



Map 6: Falmouth Village Existing Sewer Facilities



Source: Urban, Ltd.

COMPREHENSIVE PLAN ELEMENTS

Chesapeake Bay Preservation Area (CBPA) Plan

The CBPA Plan has significant impact within Falmouth Village. Of the plan elements, the most important limiting characteristics are the floodplain areas around the Rappahannock, the floodplain areas around the tributary that bisects Falmouth Village, and the poor nature of the existing soils. Because any potential redevelopment is concentrated so close to the Rappahannock River, erosion, pollution and shoreline protection are major concerns. There is an opportunity within Falmouth Village development to increase the public access to the Rappahannock River, which is recommended with the CBPA Plan. Access type should be dependent on the typical conditions of the Rappahannock along the parcels within Falmouth Village. Only passive recreation areas, stormwater management areas, marinas, piers, and open space are accepted along the shoreline within the CBPA Plan. To an extent, some of this is already in place given the recreational uses at Falmouth Beach Park and the open space associated with Belmont Plantation.

Capital Improvement Program (CIP)

There are no SWM improvements indicated for Falmouth Village within the CIP.

Stafford County's CIP calls for both water and sewer improvements in this area. A new 20" water main will be built in Warrenton Road (US-17)/Butler Road (VA-218). This improvement has not been built yet and is programmed for year 2020. Future improvements also include new 18" water mains along Butler Road (VA-218) from Carter Street to Deacon Road. This improvement was programmed for year 2007, however it has not been completed and put in the present day water model yet. A new 16" main running from Butler Road (VA-218) up Forbes Street (VA-627). The 16" water main improvements are scheduled for year 2020.

Master Plan sewer improvements include replacing the existing 16" force main with a recommend new 30" force main in King Street/River Road (VA-607). This improvement is programmed for construction in 2011. Anticipated for year 2018 is an upgrade to the Falls Run Pumping Station to take it from 9.4 mgd to 15.5 mgd. The redevelopment within Falmouth Village is expected to have much less impact to the Falls Run Pumping Station than potential development along England Run, Westlake, and along Potomac Creek west of the redevelopment area.

With respect to gravity mains, the existing 18" line along Falls Run is scheduled to be replaced with a new 36" gravity sewer in 2015. This present 18" line is operating at roughly 60% of capacity under near term (2010) conditions. The improvements are coordinated to tie-in and work with the existing pump stations in this area. These improvements will attempt to ensure that sewer service is available for redeveloped parcels.

The Planning Team notes that alignments of these infrastructure items may need to be flexible to work with potential future redevelopment as well as the eventual construction of the Warrenton Road (US-17)/Cambridge Street (US-1) interchange. Ideally, the infrastructure items, which could include the relocation of the Falls Run Pumping Station if necessary, would be placed as close as possible to the Rappahannock River so that they are out of the way of development and the interchange.

Falmouth Plan

The Falmouth Plan is specifically recognized within the Comprehensive Plan. The Falmouth Plan intends to restore the historic character to Falmouth Village through redevelopment. The primary goals within the Falmouth Plan include improving transportation networks as well as pedestrian flow, parking availability, and streetscape improvements. Of particular concern is the transportation concern associated with the intersection of Cambridge Street (US-1) and Warrenton Road (US-17)/Butler Road (VA-218), which effectively splits the area into four sectors. Historic guidelines have been implemented for the area, which creates an overlay district that limits some flexibility of redevelopment options. The Falmouth Plan also encourages recreational waterfront development. Each of these components of the Falmouth Plan will be considered within any redevelopment measures of Falmouth Village.

Groundwater

Redevelopment within Falmouth Village, would pose minor effects to Groundwater within Stafford County. Throughout Stafford County, there is significantly more groundwater supply than demand. Although well usage continues to increase annually throughout Stafford County, this increase will not, as a whole, affect groundwater supplies. Due to unique geographical characteristics, certain small areas may experience a lack of groundwater during periods of heavy drought.

Falmouth Village is situated along the edge of the Coastal Plain Aquifer system, and the Fall Line, which rises up to the Piedmont Area. Large increases in impervious areas associated with development, would decrease the ability of the groundwater to recharge wells in the area, but any Falmouth Village redevelopment should correspond to a reduction in well use in the area, which is not prevalent in the area. Given the restrictions within the CRPA concerning increases in impervious area, a reduction in groundwater is not a prime concern within this redevelopment area.

More importantly, groundwater contamination from hazardous material surface spills is a valid concern within this area given its proximity to the Rappahannock River. Falmouth Village is located along the Fall Line. Groundwater along the Fall Line is recharged, and any hazardous material spills are likely to spread contamination in this geologic zone. Specific uses and prevention measures should be considered for new business categories associated with Falmouth Village which have the potential to handle hazardous materials. Another suggestion is to designate certain uses within the redevelopment area as “hot spots” – those types of uses which pose a more serious effect to the groundwater system – and requiring these uses to follow the Virginia Stormwater Management Permit (VSMP) process even if they fall under the thresholds established by the State Department of Conservation and Recreation (DCR).

Shoreline

The Shoreline Plan is very much applicable to Falmouth Village given northern shoreline of the Rappahannock River lies within the redevelopment area. It is one of the few locations listed within the shoreline preservation plan that is shown to not have environmental resources to be protected and to also have potentially developable areas. However, development within the area could potentially lead to adverse impacts on water quality and the Chesapeake Bay. Redevelopment plans and in-fill development such as that of Falmouth Village generally require less resource usage for urban populations and less cost per capita for restoration efforts. Care shall be taken to recognize the critical nature of the riverbank area and to utilize sensitive development. Buffers should be considered with minimal direct development intrusion into the shoreline. Within the immediate vicinity of the shoreline, only passive recreation areas, stormwater management areas, marinas, piers, and open space should be considered.

Stormwater

Falmouth Village falls outside of the five stormwater watersheds studied within the Stafford Stormwater Management Plan. However, smaller stormwater quantity (as well as quality) management facilities and measures can still be effective and should be considered with any new development within the area. The CBPA as enabled with Section 28-62 of the Stafford County Zoning Ordinance requires a 10% reduction in nonpoint source pollution from redevelopment; reduction shall be based on the existing pollutant levels. The pollution calculation comes from the State Storm Water Management Handbook and is often referred to as removal of total phosphorus from runoff. Given Falmouth Village’s very close proximity to the banks of the Rappahannock River and the perceived lack of regional SWM opportunities, the Planning Team recommends that redevelopment parcels provide an even greater reduction on the order of 20-40%.

The best locations for SWM facilities, as discussed above, are along the west side of the Cambridge Street Bridge north of Warrenton Road (US-17) and south of Warrenton Road (US-17)/Washington Street (VA-1001) along the western side of the redevelopment area. Any SWM facilities should be kept outside of the 100-year floodplain for maximum effectiveness. Small to medium sized facilities can likely be located in these areas. Larger facilities will be more problematic to incorporate into smaller parcels or in areas of flat topography near the river banks. The closer the location of any SWM facilities to the river the more likely the facility would be overtopped or eroded during a 100-year storm event.

Water Supply Plan

The Water Supply Plan focuses primarily on the characteristics of the existing water sources throughout Stafford County and the costs and concerns associated with delivering it for human consumption. In the case of Falmouth Village, water supply is projected to be supplied via water mains from the Stafford reservoirs. Therefore, while the Water Supply Plan is integral for reservoir planning, construction, and expansion, it is not directly significant to Falmouth Village, which assumes that the water is readily available, based on the approved reservoir recommendations. Certain aspects of the plan, however, should be considered. If the water supply characteristics of the source reservoirs change, then that could affect water availability to Falmouth Village.

TRANSPORTATION & TRAFFIC ANALYSIS

EXISTING ROADWAY NETWORK

The following are descriptions of each of the existing major roadways (collector streets or higher classification) located in Falmouth Village. Map 7 (*Falmouth Village Existing Road Network*) depicts the existing roadway network within this redevelopment area. Photographs of typical sections within the area are included in Volume IX (*Stafford County Traffic Data*).

Cambridge Street (US-1)

Cambridge Street (US-1) is a principal arterial that runs north-south within Falmouth Village redevelopment. The roadway is currently designed as a four-lane, undivided, curb and gutter, cross section with a posted speed limit of 35 miles per hour (mph). For much of its length through the area, Cambridge Street (US-1) is characterized by narrow sidewalks running directly along Cambridge Street (US-1).

Warrenton Road (US-17 Business)

Warrenton Road (US-17) functions as a four-lane, divided, principal arterial. The roadway carries a posted speed limit of 45 mph and generally runs in the east-west direction. Within Falmouth Village, Warrenton Road (US-17) intersects Jefferson Davis Highway (US-1) under signal control.

Butler Road (VA-218)

Butler Road (VA-218) is a two-lane, undivided, minor arterial that provides a connection from Falmouth Village to King George County to the east. Butler Road (VA-218) carries a posted speed limit of 35 mph within the redevelopment area.

Forbes Street (VA-627)

Forbes Street (VA-627) is a two-lane, undivided, collector street that extends east from Jefferson Davis Highway (US-1) to provide access to Morton Road. Forbes Street (VA-627) carries a posted speed limit of 25 mph. The intersection of Forbes Street (VA-627) at Jefferson Davis Highway (US-1) operates under Stop Sign control.

Truslow Road (VA-652)

Truslow Road (VA-652) is a two-lane, undivided, collector street that extends west from Jefferson Davis Highway (US-1) to provide access to properties west of Interstate 95 (I-95). Truslow Road (VA-652) carries a posted speed limit of 35 mph. The intersection of Truslow Road (VA-652) at Jefferson Davis Highway (US-1) operates under Stop Sign control.

Washington Street (VA-1001)

Washington Street (VA-1001) is a two-lane, undivided, roadway which functions as a collector street and carries a posted speed limit of 30 mph. Washington Street (VA-1001) runs south and east from Warrenton Road (US-17) to West Cambridge Street (VA-607).

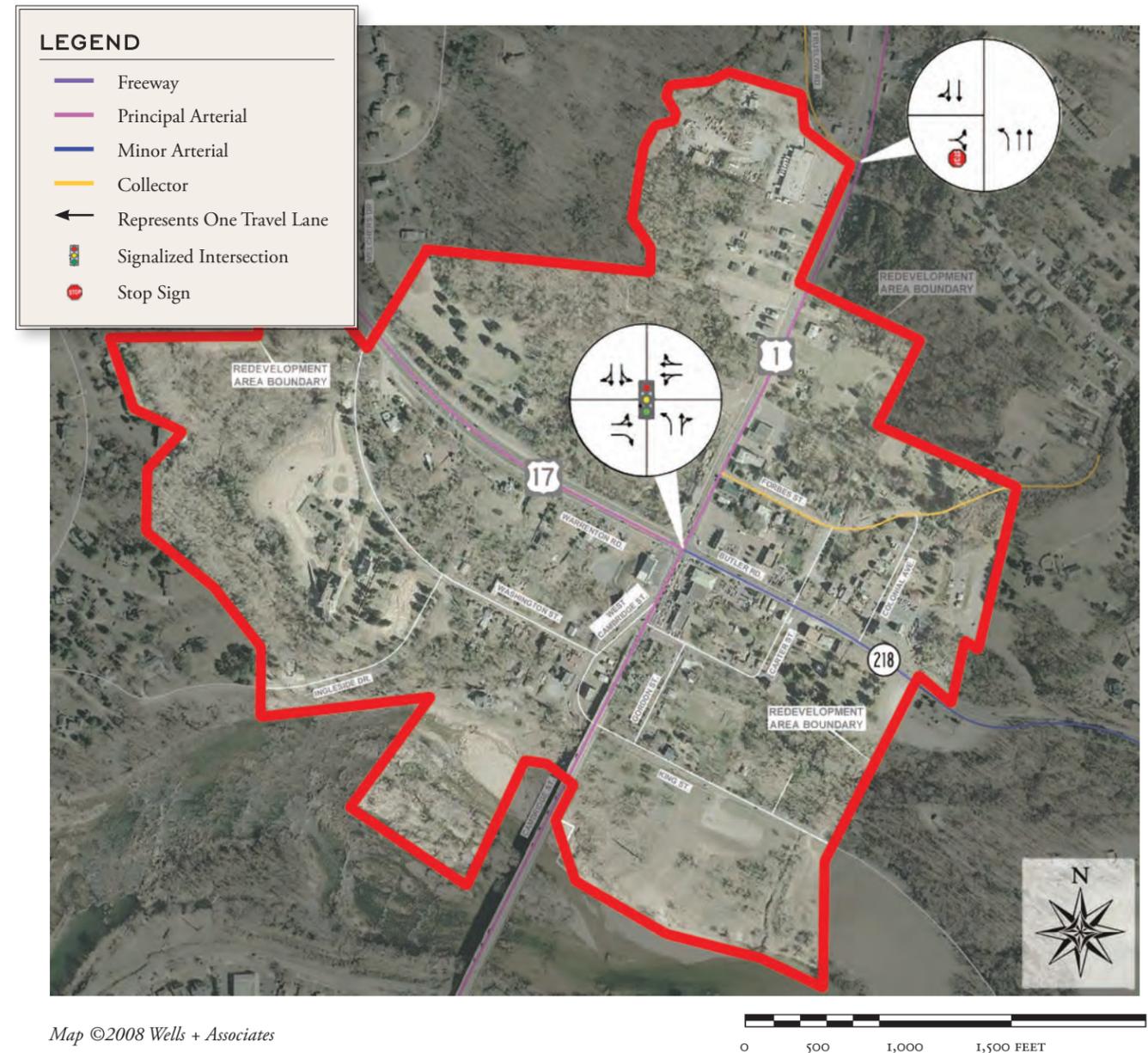
West Cambridge Street (VA-607)

West Cambridge Street (VA-607) is a two-lane, undivided, roadway which functions as a collector within the Falmouth redevelopment area and carries a posted speed limit of 25 mph. West Cambridge Street (VA-607) runs south from Cambridge Street (US-1) to King Street/River Road (VA-607) (VA-607) and provides vehicular access to the Rappahannock waterfront.

King Street/River Road (VA-607)

King Street/River Road (VA-607) is a two-lane, undivided, roadway which functions as a collector street within the Falmouth redevelopment area. King Street/River Road (VA-607) runs east from West Cambridge Street (VA-607) to the Kings Highway (VA-3 Business) and carries a posted speed limit of 35 mph.

Map 7: Falmouth Village Existing Road Network



Map ©2008 Wells + Associates

EXISTING TRANSIT SERVICES

Fredericksburg Regional Transit (FRED) provides three bus routes that run through Falmouth Village. The D1 “Southern Stafford County” bus route provides access from the Fredericksburg train station to Old Forge Shopping Center to west of Falmouth Village. The D2 “Southern Stafford County” bus route runs from FRED Central (City of Fredericksburg) to Southern Gateway. The D5 “Stafford County” bus route provides service from FRED Central to the Stafford County Courthouse. It should be noted that no bus stops were observed within Falmouth Village.

CURRENT PLANNED NETWORK

The current Stafford County Transportation Plan (June 7, 2005) makes certain recommendations for the roadways within Falmouth Village. A copy of the Transportation Plan is provided in Volume IX (*Stafford County Traffic Data*). These recommendations are summarized as follows:

- Upgrade Jefferson Davis Highway (US-1) to a six-lane, divided, facility
- Upgrade Forbes Street (VA-627) to a standard two-lane facility.
- Upgrade Truslow Road (VA-652) to a standard two-lane facility.
- Upgrade Butler Road (VA-218) to a four-lane, undivided, facility between Jefferson Davis Highway (US-1) and Chatham Heights Road.

FAMPO Constrained Long Range Plan (CLRP)

FAMPO’s 2030 CLRP includes the following recommendations for improvements in Falmouth Village:

- Construct a grade-separated interchange at Jefferson Davis Highway (US-1), Warrenton Road (US-17) and Butler Road (VA-218).
- Replace the Jefferson Davis Highway (US-1)/Falmouth Bridge across the Rappahannock River with a six-lane structure.
- Upgrade Butler Road (VA-218) to a four-lane facility.

VDOT State Highway Plan

VDOT’s 2025 State Highway Plan provides the following recommendations for Falmouth Village

- Upgrade Jefferson Davis Highway (US-1) to a six-lane, divided, facility
- Upgrade Butler Road (VA-218) to a four-lane, divided, facility.
- Upgrade Truslow Road (VA-652) to a standard two-lane facility.

Belmont-Ferry Farm Trail Project

This trail, which is planned to run along the Rappahannock River, will ultimately connect three historic landmarks within and proximate to the Falmouth Village area: Belmont, Chatham, and Ferry Farm.

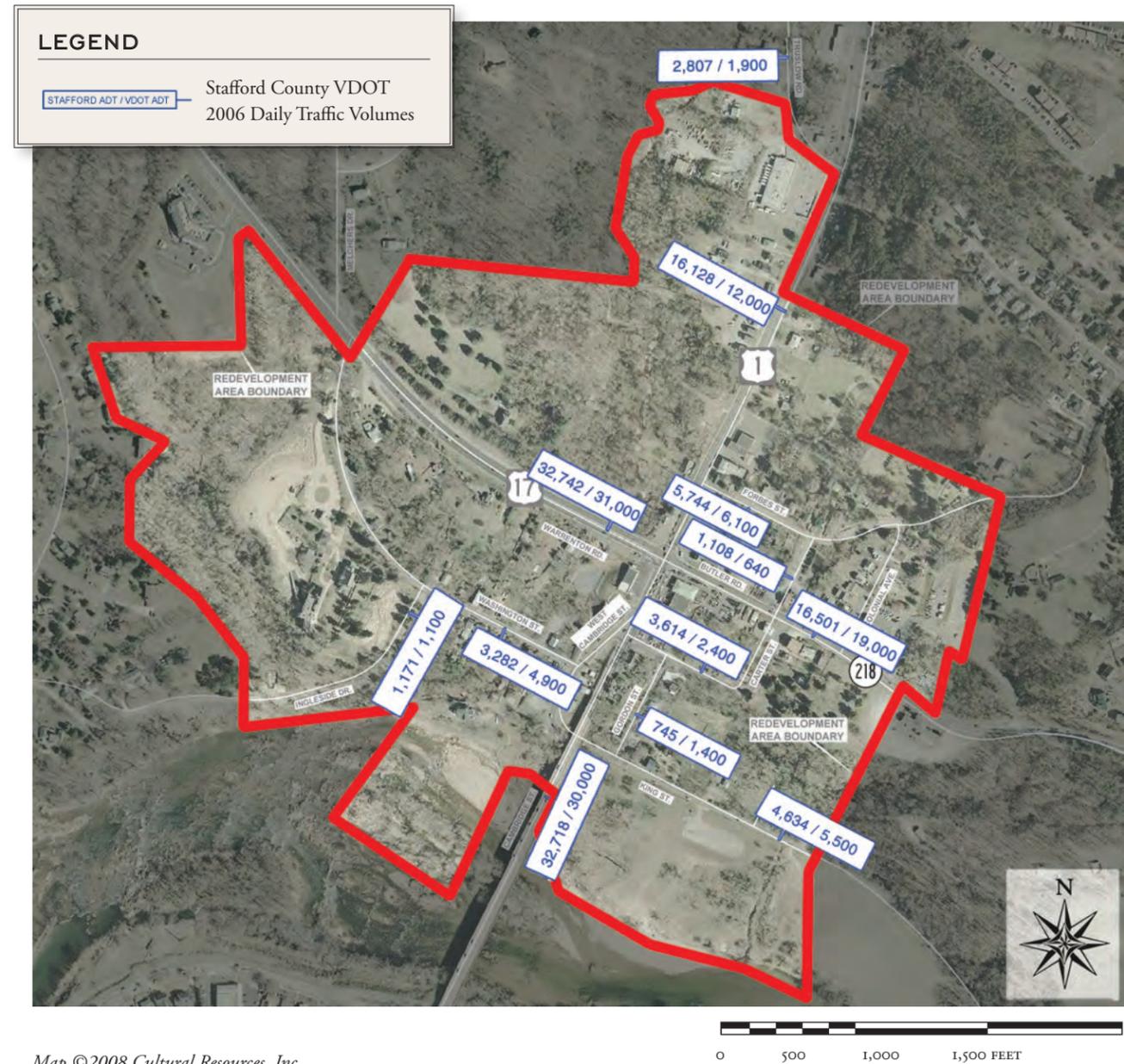
EXISTING TRAFFIC VOLUMES

Baseline traffic volumes for select roadways within Falmouth Village were collected and are summarized on Map 8 (*Falmouth Village Existing Average Daily Traffic Volumes*) and Map 9 (*Falmouth Village Peak Hour Traffic Turning Volumes*). Daily traffic volumes are provided based on both Stafford County baseline 2006 data and VDOT 2006 traffic counts. Average daily traffic volumes within the area range up to 4,436 on local streets,

from 2,807 to 5,744 on collector streets, up to 16,501 on minor arterials and from 16,128 to 32,742 on principal arterials. It should be noted that in certain cases Stafford County and VDOT volumes differ. These discrepancies are likely a result of counts being conducted independently on different dates and/or VDOT applying factors for older volume data on certain roadway links.⁵

The peak hour traffic turning volumes are summarized on Map 9 (*Falmouth Village Peak Hour Traffic Turning Volumes*). Copies of the count data are included in Volume IX (*Stafford County Traffic Data*).

Map 8: Falmouth Village Existing Average Daily Traffic Volumes



Map ©2008 Cultural Resources, Inc.

⁵ Additional peak hour turning movement counts at key intersections within the study area were obtained from Counts conducted by Wells + Associates, Inc. on Tuesday, September 23, 2008.

Table 6: Falmouth Village Typical Link Level of Service Threshold Values⁷

	LOS "A"	LOS "B"	LOS "C"	LOS "D"	LOS "E"
V/C	0.3	0.5	0.66	0.79	1.0
2 LANE	11,400	19,000	25,080	30,020	38,000
4 LANE	22,800	38,000	50,160	60,040	76,000
6 LANE	34,200	57,000	75,240	90,060	114,000
	Limits	ADT	Lanes	V/C	LOS
Jefferson Davis Highway (US-1)	North of Warrenton Road (US-17)	16,128	4	0.21	A
Jefferson Davis Highway (US-1)	South of Warrenton Road (US-17)	32,718	4	0.43	B
Warrenton Road (US-17)	West of Jefferson Davis Highway (US-1)	32,742	4	0.43	B
Butler Road (VA-218)	East of Jefferson Davis Highway (US-1)	16,500	2	0.43	B
Forbes Street (VA-627)	East of Jefferson Davis Highway (US-1)	5,744	2	0.15	A

Source: Highway Capacity Manual 2000

Table 7: Falmouth Village Existing Capacity Analysis Summary^{8 9 10}

Intersection	Traffic Control	Lane Group	Existing Levels of Service		Existing V/C Ratios	
			Weekday		Weekday	
			AM	PM	AM	PM
1. Route 1 (Cambridge Street)/ Truslow Road	Stop	EBLR NBL	C [15.3]	C [19.3]	0.32	0.40
			A [8.7]	A [9.8]	0.12	0.19
2. Route 1 (Cambridge Street)/ Route 17 BUS (Warrenton Road)/ Butler Road	Signal	EBLT	F (85.0)	F (167.3)	0.90	1.16
		EBR	D (35.7)	F (97.4)	0.70	1.06
		WBLTR	F (192.0)	F (159.1)	1.27	1.17
		NBL	F (96.6)	F (131.3)	1.00	1.09
		NBTR	E (78.7)	F (171.3)	0.93	1.20
		SBLTR	E (64.7)	E (78.2)	0.81	0.94
	Overall	F (100.9)	F (127.7)	1.00	1.11	

⁷ "Link" refers to Roadway Lanes, not intersections nor interchanges. Refer to Table 7: Falmouth Village Existing Capacity Analysis Summary for Levels of Service at intersections & interchanges.

⁸ Analysis performed using Synchro software, Version 7.

⁹ Values in parentheses, (), represent signalized delay in seconds.

¹⁰ Values in brackets, [], represent unsignalized delay in seconds.

TRAFFIC CONTROL SYSTEMS

Within Falmouth Village, the majority of intersections operate under Stop Sign control. A total of one intersection is controlled by a signal. All approaches at the Jefferson Davis Highway (US-1)/Warrenton Road (US-17)/Butler Road (VA-218) intersection operate with split signal phasing (i.e., only one approach receives a green indication at a time) which increases delay, inhibits mainline progression, and is generally an inefficient means to process intersection traffic.

The signalized intersection does not provide for pedestrian countdown heads or crosswalks on all approaches.

ACCIDENTS & SAFETY

Accident data were obtained from the Virginia Department of Transportation (VDOT) for the period between January 1, 2003 and December 31, 2007. The data is shown on Table 8 (Falmouth Village Accident Analysis: Expected Values). A copy of the accident summaries as provided by VDOT is included in Volume IX (Stafford County Traffic Data).

The total number of accidents per type at each of the study intersections for the five-year study period is provided. A determination of "expected values" for each accident type and each location was then calculated and compared to VDOT statewide expected values. Those locations exceeding VDOT's "90th percentile and 95th percentile high" values would be considered abnormally high and may require further study by VDOT and/or Stafford County.

As shown in Table 8 (Falmouth Village Accident Analysis: Expected Values), all three studied intersection experience types of crashes higher than the expected value. However, the study intersections were below the 90th percentile "crash" limits with the exception of the Jefferson Davis Highway (US-1) and Forbes Street (VA-627) intersection. This intersection experienced one head on collision during the study period, or 0.20 accidents per year. This is approximately 54% higher than the 0.13 incidents per year anticipated as being the 90th percentile limit at similar locations. In addition, the Jefferson Davis Highway (US-1) and Forbes Street (VA-627) intersection experienced four for sideswipe collisions in the same direction during the study period, or 0.80 accidents per year. This is approximately 31% higher than the 0.61 incidents per year anticipated as being the 90th percentile limit at similar locations. Based on the current characteristics of this intersection, further analysis and study is recommended, including a review of detailed accident reports.

Table 8: Falmouth Village Accident Analysis: Expected Values^{11 12}

January 1, 2003 – December 31, 2007

Intersection	Legs	ADT	Control	Years Studied
Cambridge Street (US-1) at Truslow Road (VA-652)	3	10,000 to 20,000	Unsignalized	5
Cambridge Street (US-1) at Forbes Street (VA-627)	3	10,000 to 20,000	Unsignalized	5
Cambridge Street (US-1) at Warrenton Road (US-17) and Butler Road (VA-218)	4	> 20,000	Signalized	5

Cambridge Street (US-1) at Truslow Road (VA-652)

	Collision Type						
	Rear End	Angle	Head On	Sideswipe Same Direction	Sideswipe Opposite Direction	Pedestrian	Fixed Object
At intersection	2	4	0	0	0	0	3
Acc/Year	0.40	0.80	0.00	0.00	0.00	0.00	0.60
Expected Val	0.49	0.78	0.01	0.17	0.03	0.01	0.50
90%ile high	1.63	2.73	0.13	0.61	0.30	0.11	1.43
95%ile high	1.85	3.11	0.15	0.69	0.35	0.13	1.61

	Collision Severity		
	Property Damage Only	Injury	Fatal
At intersection	6	3	0
Acc/Year	1.2	0.6	0
Expected Val	1.18	0.92	0.03
90%ile high	3.29	2.6	0.26
95%ile high	3.71	2.93	0.3

Cambridge Street (US-1) at Forbes Street (VA-627)

	Collision Type						
	Rear End	Angle	Head On	Sideswipe Same Direction	Sideswipe Opposite Direction	Pedestrian	Fixed Object
At intersection	7	6	1	4	0	0	4
Acc/Year	1.40	1.20	0.20	0.80	0.00	0.00	0.80
Expected Val	0.49	0.78	0.01	0.17	0.03	0.01	0.50
90%ile high	1.63	2.73	0.13	0.61	0.30	0.11	1.43
95%ile high	1.85	3.11	0.15	0.69	0.35	0.13	1.61

	Collision Severity		
	Property Damage Only	Injury	Fatal
At intersection	15	7	0
Acc/Year	3	1.4	0
Expected Val	1.18	0.92	0.03
90%ile high	3.29	2.6	0.26
95%ile high	3.71	2.93	0.3

Cambridge Street (US-1) at Warrenton Road (US-17) and Butler Road (VA-218)¹³

	Collision Type						
	Rear End	Angle	Head On	Sideswipe Same Direction	Sideswipe Opposite Direction	Pedestrian	Fixed Object
At intersection	30	10	1	7	2	1	2
Acc/Year	6.00	2.00	0.20	1.40	0.40	0.20	0.40
Expected Val	5.79	6.67	0.09	1.57	0.13	0.12	0.63
90%ile high	13.01	15.56	0.42	4.00	0.51	0.50	1.42
95%ile high	14.44	17.33	0.48	4.48	0.58	0.57	1.57

	Collision Severity		
	Property Damage Only	Injury	Fatal
At intersection	39	15	0
Acc/Year	7.8	3	0
Expected Val	9.92	5.29	0.05
90%ile high	21.53	9.96	0.26
95%ile high	23.83	10.88	0.3

¹¹ Traffic accident data obtained from the Virginia Department of Transportation (VDOT) – Traffic Engineering Division.

¹² Expected value data obtained from “Expected Values for Accident Analysis at Intersections” report prepared by VDOT Traffic Engineering Division, May 1991.

¹³ Intersection contains accidents that are not included in the list of types.

CULTURAL & HISTORIC RESOURCES ANALYSIS¹⁴

In April and May of 2008, the Planning Team conducted a Phase IA archaeological assessment and Phase I Reconnaissance Level Architectural Survey of 169.5 acres in Falmouth Village. The Planning Team designed the survey to identify all architectural resources that may be present in the project area and to obtain sufficient information to make recommendations about the further research potential of each resource based on their potential eligibility to the National Register of Historic Places (NRHP). To accomplish this, both documentary research and architectural survey were conducted in compliance with the National Historic Preservation Act of 1966 (NHPA-PL89-665), as amended, the Archaeological and Historic Preservation Act of 1974, Executive Order 11593, and relevant sections of 36CFR660-666 and 36CFR800.

HISTORY OF THE FALMOUTH VILLAGE REDEVELOPMENT AREA

Europeans reached the Falmouth area in the summer of 1608, when Capt. John Smith worked up the Rappahannock as far as the Falls. The Rappahannock was a dangerous river, with the lower reaches controlled by Algonquian groups, nominally allied with the Powhatan, and the upper stream inhabited by Siouan groups.

In 1675, in response to the Massacre of 1644 and the continued threat of Indian attacks on the frontier, Governor Berkeley pushed an act through the Virginia Assembly providing for the construction of several forts along the fall line. Each fort was to be garrisoned with 25-100 militia members from the surrounding counties, and later forts would have had mounted troops as well. Grazing lands were to be set aside for the horses, and the mounted troops were to patrol between forts, scouting for “troublesome Indians.” The forts were to be provisioned with powder, shot, food and a doctor, and were commanded by local militia officers with the provision that the land would become theirs after three years. Major Lawrence Smith of Gloucester County was granted a tract of land measuring 3.5 miles wide by five miles long in what was then [Old] Rappahannock County on which to build a fort.

The exact location of the fort is not known for certain, as the act only specified that the fort be constructed “at or near the falls of the Rappahannock”. However in his memoirs Moncure Conway states:

“...beyond the outhouses the vegetable garden...extended to a succession of steep terraces...These terraces were relics of fortifications built in 1675 against the aborigines, this being the origin of Falmouth.”¹⁵

These terraces can still be seen in backyard of the Conway house at 305 River Road, and of some houses along Carter Street.

In 1678 the land between Falls Run and the Rappahannock River was granted to Thomas Vicaris for transporting 27 settlers to Virginia. By 1700, the fort was in disuse, and in 1702 Thomas Vicaris patented the land that was to become Falmouth. Between 1702 and 1720 the land was sold to William Todd, and by 1720 Todd had constructed a tobacco inspection station and several warehouses on the property.

Maps dating to this time period are scarce, and the original plan of the town of Falmouth has long been lost. In 2003, Paula Felder conducted extensive research into the early days of the town and reconstructed what may have been the original layout.

¹⁴ Refer to Volume VI (Cultural Resources Report for Falmouth Village) for thorough detailed and graphically illustrated Architectural and Archaeological Information and Research on the history of Falmouth Village.

¹⁵ Conway, 1904.

During the late eighteenth and early nineteenth century, rural Stafford County underwent a radical transition between the tobacco-based plantation economy and a new diversified grain-based economy that would characterize the region through the nineteenth century and into the twentieth century.

The end of the Revolutionary War saw the arrival of a number of Scottish merchants into Falmouth, including Basil and Samuel Gordon, James Vass, Duff Green, and Robert Dunbar. Basil Gordon opened a small store in Falmouth to supply “necessary goods” to the farmers in the Piedmont region. He used the money to buy wheat from the farmers and had it turned into flour in the Falmouth mills, and shipped it to England. He was so successful at this venture that he came to be known as America’s first millionaire.

Falmouth remained busy and prosperous at the beginning of the Civil War, with the remaining mills working to serve the Confederate Army. However, all operations ceased in 1862 with the first Union occupation of Falmouth. Stafford County quickly became a central point of conflict between Union and Confederate troops attempting to gain strategic ground en route to either Washington, DC or Richmond, Virginia.

During the Fredericksburg and Chancellorsville campaigns, from November 1862 through June 1863, Stafford County was occupied by more than 100,000 troops of the Federal Army of the Potomac, and its military encampments occupied thousands of acres from Aquia Creek south to the Rappahannock River. With a force numbering over 100,000 men, the effect of the Federal Army’s presence on Stafford’s landscape and economy was devastating. The countryside was almost completely denuded of trees and fences; agricultural fields were neglected and trampled, while foraging troops “liberated” food and other essential supplies from the civilian population.

By around 1880 Falmouth had become a rural village where artisans and a few retail businesses provided goods and services to the farmers and other nearby residents. Many members of Falmouth’s wealthier families had transferred their residence to Fredericksburg following the war and that only a few had stayed in Falmouth. Falmouth’s larger neighbor Fredericksburg, although weathering its own economic woes, benefited from its railroad connections to grow increasingly preeminent as the commercial, industrial, and social center of the Stafford-Spotsylvania region. In Falmouth, while some dwellings and other buildings were repaired as needed for continued residential and commercial use, the mill buildings, canal walls, and other traces of the town’s industrial legacy gradually crumbled or were quarried for recycling into other buildings and structures constructed in the vicinity.

The artist Gari Melchers arrive in 1916 and purchased Belmont, the frame mansion house on the western edge of town built in 1761 for Susannah Fitzhugh Knox. Melchers added a large studio wing to the house and spent his remaining years at Belmont. After decades of painting rural landscapes and portraits of rural people in Europe, Melchers turned his attention to the inhabitants and the vernacular landscape of the Virginia countryside. Today Belmont is a museum of Gari Melchers’s life and art administered by the University of Mary Washington.

In the years around 1920 a new pattern of land subdivision and dwelling construction was initiated on the northern and eastern fringe of town, evidently in response to the onset of the era of mass automobile ownership.

When WPA historical writers surveyed Falmouth around 1940, they found the town’s population to number about 500, the same size it had remained for at least a century. In 1943, after a flood had again destroyed the bridge in the previous year, Falmouth underwent its most major change in town configuration since the eighteenth century. Jefferson Davis Highway (US-1) was realigned from its original position along Cambridge Street (US-1) to its current configuration east of the old bridge alignment.

Until World War II, Stafford County remained largely rural and agricultural, with its economy rooted in farming, fishing, and timbering. With the rapid expansion of the Washington, DC metropolitan area since the 1950s, however, Stafford County increasingly has become a “bedroom community” of the capital, witnessing tremendous suburbanization that has thoroughly altered the economy and landscape of the area.

In the second half of the twentieth century, with the character of Falmouth in its overall extent more that of a direct suburb of Fredericksburg than of a community that is an urban entity in its own right, the town grew considerably. Reflecting the powerful rate of population growth that has affected northeastern Virginia since circa 1960, the census of 2000 recorded Falmouth’s population at exactly 2,000 people.

ARCHITECTURAL DESIGN GUIDELINES

A total of 90 previously identified and 13 newly identified architectural resources were surveyed during this project, of which only three were not included within the boundaries of the Falmouth Village Historic District (089-0067). All resources within the District are eligible for listing on the NRHP as contributing resources to the District. Architectural Design Principles will be developed as a separate document. These design principles should reflect the evolution of architectural styles that are currently present. Regulation and enforcement of these principles will require an act of legislation. Similar acts from cities and counties around Virginia are included in Volume VI (*Cultural Resources Report for Falmouth Village*).

ARCHAEOLOGY

The ten previously identified archaeological resources within the project area were revisited to update their current conditions. During the course of the survey and documentary research, several new potential archaeological resources were identified. These resources include a surface feature within the yard of the 18th century Dunbar Kitchen at 107 Carter Street that may represent the original main dwelling and the numerous extant privies associated with early 19th century houses throughout the project area.

BELMONT-FERRY FARM TRAIL

The proposed Belmont-Ferry Farm Trail is currently planned to include Belmont, West Cambridge Street (VA-607), King Street/River Road (VA-607), and St. Clair Brooks Memorial Park. The Planning Team has determined that the West Cambridge Street (VA-607) portion of the Phase V segment of the trail be extended to follow Carter Street, leading to the Falmouth Union Church and forming a loop to the Phase III segment of the trail at St. Clair Brooks Memorial Park. The Planning Team has further determined the need for signage at the following places along the trail:

- Phase III: Archaeological sites 44ST0098 and 44ST0083, 305 King Street (089-0067-0031), describing the historical significance of each; facing the Rappahannock River, describing the historic waterfront of early Falmouth Village.
- Phase V: The base of West Cambridge Street (VA-607) at the Old Falmouth Bridge (44ST0154), with text describing the former streetscape and the 1901 view of West Cambridge Street (VA-607); along Washington Street (VA-1001), describing John Dixon’s original subdivision of ½-acre lots and a brief discussion of working-class housing in Falmouth Village; at archaeological site 44ST0159, describing the history and significance of the Eagle Mill and milling in Falmouth Village, and a brief description of 18th and 19th century flour milling; at 104 King Street (089-0067-0028), describing the history and significance of the Falmouth Canal (44ST0066).

- Recommended Extension of Phase V: At 100 and 107 Carter Street describing the history and significance of Samuel Gordon and Robert Dunbar, as well as a brief discussion of the housing of the wealthy in Falmouth Village; at the Falmouth Union Church and Cemetery, discussing the history of the church, the history and possible location of the 1675 Fort, and noted persons interred within the cemetery.

The information gained through archaeological studies can provide information and artifacts for displays and signage along the proposed Belmont-Ferry Farm trail.

THE COUNTING HOUSE

Stafford County-owned building at 103 Gordon Street (089-0067-0006), commonly referred to as the Counting House, is a ca.1840 warehouse that was subsequently converted to a dwelling. An intensive level architectural survey conducted in 2006 recommended that the resource is eligible for individual listing on the NRHP under Criterion A and C (Barile 2006). A Condition Survey Report completed in 2007 indicated that the structure is overall in poor condition and will require a full renovation (Bigoney 2007). The Architectural Review Board of Stafford County and the Stafford County Historical Commission recommend the rehabilitation of the building for use as a visitor’s center, gift shop, interpretive center, and/or public meeting space, but do not recommend the building for use as a museum (Dodd 2007; King 2007). The building’s history of flooding and frame construction renders it unsuitable for use as a curatorial museum.

As a contributing resource to the NRHP listing of Falmouth Village Historic District, this property qualifies as a certified historic property. If Stafford County elects to sell the property, the Planning Team has determined that it do so with an easement and requirement for rehabilitation within a five-year time frame, and that the buyer use federal and state tax credit programs for the rehabilitation of the structure. Prior to the rehabilitation project, the Planning Team has determined a Phase I archaeological survey be conducted on the property surrounding the building.

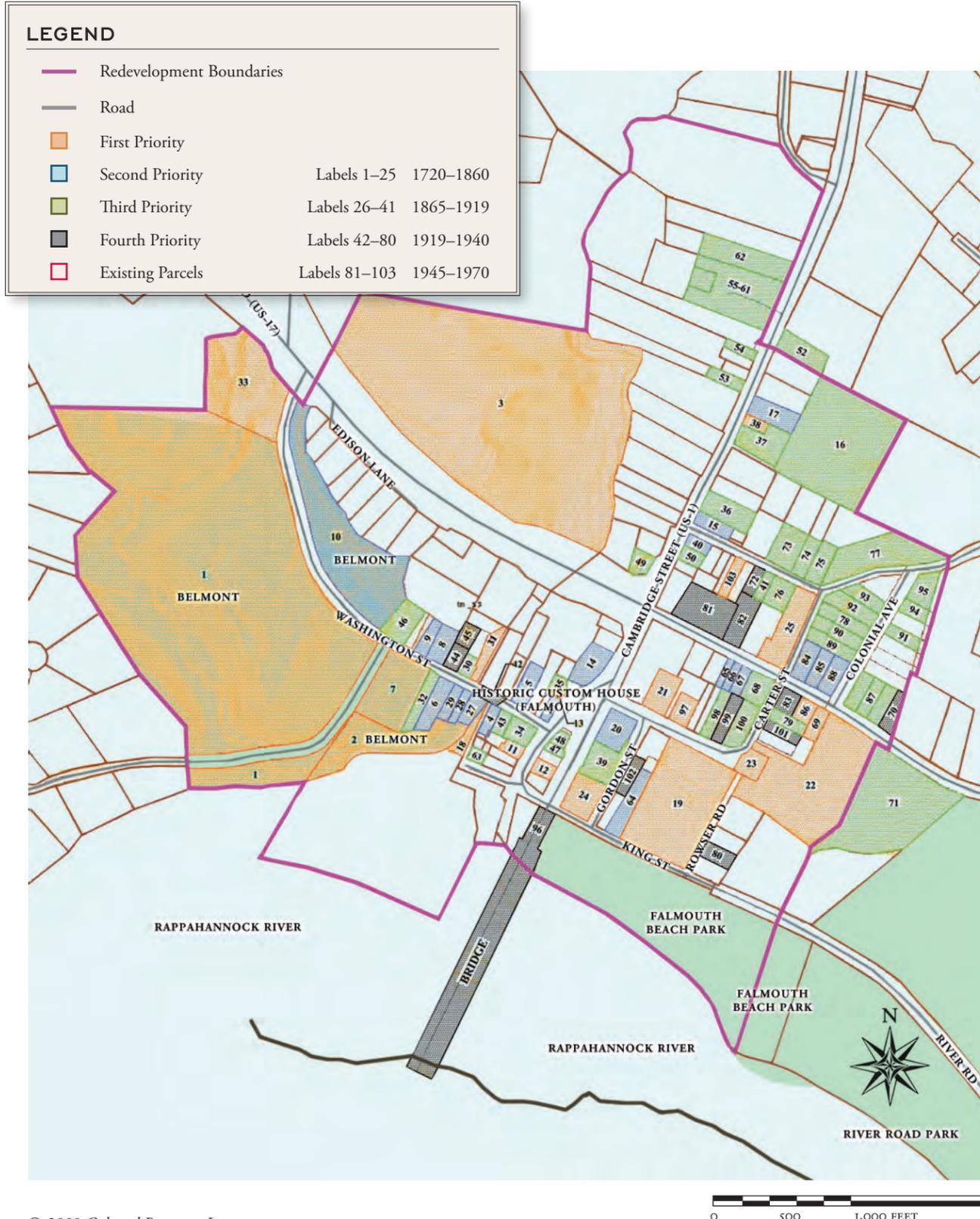
OTHER PROJECTS

The VDOT project at the intersection of Jefferson Davis Highway (US-1) and Warrenton Road (US-17) falls within the boundaries of Falmouth Village. As a federal undertaking, the project falls under the purview of the Section 106 review process. Currently, there are no guidelines in place for Falmouth Village that would govern the aesthetics of the VDOT project. Several historic properties, defined as properties that are eligible for the NRHP as contributing elements to Falmouth Village, may be impacted by the construction of the proposed intersection. As part of the Section 106 process, VDOT must reach an agreement regarding historic properties with all consulting parties prior to the start of construction.¹⁶

The street layout of Falmouth Village today, with the exception of the Falmouth (Jefferson Davis Highway (US-1)) Bridge and the extension of Jefferson Davis Highway (US-1) to Carter Street, represents the original street layout of Falmouth Village. The preservation of these streets is as integral to the preservation of the historic village as the preservation of the buildings themselves. In order to develop Falmouth Village as a viable Heritage Tourism area, the Planning Team has determined that the historic road alignments be preserved in as much as possible.

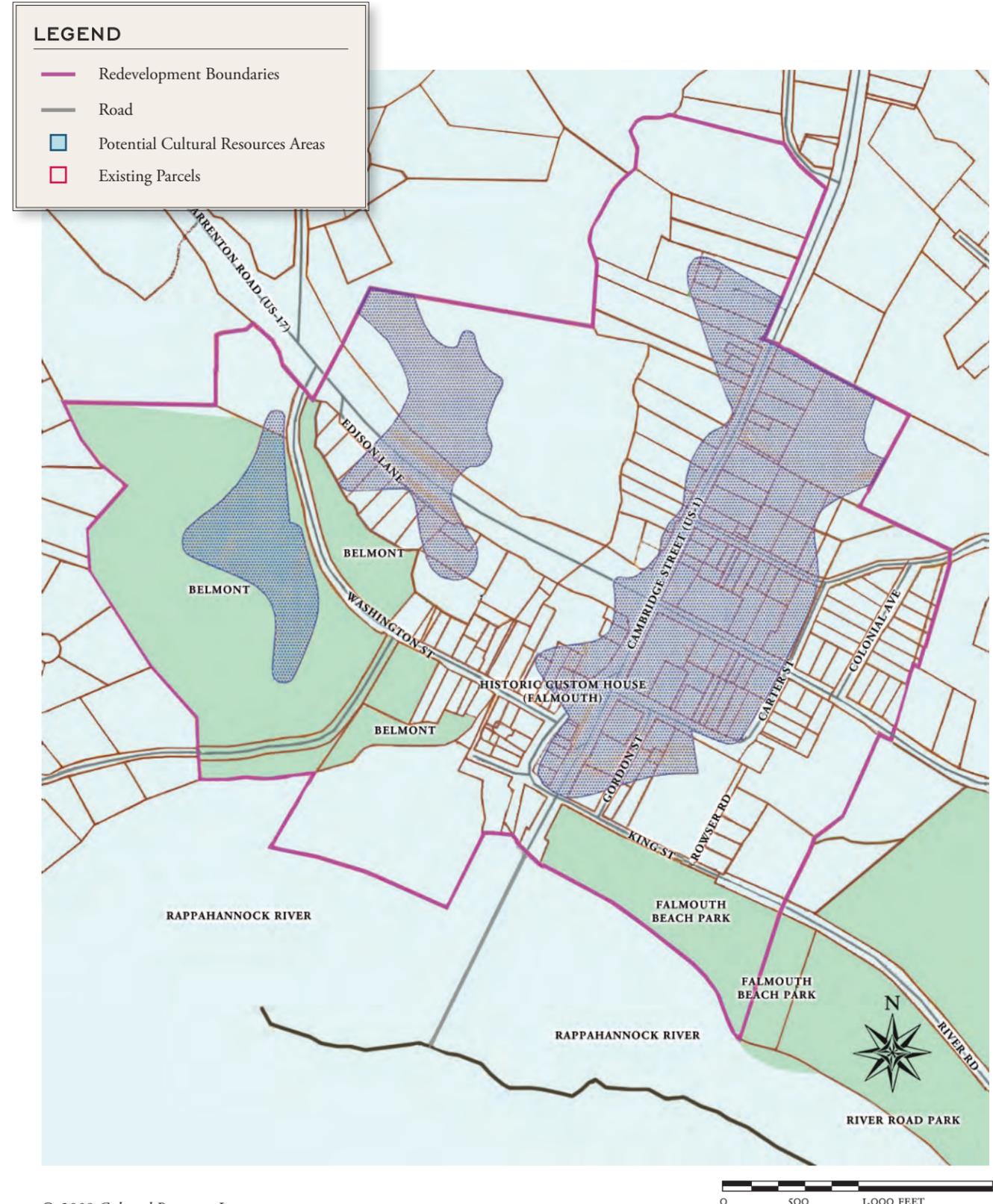
¹⁶ Stafford County is a consulting party on this project.

Map 10: Architectural Resources Within Falmouth Village – Priorities



© 2008 Cultural Resources Inc.

Map 11: Areas with Potential Cultural Resources Within Falmouth Village



© 2008 Cultural Resources Inc.

FALMOUTH VILLAGE REDEVELOPMENT AREA: SUMMARY & CONCLUSIONS

ECONOMIC & MARKET ANALYSIS

The Falmouth Village Redevelopment Area is a key asset of Stafford County. Any development of additional real estate must be tempered to support the district's historic significance and comply with environmental (floodplain) restrictions. Opportunities for cultural tourism could be developed through a coordinated effort and marketing. Coordination with current and future hotel properties in and around the Southern Gateway redevelopment area would increase capacity for visitors without compromising the historic assets of Falmouth Village. In addition to developing a potential Cultural Arts-in-Residence program, the area could support up to 8,600 square feet of office space between 2007 and 2020. This is likely to be professional services, and either be developed in the rehabilitation of existing structures that are not currently used as office space or in new space outside of the historic core. Also, between 2007 and 2012, the area could support up to 14,000 additional square feet of retail and restaurant space, which would support one to two additional restaurants and one to two small boutiques/gift shops/galleries. These would be best positioned to support the cultural tourism strategy while also being attractive businesses for local residents.

The Concept of Falmouth Village as a Cultural, Heritage and Recreation Resource came about shortly after the Planning Team started to review information regarding the rich history of Falmouth Village. A critical mass of activities, resources, and programming is needed in order to expand visitor numbers and enhance visitor experience satisfaction. This means a supportive infrastructure, which would include, among other items, a Wayfinding signage system in Falmouth Village and along major corridors of Jefferson Davis Highway (US-1) and Warrenton Road (US-17) leading to the site, and physical improvements such as landscaping, screening and billboard management, and removal along entry corridors. A proposed Falmouth Village redevelopment program would feature a Cultural Arts-in-Residence program – associated with Mary Washington University's Gari Melchers Home and Studio at the Belmont Estate – featuring historic guesthouses. The objective of this concept is to increase Stafford-based overnight stays to create additional opportunities for tourist visits at Falmouth Village and other Stafford sites, to take advantage of the Belmont Estate facilities and to offer individual property owners and businesses the opportunity to participate. Key components of the concept would include: Development of an arts program for visitors and the rehabilitation of small houses in Historic Falmouth Village as guest houses, which could be rented to participants in the resident arts program, and visitors during special events such as Civil War reenactments and festivals, and which would also have access to the historic trail between Belmont and Ferry Farm, George Washington's boyhood home. Guests would patronize Falmouth Village restaurants, or go into Fredericksburg or Southern Gateway for additional dining options. The Planning Team will endeavor to propose a sustainable redevelopment of Falmouth focusing and highlighting Falmouth Village's location, assets, history, recreation potential and environmental sustainability.

INFRASTRUCTURE & STORM WATER MANAGEMENT (SWM) ANALYSIS

In regard to Infrastructure and Storm Water Management (SWM) Analysis, Falmouth Village contains two major programmatic issues due to 100-yr floodplain and the Critical Resource Protection Areas (CRPAs), limiting development within its boundaries. Transportation concerns at the Jefferson Davis Highway (US-1)/Warrenton Road (US-17) intersection will yield the largest changes in development and impervious area.

The CBPA Plan has significant impact within Falmouth Village. The most important limiting characteristics are the floodplain areas around the Rappahannock, the floodplain areas around the tributary that bisects Falmouth Village, and the poor nature of the existing soils. Because any potential redevelopment is concentrated so close to the Rappahannock River, erosion, pollution, and shoreline protection are major concerns. There is an opportunity within the course of Falmouth Village development to increase the public access to the Rappahannock River, which is recommended with the CBPA Plan. Access type should be dependent on the typical conditions of the Rappahannock along the parcels within Falmouth Village. Only passive recreation areas, stormwater management areas, marinas, piers, and open space are accepted along the shoreline within the CBPA Plan. To an extent, some of this is already in place given the recreational uses at Falmouth Beach Park and the open space associated with Belmont Plantation. Additional water quality measures should be considered to help protect groundwater and the Rappahannock from nonpoint source pollution.

Currently, there is adequate water/sewer capacity in the near term for redevelopment within the Falmouth area, and programmed CIP projects will increase the capacity of available water/sewer over the next 10-years. Careful thought should be given to extending sewer service to the eastern blocks within the redevelopment area, and as development progresses, Stafford County's water/sewer models should be updated to reflect demand/flow increases.

The Falmouth Plan intends to restore the historic character to Falmouth Village through redevelopment. The primary goals within the Falmouth Plan include improving transportation networks and pedestrian flow, parking availability, and streetscape improvements. Of particular concern is the transportation concern associated with the intersection of Cambridge Street (US-1) and Warrenton Road (US-17)/Butler Road (VA-218), which effectively splits the area into four sectors. Historic guidelines have been implemented for the area, which create an overlay district that limits some flexibility of redevelopment options. The Falmouth Plan also encourages recreational waterfront development. Each of these components of the Falmouth Plan will be considered within any redevelopment measures of Falmouth Village.

Phase II of the redevelopment plan process will begin to plug in increases in demands/flows within this area so that timely decisions can be made regarding bringing any critical elements on-line when they are needed.

TRANSPORTATION & TRAFFIC ANALYSIS

Transportation and traffic-wise in Falmouth Village, the Jefferson Davis Highway (US-1)/Warrenton Road (US-17) intersection currently operates at capacity during peak hours (LOS “F”). All other key intersections and roadway segments operate at overall adequate levels of service (LOS “D” or better). While sidewalks are provided along many roadways in the network, the Jefferson Davis Highway (US-1)/Warrenton Road (US-17) signalized intersection lacks pedestrian signal heads and push buttons. There is currently no comprehensive bicycle network. There are three local bus routes that provide transit service for the Falmouth area and serve to connect to the nearby City of Fredericksburg. An accident analysis conducted for the area indicates higher-than-expected annual crashes at the Jefferson Davis Highway (US-1)/Forbes Street (VA-627) intersection.

CULTURAL & HISTORIC RESOURCES ANALYSIS

Architectural resources – a total of 90 previously identified and 13 newly identified – were surveyed during this phase of the project. All of these, except for three outside of the Falmouth Village Historic District are eligible for listing on the NRHP as contributing resources.

Ten previously identified archeological resources within Falmouth Village were revisited to update their current conditions. During the course of the survey and documentary research, several new potential archeological resources were identified.

The proposed Belmont-Ferry Farm Trail is currently planned to include Belmont, West Cambridge Street (VA-607), King Street/River Road (VA-607), and St. Clair Brooks Memorial Park. The Planning Team has determined that the West Cambridge (US-1) portion of the Phase V segment of the trail will need to be extended to follow Carter Street, leading to Falmouth Union Church and forming a loop to the Phase III segment at St. Clair Brooks Memorial Park. The Planning Team has further determined that information gained through archeological studies that provides information and artifacts be used for displays and signage along historically relevant points of the Belmont-Ferry Farm Trail.

Data recovered by archeologists may also be used to build a working re-creation of the 18th century Falmouth waterfront. Replica warehouses, docks, and associated structures may serve as educational tools, tourist attractions, and as restaurants and stores. A replica of the 18th century dock may serve as boardwalk, with a replica ferry house as a public boathouse and this could be coordinated to become part of the County-planned river front pier and promenade.

The street layout of Falmouth Village today for the most part represents the original street layout of the Historic Village, except for the Falmouth (Jefferson Davis Highway (US-1)) Bridge and the extension of Jefferson Davis Highway (US-1) to Carter Street. The proposed VDOT project at the Jefferson Davis Highway (US-1)/Warrenton Road (US-17) intersection falls within the boundaries of the Falmouth Historic District. As a federal undertaking, the project falls under purview of the Section 106 review process to evaluate historic properties and their significance.¹⁷ However, there are currently no guidelines in place for the Falmouth Historic District that would govern the aesthetics of the VDOT project, and VDOT must reach an agreement regarding historic properties with all consulting parties – including Stafford County – prior to start of construction.

The Planning Team has determined that Falmouth Village needs to be considered as part of the Southern Gateway Redevelopment Area, given their locations along Warrenton Road (US-17). An effort shall be taken to tie in the architecture of Southern Gateway with the architecture of Falmouth Village, creating a continuous transition between the two redevelopment areas. The Planning Team approached the analysis focusing on these two areas as interrelated for development; an extended corridor area that would make them each potentially more successful. The integrity of the historic district can be preserved with bus/shuttle service from Southern Gateway, the larger commercial hub where hotels may be located, to avoid having more automobiles and traffic in Falmouth Village. Tourists can be brought via transit to a central visitor’s center where they can walk down Falmouth Village’s quaint streets, buildings and along the river, for tourism, recreation, and history-related activities. Once rehabilitated, smaller bed and breakfast facilities are envisioned in some of the historic structures. Falmouth Village is very rich in historical resources and potential for water-related recreational facilities. One of many possibilities, as was mentioned earlier, would be to implement a replica of Falmouth Village’s 18th century dock, which may serve as boardwalk in coordination with County-planned designs for the implementation of a riverfront pier and promenade, and a replica ferry house as a public boathouse, an added amenity to attract boat and kayak enthusiasts.

¹⁷ Please refer Volume IX (*Stafford County Traffic Data*) for detailed information on this process.

MOVING FORWARD

The Planning Team has undertaken thorough research, review and understanding of the four redevelopment areas' existing conditions; their rich cultural resources, land use potential and regulations, current trends and the market. With the information gathered throughout this phase and with the public workshops input the Vision starts to take shape.

As a result of the Planning Team's analysis and findings, the actual mix and intensity recommended varies from one redevelopment area to the other as they vary in size and character. The Planning Team recommends that Falmouth Village be considered as part of the Southern Gateway Redevelopment Area, in order to create a continuous transition between the two areas, allowing for the integrity of the historic district to be preserved while maintaining a connection to larger shops, hotels and restaurants in Southern Gateway in an extended corridor area that would make them each more successful for redevelopment. Landscape improvements to Warrenton Road (US-17) between Interstate 95 (I-95) and Jefferson Davis Highway (US-1) will blend Southern Gateway to Falmouth Village, assisting the County in its goals for Economic Development while maintaining dedication to Historic Preservation. Based on this discussion and recommendation that Falmouth Village be considered in the context of the Southern Gateway Redevelopment Area, the need to create a continuous transition between the two areas became apparent; not just for a corridor via Warrenton Road (US-17) but to take advantage of Southern Gateway's more visible location to capture visitors. The proposed design strategy to create this link and foster development in the Warrenton Road (US-17) Corridor is illustrated as part of the Concept Master Plan.

The Concept Master Redevelopment Plan will take the previous conceptual visions a step further, with land uses and implementation strategies for each redevelopment plan. The Planning Team's design recommendations will be in context to the Comprehensive Plan, the Land Use Plan and in direct response to development trends and public input. It will provide a framework to address each community's vision and potential for the future of their neighborhoods and the County.

The Planning Team has determined that future development should reflect the evolution of architectural styles that is currently present through the development of design principles for new construction within the areas. In general, elements of the surrounding architecture should be included in order to promote a sense of continuity within the area, without creating a false sense of history with inaccurate representations of historic buildings. Regulation and enforcement of these guidelines will require an act of legislation. Additionally, the Planning Team has specifically determined that commercial development within Falmouth Village be restricted to West Cambridge Street (VA-607), Cambridge Street/Jefferson Davis Highway (US-1), and Butler Road (VA-218)/Warrenton Road (US-17), with the secondary streets maintaining their residential feel. The Planning Team has also determined that business should be encouraged to use existing historic properties whenever possible, and to conform to design guidelines when constructing new commercial or residential buildings within the Historic District. The regulation of new construction within the Falmouth Village Historic District will require an act of legislation, similar to the Fredericksburg Historic District Ordinance enacted to protect that city's historic, architectural, and cultural significance.

In an effort to locate and collect information on historic and prehistoric resources to specifically learn more about the industrial age of Falmouth Village and aid in the development of heritage tourism. The Planning Team recommends that a Phase I Archaeological Survey be conducted within high-probability areas, and on vacant lots within Falmouth Village, in an effort to collect information on factories, warehouses, commercial buildings, and dwellings related to the early development of Falmouth Village prior to any ground-disturbing activities.¹ Any resources identified during the course of these surveys will serve to add to the historical context of the area, and may provide opportunities for heritage tourism. The regulation of these processes may require an amendment to the current Cultural Resources Management Plan.

Ideally, the position of County Archaeologist should be created to regulate and enforce cultural resource legislation. The Planning Team understands that the creation of a County Archaeologist position is outside the scope of the current project; however, and thus have determined that the creation of this position be considered for the future to regulate and enforce cultural resource legislation.

Finally, although not part of the Master Redevelopment Scope, the Planning Team has determined that Design Guidelines be developed for the Falmouth Village historic district. Currently, Stafford County's Design & Construction Standard enforces architectural controls at a County-wide level, while Stafford's Architectural Review Board has specific requirements for Falmouth Village.

¹ Specifically the Falmouth Beach Park, River Road Park, St. Clair Brooks Park, and Falmouth Union Church and Cemetery areas, to help locate the 1675 Fort at Falmouth – the original docks, public wharves, warehouses, and ferry houses within Falmouth Village.

FALMOUTH VILLAGE: CONCEPT MASTER REDEVELOPMENT PLAN & RECOMMENDATIONS



PUBLIC PROCESS & COMMUNITY INPUT¹

PUBLIC WORKSHOP #1 CONCLUSIONS

Public Input: Existing Conditions

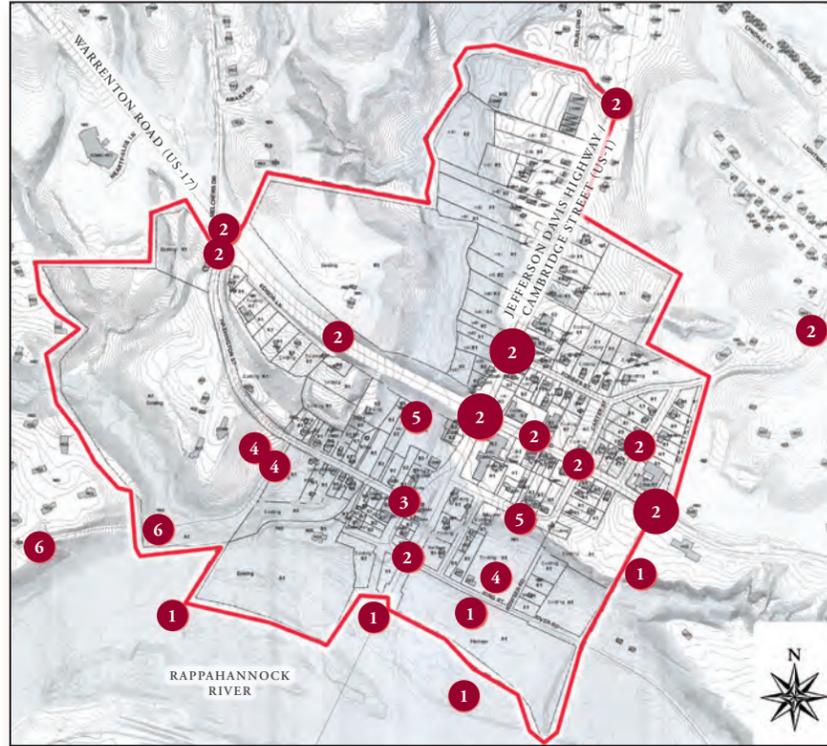
The public stated that traffic is the main concern and challenge for village residents, especially at the intersection of Jefferson Davis Highway (US-1) and Warrenton Road (US-17). Residents also feel that the fabric of the Village has been damaged. Positive comments included the Rappahannock River, which the community views as a great asset, particularly for its view sheds and recreation potential. Residents are also very aware of the rich historic properties (the modest village historic structures as well as the grander Belmont and Carlton Estates), and the value they bring to the area. Nevertheless, the community listed the following as serious and continuing concerns related to the future of the district:

- The public is worried about the potential intersection improvements and the further isolation of its main quadrants should VDOT go ahead with current plans, stressing they would favor a proposal that would by-pass the Village instead.
- The public feels strongly about the way it could further fracture the Village fabric, as road widening could impact existing buildings, and stressed the need for traffic calming measures.
- The community is concerned with flooding, steep slopes, traffic congestion, lack of gateways, accessibility issues, and a broken street grid.
- Residents stated that commercial areas need to be protected while still providing access to surrounding residential areas and fostering development in underutilized commercial properties.
- Citizens feel that the steep slopes may prove a challenge for redevelopment.
- The community repeatedly mentioned the lack of an “entrance” from Interstate 95 (I-95) along the Warrenton Road (US-17) corridor, which fails to “announce” the historic destination that is Falmouth.
- Despite blight and traffic, the Warrenton Road (US-17) corridor has existing businesses, residents, an abundance of open spaces, and historic Civil War sites.
- The community stated the need for road and sidewalk improvements; medians, bike lanes, and pedestrian access and traffic improvements.
- Community members believe that the bleak appearance and lack of a feature that announces Falmouth fails to attract potential travelers that might consider the area as an option for distraction and entertainment and constitutes a lost opportunity.



¹ For further detail of the public's preferences, refer to the Appendices, which contain the compiled results in more detail, taken from the public workshops from both Phases of the Redevelopment Plan.

Public Input: Dot Maps



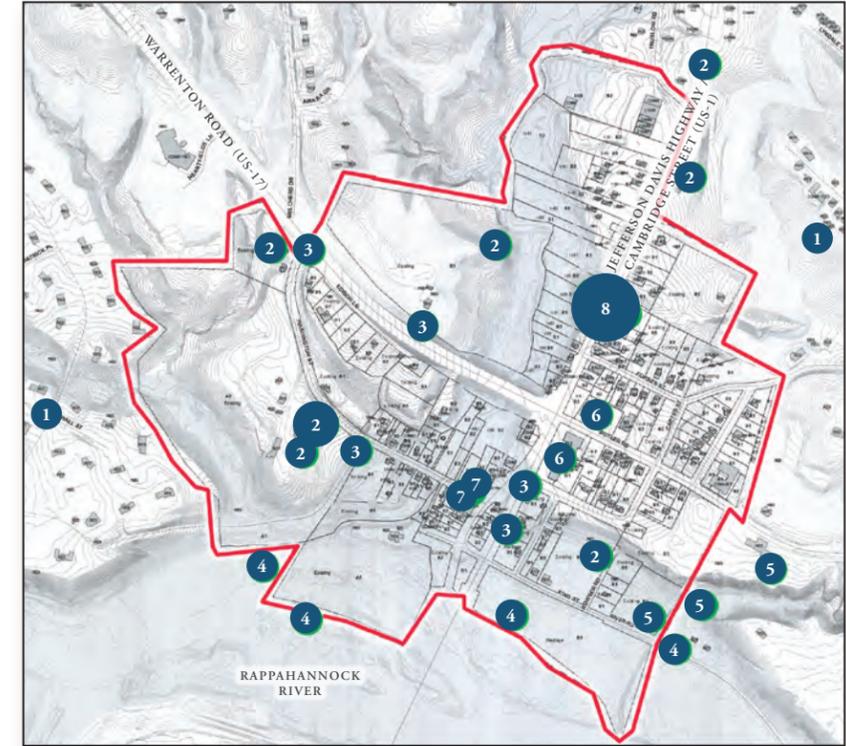
Map 12: Falmouth Village Existing Conditions – Challenges

1. Rappahannock River, view shed, steep slopes
2. Traffic congestions, gateways, access
3. Flooding, steep slopes, old homes
4. Historic property, (Belmont and Underground Railroad) to be preserved
5. Underutilized commercial, access, grids
6. Cut through traffic



Map 13: Falmouth Village Existing Conditions – Strengths

1. Clearview Estate & Carlton Estate
2. Belmont Estate
3. Rappahannock River
4. Underground Railroad
5. Falmouth Village
6. Existing commercial



Map 14: Falmouth Village Existing Conditions – Opportunities

1. Protect residential areas outside the redevelopment area (provide access to surrounding residents once redevelopment occurs)
2. Historic properties, NRHP and non-NRHP
3. Potential traffic improvements
4. Rappahannock River
5. Potential trail, open space, parks
6. Potential redevelopments, quadrants
7. Flood prevention, traffic reduction
8. Potential redevelopment of old commercial properties

Visual Preference Survey

Most people were in favor of smaller-scale, more inviting one- and two-story buildings, with retail and places to eat at street-level and offices or residential “above the shop.” The public was very much opposed to traditional, cold, suburban and commercial architecture. Most were also in favor of two-story town homes with gardens or small green fronts and tree-lined, nicely landscaped sidewalks.

An overwhelming majority was in favor of smaller, nicely landscaped sidewalks, parks and open plazas, and other gathering spaces with lighting and street furniture improvements. There was no clear consensus on the specific type but a good half of the public was in favor of onstreet parking/landscaped areas. In general, the public seemed to be in favor of small front gardens and landscaped sidewalks, farmer market-style vendors, and outdoor cafes. Most respondents were in favor of images that had green spaces, brick sidewalks, and smaller scale buildings.

VISION & GOALS

The vision and goals for Falmouth Village embodies these sentiments:

- *Pedestrian connectivity, road and streetscape improvements, bicycle lanes, sidewalks, tree-lined medians, and bypass road from the Warrenton Road (US-17) Corridor.*
- *Redevelopment should include old commercial and private historic properties, flood prevention efforts, and traffic reduction while protecting existing local residences and businesses.*
- *Compatible architecture for historic district with well-planned mixed-use redevelopment, zoning regulations, buffering and setbacks.*
- *Open space: riverfront environmental opportunities in conjunction with parks, outdoor markets, ecotourism opportunities, walking/biking trails.*
- *Link to the historical trail from Belmont to Ferry Farm, and enhancement plans for pedestrian-access improvements along the riverfront.*

The vision for the Falmouth Village area consists of redevelopment of commercial properties while protecting existing local residences and businesses. The most important improvements include increasing pedestrian connectivity, road and streetscape improvements, bicycle lanes, sidewalks, tree-lined medians, and a bypass road from the Warrenton Road (US-17) Corridor. Mass transit opportunities, convenient access to the local VRE Station, truck traffic restrictions, and traffic calming elements are also viewed as essential. The potential for redevelopment, including old commercial and private historic properties, flood prevention efforts, and traffic reduction, is an attractive prospect. The community wants zoning regulations with an overlay district, buffering and setbacks. Citizens also desire compatible architecture for historic district with well-planned mixed-use redevelopment, open space with riverfront environmental opportunities in conjunction with existing parks, outdoor markets and ecotourism opportunities, including walking/biking trails and a link to the historical trail from Belmont to Ferry Farm, as well as enhancement plans for pedestrian-access improvements along the riverfront. Regional storm water ponds, stream restoration, erosion and storm water education is also seen as a priority.

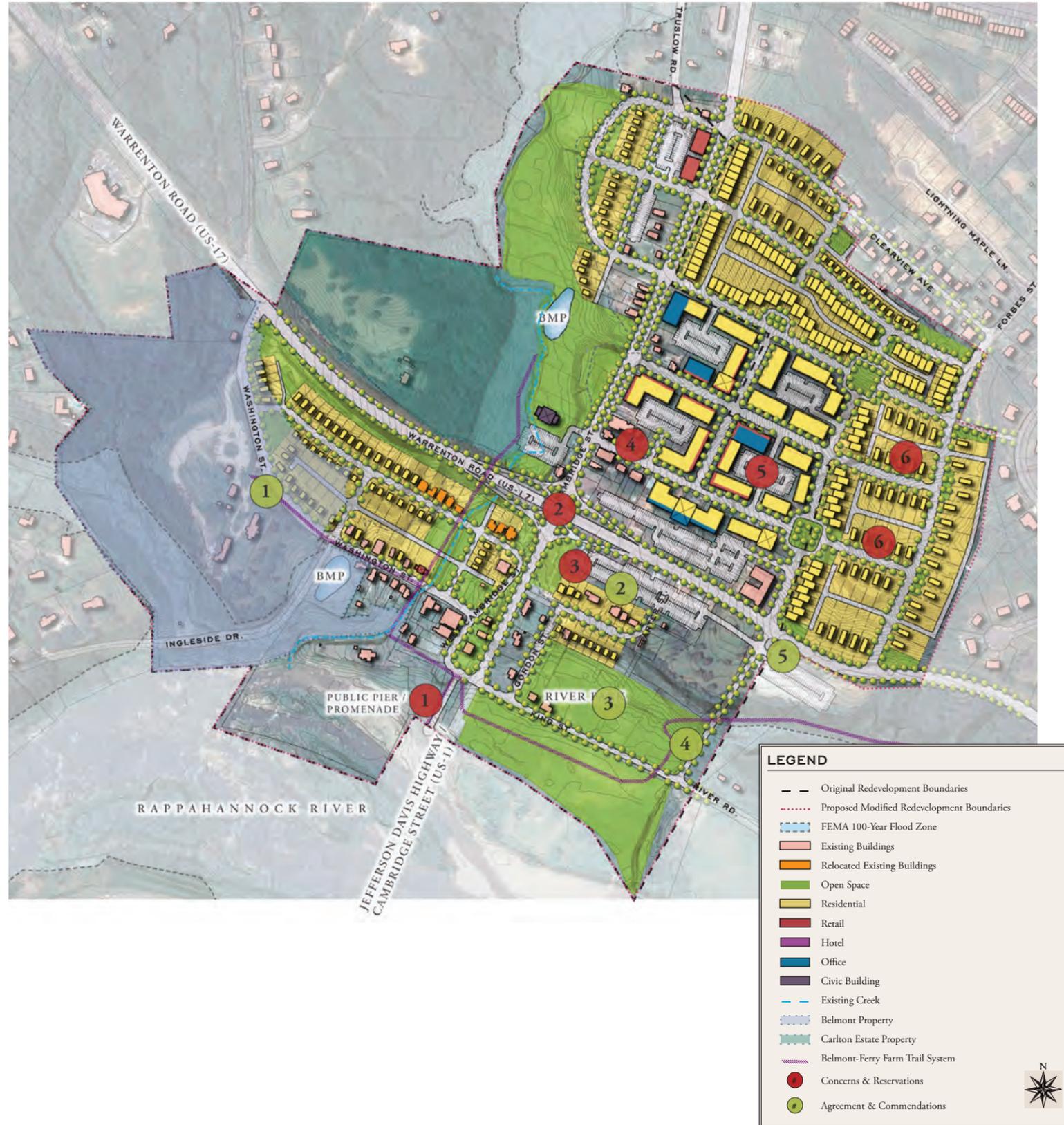
While the Warrenton Road (US-17) corridor has open spaces, potential for parks, and a new entryway to Falmouth, the stretch of land between Southern Gateway and the Falmouth Village is also seen as having great potential for redevelopment of commercial property, as well as immediate and badly needed way-finding and streetscape improvements to bring visitors to both Falmouth and Southern Gateway, creating a continuous transition between the two areas. It is hoped that this will result in a thriving, attractive corridor that benefits the entire district. A gateway, announcing the historic significance of Falmouth, is seen as an important and essential component of any redevelopment plan.

Vision Statement

“Recreate a village center that can be connected to its riverfront recreational & historical cultural resources. Weave together existing & new structures with walkable streets that connect living areas to shopping and work areas. Enhance its needs to be a well designed street that draws visitors from Interstate 95 (I-95) to Falmouth Village.”



Map 15: Falmouth Village Preliminary Master Plan – Public Input



PUBLIC WORKSHOP #2 CONCLUSIONS

Concerns & Reservations (Red Dots)

1. The proposed pier would need to be well-designed and engineered in order to withstand river flooding; the pier could also exacerbate flood flow and require a detailed flood modeling/study.
2. Some would like to keep the house located at 107 Carter Street and add a Best Managed Practice (BMP).
3. The proposed interchange will not be sufficient for traffic flow; some believe that traffic will continue to back up, and wonder how the interchange will affect access.
4. The bank building at Jefferson Davis Highway (US-1) and Warrenton Road (US-17) is noted for flooding constantly.
5. Too much development may cause even more traffic; there needs to be more open space and preserve the already existing.
6. There will be no more housing north of Warrenton Road (US-17).

Agreement & Commendations (Green Dots)

1. Keep Washington Street (with stone wall on the Belmont Property) as it is historical, but also in order to slow traffic.
2. The public like the proposed homes; they have porches, open space, and a “quaint old town feeling.”
3. Several people believed that a river park is a very good idea and one of the only things appropriate for this particular area.
4. The proposed park is an efficient use of resources, as it ties into St. Clair, Brooks Park, and the proposed Belmont-Ferry Farm Trail.
5. People liked the connection of Forbes Street to Butler Road.

General Notes

- ◆ An elderly couple owning two homes said that they will fight any attempt to take their home down. One is located at the Butler Road and Warrenton Road (US-17) intersection, on the path of VDOT’s plans, and the other located on Forbes Street where new development is shown.
- ◆ A gentleman currently owning property at 107 Carter Street believes the Plan should keep his house, as it is a 1793 home undergoing historic renovations; though he loved the proposed Master Plan, it shows this home as green and open space
- ◆ It was suggested to implement a stormwater Best Management Practices (BMP) in the area near the proposed parking lot at south-east corner of Jefferson Davis Highway (US-1) and Warrenton Road (US-17).
- ◆ Some residents mentioned the need to have another bridge over the Rappahannock River, as the Jefferson Davis Highway (US-1) bridge currently provides the only exit-access for the area.

PROPOSED MASTER PLAN

FALMOUTH VILLAGE PROPOSED MASTER PLAN

After all of the public workshops during the initial phase were complete, the Planning Team focused on the Master Redevelopment Concept Plan. This step brought the findings of the Planning Team together with the public’s input – their “wish list” – to set realistic goals and seek redevelopment that is a response to market potential, land and infrastructure capacity and mostly, to the community’s desires and vision of itself.

The Planning Team approached Falmouth Village considering it as part of the Southern Gateway Redevelopment Area. To create a continuous transition between the two areas that would allow for the integrity of the historic district to be preserved while maintaining a connection to larger shops, hotels and restaurants in Southern Gateway, an extended corridor on Warrenton Road (US-17) was identified as a gateway path that would make them each more successful for redevelopment.

The potential long-term density for Falmouth Village is generally larger than that in the Comprehensive Plan. According to the Stafford Comprehensive Plan, the redevelopment areas should be designed to incorporate principles of traditional neighborhood design and in order to comply with state guidelines, these areas must be able to accommodate and develop at higher commercial and mixed-use densities. This is a necessary step to achieve critical mass and a sense of place; these efforts will help to create a thriving center that integrates a mix of uses, provides balance, and crafts its own character over time, and becomes a positive impact in the area’s economic factors.

The Master Redevelopment Plan takes the previous conceptual visions and goals much further, with specific land uses and implementation strategies for each redevelopment plan. The Planning Team’s design recommendations are in context to the Stafford County’s Comprehensive Plan, and in direct response to development trends and public input. It provides a framework to address each community’s vision and potential for the future of their neighborhoods and of the County. Each master plan is a community guided vision for development of each area.

Table 9: Falmouth Village Estimated Demand*

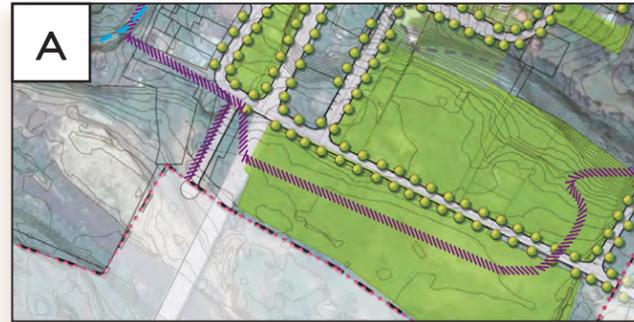
	TOTAL SF	TOTAL UNITS
Civic	5,200	
Office	55,000	
Retail/Commercial	72,000	
Residential	224,000	425
TOTAL	356,200	425

*Note: Parking (with 267,750 SF) is not included in the total for the Master Plan Program.

PROPOSED MASTER PLAN HIGHLIGHTS

- A. *The Southern portion of Falmouth Village off of the Jefferson Davis Highway/Cambridge Street (US-1) bridge features a River Park, a Public Pier & Promenade, and updates to the Belmont Ferry-Farm Trail.*
- B. *Several homes that are part of the National Register of Historic Places can be preserved and relocated by their owners to a more historically appropriate location.*
- C. *The central district within Falmouth Village contains mixed-use of some office and mostly residential above some first-floor commercial.*
- D. *The northern entrance into Falmouth Village from Jefferson Davis Highway/Cambridge Street (US-1) leads into residential townhouses and single family homes, keeping with the traditionally residential redevelopment area.*
- E. *The center of Falmouth Village brings visitors and local residents to the historical center of the County, with retail opportunities intermixed with multi-family residential.*
- F. *Homes from the National Register of Historic Places may be relocated by their owners or developers to a central location on the southeast entrance to Falmouth Village off of Warrenton Road (US-17).*
- G. *The typically residential atmosphere that contributes that characteristic to Falmouth Village is preserved by developing more residential townhomes and single family homes at surrounding the outer perimeter of the redevelopment area.*

Map 16: Falmouth Village Open Space & Circulation Plan



PROPOSED OPEN SPACE & CIRCULATION PLAN

Open spaces, parks, pedestrian friendly environments and streetscape improvements were sought for Falmouth’s main arteries, especially Jefferson Davis Highway (US-1) and Warrenton Road (US-17). Planning design efforts have been made to foster a grid system, density and interaction among users. Landscape improvements to Warrenton Road (US-17) between Interstate 95 (I-95) and Jefferson Davis Highway (US-1) will set a physical link between Southern Gateway and Falmouth Village, assisting the County in its goals for Economic Development while maintaining dedication to Historic Preservation.

There is an opportunity through the Falmouth Village redevelopment to increase the public access to the Rappahannock River and provide and promote recreational opportunities. Creation of a Riverfront Park, implementation of an overlook pier and promenade and inclusion of a replica of Falmouth’s 18th Century Ferry House in the Rappahannock will add to the character of the Village (A). Furthermore, this park area will be linked to the Belmont-Ferry Farm proposed trail to bring people along the river and into the historical trail markings between the Belmont Estate and George Washington’s boyhood home at Ferry Farm (B). The link should also be extended towards the north to provide a true pedestrian network. While connecting the trail with a new park on the northwest quadrant, this recreational area will include a community center facility for citizens of all ages to enjoy.

PROPOSED MASTER PLAN STREET SECTIONS

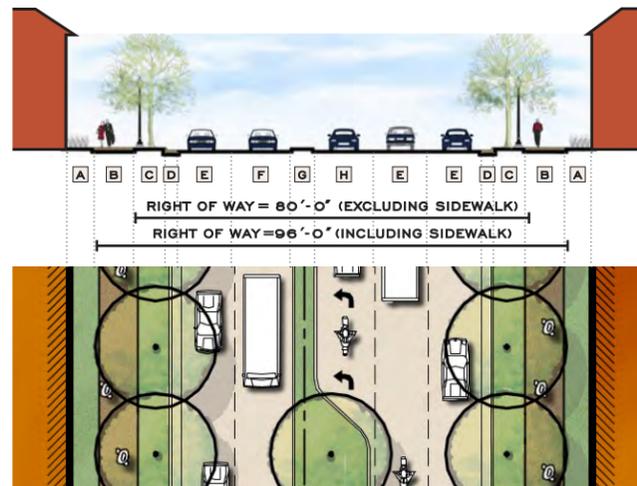


Figure 5: Falmouth Village Section & Plan – Warrenton Road (US-17)

A. Browse/Planting/Seating Area	5' – 6"
B. Sidewalk	8' – 0"
C. Landscape Area	6' – 6"
D. Curb & Gutter	2' – 6"
E. Thru Lane	11' – 0"
F. Thru Lane	12' – 0"
G. Raised Median	5' – 0"
H. Left Turn Lane	11' – 0"



Figure 6: Falmouth Village Street View looking east: Warrenton Road (US-17) – Before



Figure 7: Falmouth Village Street View looking east: Warrenton Road (US-17) – After



Figure 9: Falmouth Village Street View – Cambridge Street/Jefferson Davis Highway (US-1) looking south: Before



Figure 10: Falmouth Village Street View – Cambridge Street/Jefferson Davis Highway (US-1) looking south: After

PROPOSED MASTER PLAN STREET SECTIONS

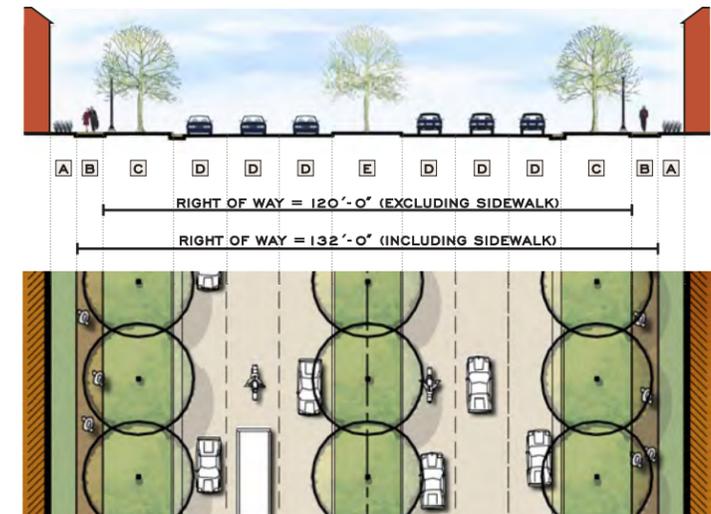


Figure 8: Falmouth Village Street Section & Plan – Cambridge Street/Jefferson Davis Highway (US-1)

A. Browse/Planting/Seating Area	6' – 0"
B. Sidewalk	6' – 0"
C. Landscape Area & Curb	16' – 0"
D. Thru Lane	12' – 0"
E. Raised Median	16' – 0"

RECOMMENDATIONS TO ELEMENTS OF THE COMPREHENSIVE PLAN: INFRASTRUCTURE

CHESAPEAKE BAY PRESERVATION AREA (CBPA) PLAN

There are 2 main locations of CBPAs within Falmouth Village: Along the back of the parcels which front on the west side of Cambridge Street (US-1) and in areas immediately adjacent to the Rappahannock River. The CBPA in this area is completely contained within the FEMA 100-yr Floodplain. Given the restrictions within the floodplain area, the CBPA is naturally protected from disturbance. We recommend that the disturbance within the floodplain be limited as much as possible to help ensure that the CBPAs will not be directly impacted.

CAPITAL IMPROVEMENTS PROGRAM (CIP)

As any upgrades are added under the SWM Protection Plan and Water/Sewer Plan the CIP should be updated with the timing and cost of these improvements.

GROUNDWATER MANAGEMENT PLAN

Falmouth Village is located proximate to the Rappahannock River in addition to being located along the edge of the Coastal Plain Aquifer system, and the Fall Line, which rises up to the Piedmont Area. In an effort to help protect the quality of the ground water in this area, the Planning Team recommends implementation of water quality protections as each area is redeveloped. The Planning Team also recommends that all redevelopment site conform with the Virginia Stormwater Management Permit (VSMP) process even if the site area falls below the thresholds established by the Virginia Department of Conservation and Recreation (DCR).

WATER AND SEWER PLAN

Water System

The Planning Team’s analysis identified no specific water system degradations due to the Core Development Areas. Only minor changes to pipe velocities, headloss, and junction pressures were noted – none of which resulted in the addition of any deficient pipes in the system. No further improvements are recommended.

Sewer Pump Stations

- Falls Run Pump Station**
 LFR-209 expands the Falls Run Pump Station from 9.4 MGD (6,528 gpm) to 15.5 MGD (10,764 gpm). A-217 is planned for design and construction in 2017-2018. (**Note:** The latest model provided to the Planning Team by Stafford County reflects the Pump Station capacity as 3,250 gpm; significantly less than all of the values above. We have used the values referenced in the CIP for the purpose of this analysis.)
 - Ex. flow = 4497 gpm < 6528 gpm
 - Core Development Area flow = 4538 gpm < 6528 gpm
- Conclusion:** A 9.4 Falls Run Pump Station is adequate to handle the increase in flows associated with the Falmouth redevelopment.
- Old Rt. 3 Pump Station**
 After a discussion with County staff, we understand that this Pump Station consists of 2 pumps which combine for a output of 1350 gpm. Present flows to this Pump Station are approximately 1132 gpm. Core Development Area demands are expected to increase the flow to just over 1500 gpm. Accordingly, we recommend that consideration be given to upgrading this pump station. In the short term, there is approximately 218 gpm of capacity available in this Pump Station, which corresponds to being able to handle roughly 60% of the Core Development Area redevelopment density. Based on the CIP cost of comparative Pump Station upgrades/expansions, a rough cost for this work is approximately \$750,000.
- Claiborne Run Pump Station**
 LFR-214 expands the Claiborne Run Creek Pump Station from 8.1 MGD (5625 gpm) to 18 MGD (12,500 gpm) by 2007-2008 and ultimately to 30 MGD (20,833 gpm) by 2025. (**Note:** The latest model provided to the Planning Team by Stafford County reflects the Pump Station capacity as 670 gpm; significantly less than all of the values above. We have used the values referenced in the CIP for the purpose of this analysis.)
 - Ex. Flow = 1,132 gpm < 5,625 gpm
 - Core Development Area flow = 1,175 gpm < 5,625 gpm
- Conclusion:** An 8.1 MGD Falls Run Pump Station is adequate to handle the increase in flows associated with the Falmouth redevelopment. The existence of the 8.1 MGD Pump Station planned needs to be verified as existing or constructed prior to development.

Gravity Sewer

Several sewer pipes in this area appear to be well undersized based on the information provided in the County’s sewer model. Most importantly, a number of these pipes are located in the Falls Run Interceptor. Several of these pipe segments occur along Falls Run at the western edge of the redevelopment boundary. The Southern Gateway recommendations will address this interceptor as the interceptor mainly conveys flows from Southern Gateway into the Falmouth Village area while servicing some of the northern portions of the Falmouth Village redevelopment area.

In addition to the Falls Run Interceptor, outside the Falmouth redevelopment area we note that there are some additional pipes in the downstream sewer outfall. These occur below manhole 68-0106 which is where the 8” forcemain from the Falls Run Pump Station ties into a 10” gravity line. The Planning Team estimates the following upgrades and costs for this segment:

Existing Pipe Size (Inches)	Proposed Pipe Size (Inches)	Total Length (Feet)	Unit Cost (Per Linear Foot)	Total Cost
8"	10"	104'	\$175.00	\$18,200.00
10"	12"	810'	\$200.00	\$162,000.00
12"	15"	323'	\$225.00	\$72,675.00
15"	18"	786'	\$235.00	\$184,710.00

The Planning Team assumes that some of the minor sanitary sewer lines within the redevelopment area will be reconstructed when the uses and new streets come on-line. With this approach, the Planning Team has not highlighted any specific minor sewer improvements within these areas which will likely be re-routed with the redevelopment.

WATER SUPPLY PLAN

There are no specific recommendations for Falmouth Village. The proposed redevelopment is expected to extend the public water supply system within these areas. The public water source reservoirs and storage facilities should be continued to be monitored to ensure the highest quality public water possible. The redevelopment should have a net positive effect on the quality of water supply available to private well sites due to the implementation of additional BMP facilities as well as the replacement of some uses which adversely affect water quality (mainly industrial and some agricultural uses).

RECOMMENDATIONS TO ELEMENTS OF THE COMPREHENSIVE PLAN: TRANSPORTATION

TRANSPORTATION PLAN

As stated above, the proposed revisions to the Plan set forth four objectives for future development in the County. The proposed redevelopment plan for the Falmouth area has been designed to meet the objectives of the Plan. Implementation strategies should be developed in furtherance of the Plan's policies. A discussion of each of the County's transportation objectives, as proposed, relative to Falmouth Village is provided below:

Maintain a safe road system.

The roadway network in Falmouth should be designed and developed to provide a hierarchal system of interconnected streets and to recognize the dual purpose and functionality of Cambridge Street (US-1).

Cambridge Street (US-1) and Warrenton Road (US-17) are the primary arterials through the redevelopment area. Jefferson Davis Highway/Cambridge Street (US-1) is a principal arterial roadway that extends south from the Capital Beltway (I-495) in Fairfax County, through Prince William County to Stafford County and points south. Cambridge Street (US-1) through Falmouth Village is constructed as a four-lane, undivided, curb-and-gutter roadway with a posted speed limit of 35 mph.

Warrenton Road (US-17) is a principal arterial roadway that runs northwest-southeast between Warrenton and Fredericksburg. Through the redevelopment area, Warrenton Road (US-17) is constructed as a four-lane, divided roadway with a posted speed limit of 45 mph.

In order to manage increased congestion in the future, the County should work with VDOT in developing a comprehensive access management plan for both of these critical corridors. Full movement intersections should be located in general accordance with VDOT's access management standards and should be consistent with the planned interchange.

County staff has stated that a major objective of the Falmouth Village redevelopment plan is to revitalize the Rappahannock River waterfront. King Street, which runs parallel to the shoreline, crosses below grade and is accessed via a network of locally oriented streets which currently

experience low traffic volumes. As redevelopment occurs as planned, active trip generating uses may develop along King Street increasing the numbers of trips along these local connecting roadways. In order to maintain the safety of these streets, not only for vehicular travel but also for pedestrian/bicycle travel, a traffic calming strategy plan should be developed to address potential safety concerns. The traffic calming plan should be developed by the County in concert with VDOT to ensure the practicality of implementing such a plan and the potential impacts on roadway/intersection capacity.

Provide & maintain a multi-modal public transit system.

As outlined in the Research and Program Development Report, Fredericksburg Regional Transit (FRED) provides three bus routes that run through Falmouth Village. The D1, D2 and D5 bus routes currently travel through the village to various parts of the County. No bus stops were observed in the village proper. As the area develops, bus service with stops should be provided in order to reduce single occupant vehicle trips to/from the area. The County should request future developers to commit to transportation demand management programs with the goal of further reducing single occupant vehicle trips through incentivizing car/van pools, bus usage, flex schedules, etc.

Land use controls can be used to create environments that are peaceful between pedestrians and automobiles. Certain automobile oriented uses, such as service stations, drive-in banks etc, are more appropriately located outside the "core" area, which is generally considered to be the intersection of Cambridge Street (US-1) and Warrenton Road (US-17). The County should consider designating a highway corridor overlay district along both Cambridge Street (US-1) and Warrenton Road (US-17) in this area which would regulate access to/from such uses. Driveways to such uses should also be located outside major pedestrian corridors.

Create a system of sidewalks, bike paths, and trails to provide non-motorized transportation alternatives.

Sidewalks should be provided along both sides of all streets in order to foster and encourage walking and biking. Additionally, pedestrian and bike connections should be provided between commercial/residential uses and the planned regional trail network (Belmont-Ferry Farm) with an emphasis on providing a safe non-vehicular connection to/from the adjacent City of Fredericksburg across the Rappahannock River.

Create better patterns of traffic flow and circulation.

The proposed redevelopment plan for Falmouth reflects, in concept, an interconnected grid of streets with the planned Warrenton Road

(US-17) and Cambridge Street (US-1) interchange in the approximate center. Stafford County should plan ahead by stipulating maximum block lengths and perimeters in their codes and designating vital public street connections that must be made as the land develops. The development of secondary or parallel streets along highways can also help in meeting community-wide transportation needs. Where public street connections are not practical, local codes should require the development of bicycle and pedestrian connections and internal private streets that mimic public streets and meet the block standard.

Warrenton Road (US-17) is a principal arterial roadway that runs northwest-southeast between Warrenton and Fredericksburg. Through the redevelopment area, Warrenton Road (US-17) is constructed as a four-lane, divided roadway with a posted speed limit of 45 mph.

In order to manage increased congestion in the future, the County should work with VDOT in developing a comprehensive access management plan for both of these critical corridors. Full movement intersections should be located in general accordance with VDOT's access management standards and should be consistent with the planned interchange.

Current Planned Network

The current Stafford County Transportation Plan (June 7, 2005) makes certain recommendations for the roadways within the Falmouth Village redevelopment area. These recommendations are summarized as follows:

- Upgrade Cambridge Street (US-1) to a six-lane, divided facility.
- Upgrade Forbes Street (VA-627) to a standard two-lane facility.
- Upgrade Truslow Road (VA-652) to a standard two-lane facility.
- Upgrade Butler Road (VA-218) to a four-lane, undivided facility between Cambridge Street (US-1) and Chatham Heights Road.

Based on this preliminary assessment, the above recommendations should be retained to best accommodate the planned interchange at Cambridge Street (US-1) and Warrenton Road (US-17). However, and as stated above, this assessment recommends the County designate a highway corridor overlay district for the segments of Cambridge Street (US-1) and Warrenton Road (US-17) within the redevelopment area. An access management plan should also be developed for these roadways to establish and regulate future points of access for intersections and private driveways. Finally, a traffic calming plan should be established for critical intersections proximate to the King Street waterfront to promote driver safety and regulate potential increases in vehicle trips as a result of future redevelopment.

CORE DEVELOPMENT AREA

RATIONALE FOR DEFINING THIS AREA AS THE CORE DEVELOPMENT AREA

The proposed Falmouth Village Master Plan illustrates future redevelopment and incorporates the preservation of historic properties. The historic boundaries of Clearview, Belmont, and Carlton Estates are preserved. The Local Historic District Boundary presented does not include all local streets. “Contributory” streets such as Washington Street, West Cambridge Street, Gordon Street, King Street, River Road, and Spartan Lane are preserved under the proposed master plan, and while the plan shows a change in the configuration of Forbes Street (VA-627), the reasons are to allow more redevelopment potential and in response to the dead ended streets that will result from the reconfiguration of the Warrenton Road (US-17) and Cambridge Street/Jefferson Davis Highway (US-1) raised intersection. With the advent of VDOT’s “interchange intersection” Falmouth Village will not have a village center. It will just be a series of buildings and existing streets, many of them dead ended. The master plan’s overriding goal is to create a village center. The initial phase of redevelopment is just outside the area that will be affected by the highway reconfiguration – based on the concept layout provided by VDOT. However, if the streetscape improvements are done along Cambridge Street/Jefferson Davis Highway (US-1), adjacent to the proposed core and north to Truslow Road (VA-652), it may in itself prompt higher value redevelopment in accordance with the vision of the Master Plan.

The roadway network in Falmouth Village should be designed and developed to provide a hierarchal system of interconnected streets and to recognize the dual purpose and functionality of Cambridge Street/Jefferson Davis Highway (US-1). The master plan depicts such a hierarchy for the redevelopment area. Cambridge Street/Jefferson Davis Highway (US-1) and Warrenton Road (US-17) are the primary arterials through the redevelopment area. To create better patterns of traffic flow and circulation, the proposed redevelopment plan for Falmouth reflects, in concept, an interconnected grid of streets with the planned Warrenton Road (US-17) and Cambridge Street/Jefferson Davis Highway (US-1) interchange in the approximate center. The focus is to provide guidelines for future redevelopment.

As the County is currently in the process of updating their Land Use Plan and subsequent Comprehensive Plan, this proposed master plan for Falmouth Village provides guidelines on how the County may update their density standards. These density standards may require revision in order to implement a plan that has been found in favor by the general public. Currently the proposed plan presents a variety of densities for unique parts of the village.

ACTION PLAN

In order for development to occur in this initial target area, the following initiatives *must* be implemented:

1. The construction of the Warrenton Road (US-17) and Cambridge Street/Jefferson Davis Highway (US-1) interchange must be constructed. With VDOT considering various options, the option that *least* impacts Falmouth Village must be selected. Once that option is decided, the Master Redevelopment Plan should be revisited if the elevated interchange is not used.
2. Create a Form Based Code for the Falmouth Village Area to establish the criteria for redevelopment and achieve the goals and vision for this area. The Form Based Code should address the entire Village area, not just the initial phase. During the development of the Form Based Code, the County planning staff can develop an interim overlay district for this area. This will allow development to not only proceed, but proceed in accordance with the vision & goals established herein.
3. A regional storm water management facility must be provided so that individual small developments can be feasible.
4. Develop a strategic master plan to develop the riverfront as cultural/historical and recreational attractions. Integrated with the Belmont-Ferry Farm Trail, this could provide a unique tourist draw and provide the basis for the sensitive transformation of Falmouth Village.

OTHER KEY ELEMENTS & RECOMMENDATIONS:

- Streetscape improvements to Jefferson Davis Highway (US-1) from Warrenton Road (US-17) to the Truslow Road (VA-652)-Clearview Avenue intersection.
- Streetscape improvements to Warrenton Road (US-17) from Interstate 95 (I-95) to Jefferson Davis Highway (US-1) should as first priority provide landscaped edges and medians, pedestrian sidewalks, bike paths, and street lighting. As a secondary priority, the electric utilities should be located underground.
- Develop a signage ordinance for Falmouth and Warrenton Road (US-17) that eventually will eliminate tall pylon signs.
- Provide a better wayfinding system for Falmouth.
- Plan and develop the Ferry Farm Trail.
- Plan and develop the Rappahannock River overlook.
- Establish a program that encourages a sensitive renovation of Buildings in the Historic Falmouth Village as guesthouses, stores or galleries.
 - ◆ Provide guidance and support for obtaining historic tax credits.
 - ◆ Provide County tax incentives for property owners renovating their properties within defined criteria

- Establish small business support programs and financial assistance to Falmouth Village businesses.
- Using the information from future archeological studies, create displays and signage along relevant points of the Belmont-Ferry Farm Trail and throughout the Village.
- Prior to any development in the historic Falmouth Village perform a Phase I Archeological Survey of all vacant lots to collect artifacts, and information of past structures.
- In order to manage increased congestion in the future, Stafford County should work with VDOT in developing a comprehensive access management plan for both of these critical corridors. Full movement intersections should be located in general accordance with VDOT’s access management standards and should be consistent with the planned interchange. As of the time of this writing, the clover-like interchange project as shown in the Master Plan is a likely option being considered by VDOT. Any future development must be planned to support the district’s historic significance and comply with environmental restrictions.
- Coordinate new development with Stafford Architectural Review Board and Stafford County Historical Commission
- Disturbance within the floodplain should be limited as much as possible to help ensure that the CBPAs will not be directly impacted.
- Implementation of water quality protections as each area is redeveloped in Falmouth Village is recommended.
- Redevelopment of the riverfront area should conform with the Virginia Stormwater Management Permit (VSMP) process even if the site area falls below the thresholds established by the Virginia Department of Conservation and Recreation (DCR).
- Future redevelopment (beyond the Core Development Area) demands are expected to increase the flow to Old Rt. 3 sewer pump station. Consideration should be given to upgrading this pump station.
- Identify potential locations for pedestrian crossings; begin feasible pedestrian improvements in conjunction with early roadway or development initiatives.

CORE DEVELOPMENT AREA: FINANCIAL FEASIBILITY

The Core Area redevelopment program for the Falmouth Redevelopment Area included 114,000 square feet of gross building area on 6.8 acres, including 16,000 square feet of office space, 35,000 square feet of retail, and 63,000 square feet of multifamily residential space (57 units). ERA used the efficiency rates to arrive at a net rentable square footage for each of these uses.

Table 10: Falmouth Village Core Development Area Program Assumptions

Redevelopment Area	Falmouth Village Redevelopment Area						
Site Area (acres)–	6.80						
Does not include Cultural or Civic Uses							
PROGRAM AND PSF COSTS							
		Rooms/ Units	Avg Unit Size	GBA	NRA	Avg Ann'l Abs	Total Parking
Office		n/a	n/a	16,000	13,600	40,000	51
Retail	% of retail						
General Retail	50%	n/a	n/a	17,500	15,750	50,000	70
Restaurant	50%	n/a	n/a	17,500	15,750	10,000	70
Residential	% of mf						
Rental Apartments	10%	6	1,050	6,300	5,985	100	19
Condominiums	90%	51	1,050	56,700	53,865	100	169
Total				114,000	104,950		379
LAND & INFRASTRUCTURE COSTS							
Horizontal							
Site Improvements	\$250,000 Per Acre						
Demolition Costs	\$194,400 Allocated						

Source: CMSS; Economics Research Associates, 2009.

Using this program and the other assumptions discussed earlier, at infrastructure costs of \$250,000 per acre the total development cost would be approximately \$17.5 million, or \$153 per square foot of gross building area. The project IRR would be 18.8%. At a discount rate of 12%, the residual land value of the total development would be approximately \$364,800 per acre.

Table 11: Falmouth Village Core Development Area Residual Land Value Overview

NET PRESENT VALUE ANALYSIS	
NPV of Net Cash Flow	\$18,069,574
NPV of Development Costs	(\$15,589,206)
RESIDUAL LAND VALUE	\$2,480,368
\$PSF of Built Scenario	\$21.76
\$PSF of Developable Land Area	\$8.37
\$Per Acre of Developable Land Area	\$#364,760
Notes: Net Present Value @ 12.0%	

Source: Economics Research Associates, 2009.

Table 12: Summary of Core Development Area Annual and Construction Period Fiscal Benefits

ANNUAL				
Redevelopment Area	Property Tax¹	On-Site Sales & Use Taxes²	Off-Site Sales & Use Taxes²	Total
Boswell's Corner	\$1,027,926	\$1,488,293	\$131,525	\$2,647,745
Courthouse Area	\$1,217,035	\$1,549,669	\$252,716	\$3,019,419
Falmouth Village	\$146,663	\$291,546	\$18,597	\$456,807
Southern Gateway	\$800,238	\$883,460	\$108,387	\$1,792,086
Total	\$3,191,862	\$4,212,969	\$511,225	\$7,916,057
CONSTRUCTION PERIOD				
Redevelopment Area	Construction Materials Sales Tax	Sales & Use Taxes on Construction Worker Spending²		Total
Boswell's Corner	\$477,251	\$92,269		\$569,520
Courthouse Area	\$565,052	\$109,243		\$874,295
Falmouth Village	\$72,725	\$14,060		\$86,785
Southern Gateway	\$383,483	\$74,140		\$457,623
Total	\$1,498,512	\$289,712		\$1,788,224

¹Construction Cost (not including land) is used as a proxy for full market value. Using 2009 Rates, per County website @ \$0.84 per \$100.00 value. It is assumed that all construction construction purchases are made in Stafford as often, jurisdictions charge taxes on materials even if they are purchased elsewhere.

²Includes local retail sales tax of 1%, meals tax of 4%, and hotel tax of 5%, as appropriate.

Source: Stafford County Commissioner of the Revenue; ERA, 2009.

Table 13: Summary of Property Tax Benefits by Redevelopment Area

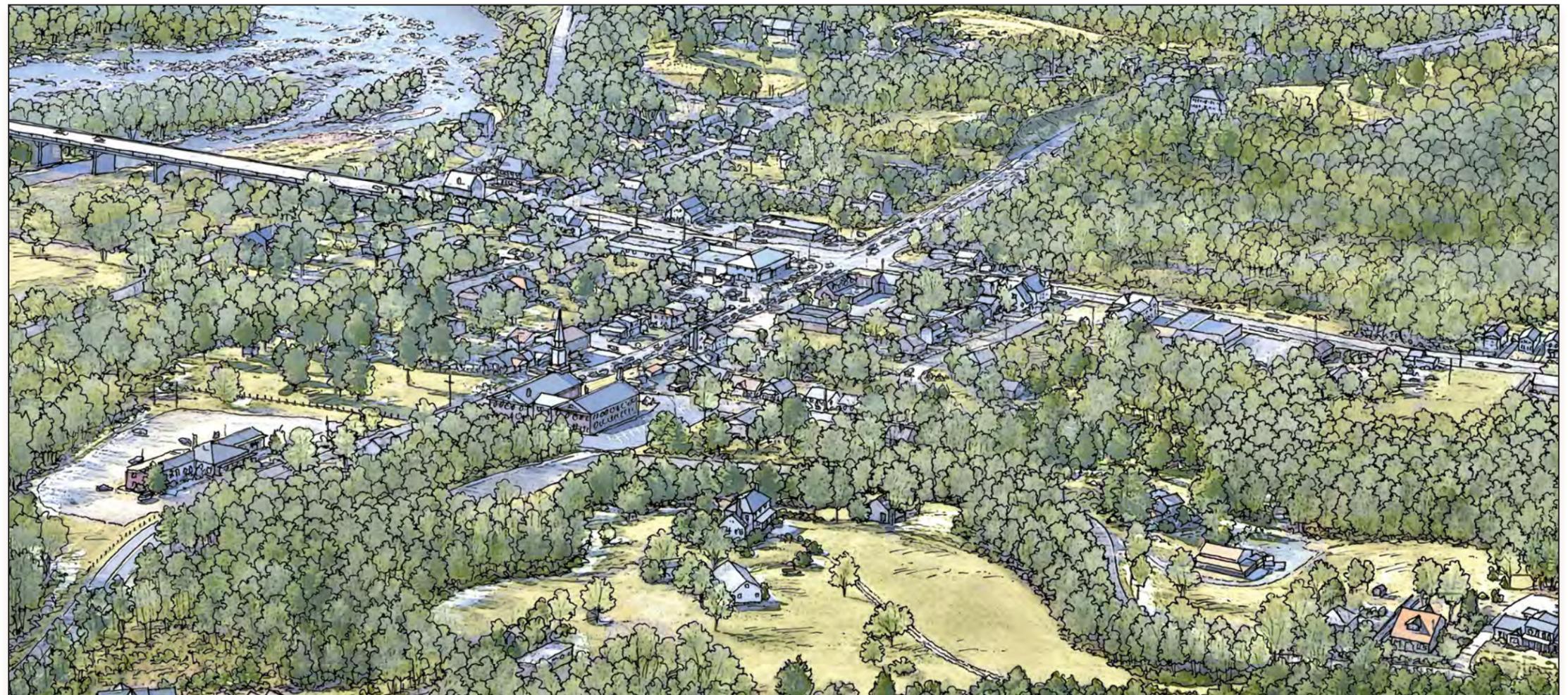
Use	Value¹	County Tax²
Boswell's Corner	\$1,22,372,178	\$1,027,926
Courthouse Area	\$144,885,069	\$1,217,035
Falmouth Village	\$17,459,910	\$146,663
Southern Gateway	\$95,266,451	\$800,238

¹ Construction Cost (not including land) is used as a proxy for full market value

² Using 2009 rates, per County website @ \$0.84 per \$100.00 value.

Source: Stafford County Commissioner of the Revenue; ERA, 2009.

FALMOUTH VILLAGE: APPENDICES



APPENDIX I

RUGBY, TENNESSEE: HERITAGE TOURISM CASE STUDY

Historic Rugby, Tennessee (population 85) is a restored Victorian village in Morgan County founded in 1880 by British author and social reformer Thomas Hughes. His vision was a cooperative, class-free, agricultural community for younger sons of English gentry and others wishing to start life anew in America. At its peak, about 350 people lived in the colony.

Today, more than 20 of the original 60 Victorian buildings remain at the southern edge of the Big South Fork National Park, surrounded by rugged river gorges. Visitors are welcome to attend Sunday services at the 1887 Christ Church Episcopal church and stay in historic lodgings. Many visitors staying in the historic lodgings also use meeting and dining facilities at the visitor center for business and educational symposia.

The founder's Gothic revival cottage is filled with furnishings made by early colonists or brought from England and Cincinnati on the railroad. The Schoolhouse contains exhibits that detail the 125-year history of Rugby, and the Thomas Hughes Library, with a 7,000-volume collection and original furnishings, is unchanged since it opened in 1882.

The town recently completed a new visitor center and theater to welcome the more than 60,000 visitors who come to Rugby each year. Every year in May the town hosts the Historic Rugby Festival of British and Appalachian Culture. Events include music, dancing, storytelling, crafts demonstrations and sales, with more than 100 performers and artisans taking part. A bi-annual Pilgrimage of Rugby Homes has been held for more than 40 years, and Christmas at Historic Rugby is in its 20th year.

Historic Rugby is owned and managed by the Historic Rugby Foundation, a non-profit organization. Historic Rugby is funded by a combination of donations, memberships, rental fees and food services revenue from the visitor center and theater for groups and symposia, and event revenues, as well as an endowment. The foundation also earned income by developing adjacent tracts of land for residential use, primarily for second homes.

APPENDIX II

CULTURAL & HISTORIC RESOURCES: HISTORY, GROWTH, & HISTORIC PRESERVATION OF THE FALMOUTH VILLAGE REDEVELOPMENT AREA

The independent investigation of Falmouth Village and the other redevelopment areas has derived a collection of architectural and archeological significant properties. Some properties are part of the National Registry of Historic Places while others have the potential of being so designated. Three separate volumes, compiled by Cultural Resources, Inc., document each of the four redevelopment areas as well as additional references of Cultural Resources Legislation. The following is a list of each volume and what they contain.

- Volume VI: Cultural Resources Report for Falmouth Village
 - A. The history and growth of the redevelopment area.*
 - B. VDHR Forms and Documentation of properties within Falmouth Village.*
- Volume VII: Cultural Resources Report for Boswells Corner, the Courthouse Area, and Southern Gateway
 - A. The history and growth of Boswell's Corner, Courthouse Area, and the Southern Gateway redevelopment areas.*
 - B. VDHR Forms and Documentation of properties within Boswell's Corner, the Courthouse Area, and the Southern Gateway Redevelopment Areas..*
- Volume VIII: Examples of Cultural Resources Legislation
 - Best practices for historic preservation.*

APPENDIX III

FREQUENTLY USED ACRONYMS

ADA	Americans with Disabilities Act	FRED	Fredericksburg Regional Transit	TIF	Tax Increment Financing
ADR	Average Daily Rate	FY	Fiscal Year	TND	Traditional Neighborhood Development
BRAC	Base closure And Realignment Commission	GDP	Generalized Development Plan	UDA	Urban Development Area
BMP	Best Managed Practice	GIS	Geographical Information System	USA	Urban Service Area
CBPA	Chesapeake Bay Protection Area	HABS	Historic American Building Survey	USD	Urban Service District
CIP	Capital Improvement Program	LOMR	Letter of Map Revision	VATC	Virginia Tourism Corporation
CLRP	Constrained Long Range Plan	LOS	Level of Service	v/c	Volume to Capacity
CRPA	Critical Resource Protection Area	LRMA	Land Resource Management Area	VDCR	Virginia Department of Conservation & Recreation
EIS	Environmental Impact Statement	MRIS	Metropolitan Regional Information Systems	VDHR	Virginia Department of Historic Resources
EMS	Emergency Medical Service	NRHP	National Register of Historic Places	VDOT	Virginia Department of Transportation
E&S	Erosion & Sediment	PRV	Pressure Reducing Valve	VSMP	Virginia Stormwater Management Permit
FAMPO	Fredericksburg Area Metropolitan Planning Organization	PUD	Planned Urban Development	VEC	Virginia Employment Commission
FAR	Floor Area Ratio	SWM	Storm Water Management	VRE	Virginia Railway Express
FEMA	Federal Emergency Management Agency	SWOT	Strengths, Weaknesses, Oppotunities, & Threats	WHPP	Wildlife Habitat Protection Plan
FIRE	Finance, Insurance, & Real Estate	TAZ	Traffic Analysis Zone	WIA	Workforce Investment Area

APPENDIX IV

RESEARCH & PROGRAM DEVELOPMENT BIBLIOGRAPHY

EDA Annual Economic Report (2007 & 2008)

*Economic Development Authority,
Stafford, Virginia.*

Volumes VI-VIII (2008)

Cultural Resources, Inc.
Fredericksburg, Virginia.

Base Alignment and Closure (BRAC) (2005)

United States Marine Corps
Washington, DC.

Best Place to Get Ahead (2008)

Forbes.com.

Bicycle / Pedestrian Facility Plan (1996)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Capital Improvement Program (2007)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Chesapeake Bay Preservation Area Plan (2001)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Comprehensive Water Supply Study (1991)

*Element of the Comprehensive Plan
Obrien & Gere, Virginia.*

Cultural Resources Plan (2007)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Design & Construction Standards (2005)

Stafford County, Virginia.

The Stafford Comprehensive Plan (2007)

*A Sustainable Future
Peter J. Smith & Company
Buffalo, New York.*

Economic Development Plan (1994)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Economic Development Plan (2006)

*Element of the Comprehensive Plan
Basile Baumann Prost & Associates, Inc.
Annapolis, Maryland.*

Existing Condition Analysis (2008)

Urban Ltd.
Chantilly, Virginia.

Falmouth RMP (2008)

Cultural Resources, Inc.
Fredericksburg, Virginia.

Final Environmental Impact Statement (2007)

*Westside Marine Base Quantico
United States Marine Corps
Washington, DC.*

Stafford Focus (2005-2008)

*Economic Development Authority
Stafford, Virginia.*

Groundwater Management Plan (2004)

*Element of the Comprehensive Plan
Draper Aden Associates
Charlottesville, Virginia.*

Land Use Plan (2003)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Parks & Open Space (1989)

*Element of the Comprehensive Plan
Rhodeside Harewell & Economic Research
Associates
Alexandria, Virginia & Washington, DC.*

Master Water and Sewer Plan (1992)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Public Safety Plan (1993)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Shaping a Master Plan (2007)

Cunningham & Quill Archit
Washington, DC.

Shoreline Area Management Plan (1990)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Stafford County Master Redevelopment Plan (2008)

CMSS Architects, PC
Virginia Beach, Virginia

Economic Research Associates
Washington, DC

Urban Ltd.
Chantilly, Virginia

Wells + Associates
Manassas, Virginia.

Stormwater Management Plan (1993)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Subdivision Regulations (2007)

Municipal Code Corporation
Tallahassee, Florida.

Telecommunication Plan (2002)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

The Falmouth Plan (2002)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Three Area RMA (2008)

Cultural Resources Inc.
Fredericksburg, Virginia.

Transportation Plan (1995)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Widewater Area Plan (1994)

*Element of the Comprehensive Plan
Stafford County, Virginia.*

Wildlife Habitat Protection Plan (2000)

*Element of the Comprehensive Plan
Virginia Department of Forestry
Charlottesville, Virginia.*

Zoning Ordinance (2007)

Municipal Code Corporation
Tallahassee, Florida.

APPENDIX V

FALMOUTH VILLAGE & SOUTHERN GATEWAY PUBLIC WORKSHOP #1

On February 2, 2009, the County of Stafford and its Planning Team, led by CMSS Architects, conducted a public workshop for the Falmouth Village and Southern Gateway portion of the Stafford County Master Redevelopment Plan. This workshop was a formal presentation, planning process, and activities that sought to obtain public input on the future of the area. The following report documents the workshop process and the results from the public input surveys.

The workshop was held at the Gari Melchers Home and Studio at Belmont in Falmouth Village on Monday, February 2, 2009, from 6:30 pm till 8:30 pm.

PUBLIC WORKSHOP #1 AGENDA

1. Introduction by Brad Johnson, Redevelopment Director
2. CMSS team presentation (PowerPoint)
 - a. Introduction of the Planning Team.
 - b. Brief description of the Falmouth Village & Southern Gateway Redevelopment Areas.
 - c. Recap on the “Vision” plan from 2006 (C&Q)
 - d. Explanation of Planning Process; Consultant’s Findings (Cultural, Market-Economic, Infrastructure & Transportation issues).
 - e. Planning Process and Public Input;
 - i. Master Redevelopment Plan: building upon the “Vision” Plans
 - ii. Project phases
 - f. Public Participation / Emphasis on the importance of Public Input
 - i. Recap on Public Forums: public input/citizens concerns
 - ii. Public participation vital to the success of the master plan
3. Hands-On activities, encouraging discussion/input
 - a. After discussion and review of the above-mentioned surveys each table’s representative will present conclusions and comments for review.
 - i. The attendees were asked to place red, blue, and green dots on maps.
 - b. The attendees were given a short questionnaire to fill in.
 - c. The attendees were given a Visual Preference survey to fill in.
4. End of Falmouth Village & Southern Gateway Public Workshop.

PUBLIC WORKSHOP #1 ACTIVITIES

A total of thirty-four (34) people attended the Falmouth Village and Southern Gateway Public Workshop, not including the Planning Team, County Staff and members of the Board of Supervisors. After the introductory presentation, the public was free to move among the tables, boards, maps and participate in the activities conducted at them. Many people stayed around the table moderators to inform the planning team of the various issues they would like to see addressed. Others placed dots on the maps to bring attention to specific sites, identifying strengths, opportunities and weaknesses in the area. Public comments are found at the bottom of each map, in reference to numbers as indicated on the map.

Dot Maps

Three maps were mounted on a wall so residents and stakeholders would identify and highlight three specific criteria. A moderator from the planning team was close by to encourage attendees to place color dots on the three maps as follows;

- Red dots — Challenges
- Blue dots — Strengths
- Green dots — Opportunities

Note on maps and comments

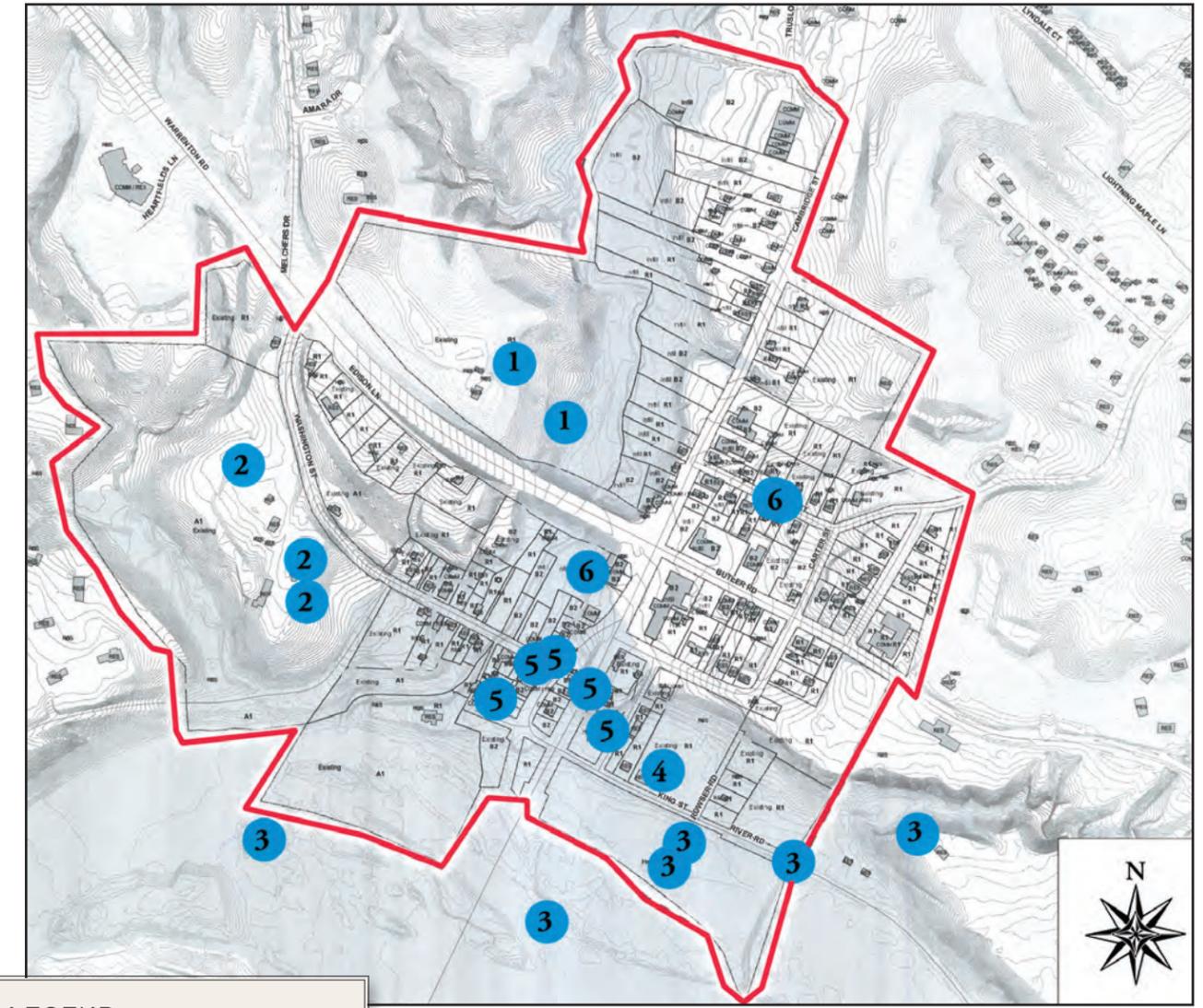
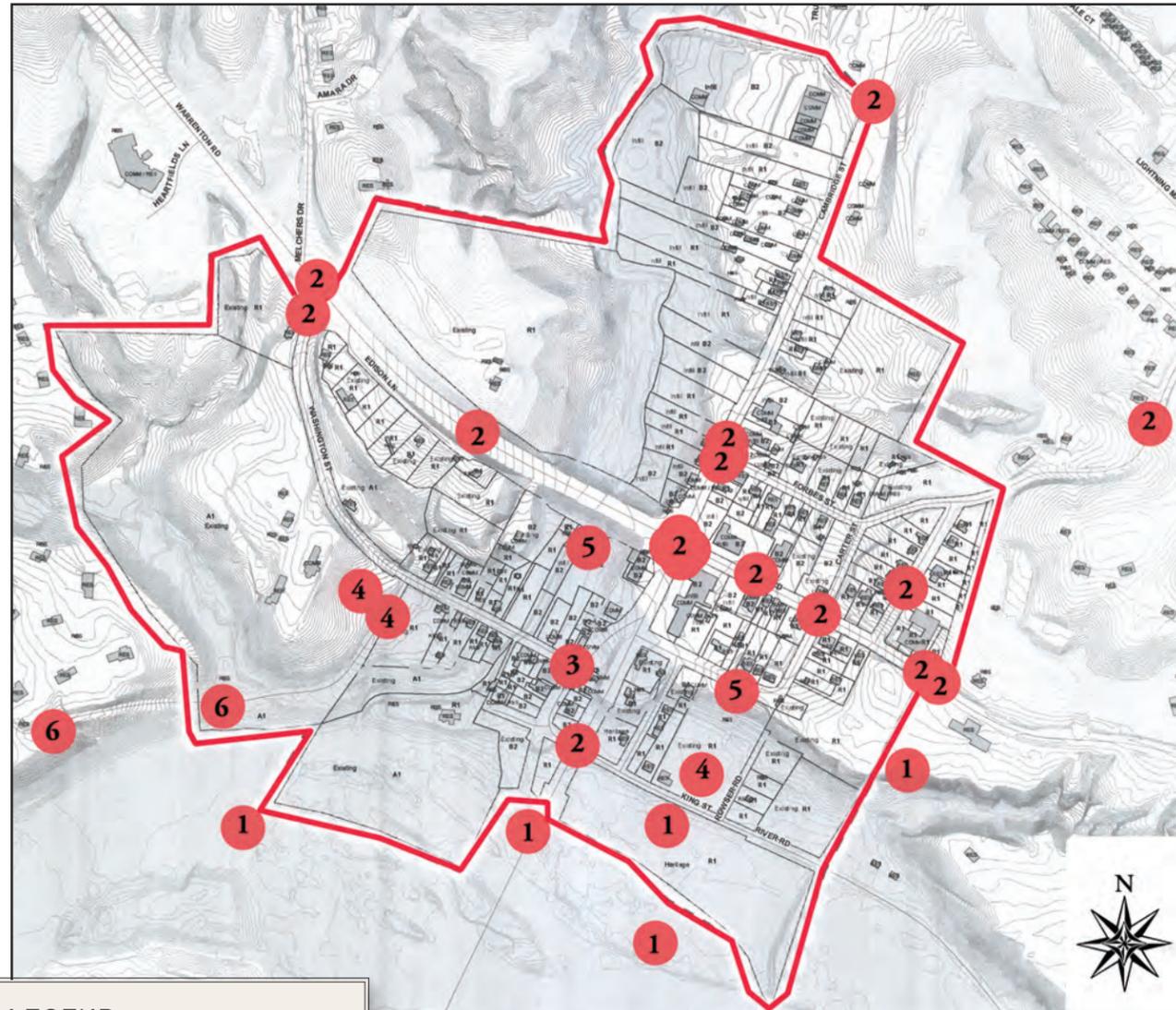
- ◆ Each table utilized independent numbering system, and marked up on maps separately
- ◆ Numbering system was consolidated and simplified for consistency purpose
- ◆ Mark-ups and notes were also combined to ensure uniformity and coalescent repetition

General Comments

- ◆ County should be involved in paying for road, storm water and grading, pedestrian connectivity.
- ◆ Steep slopes – potential for trails – utility corridor use for trails
- ◆ River as a resource – outdoor markets, ecotourism
- ◆ Road widening impacts on existing buildings, need traffic calming
- ◆ Compatible architecture to historic district
- ◆ Redevelopment to a mixed-use development
- ◆ Add bicycle lane, sidewalks, median with trees, and bypass road from the Corridor to 17 Regional storm water ponds, stream restoration, education regarding erosion & storm water
- ◆ Mass transit opportunities , connection to Leeland Station, buses, etc., restrict truck traffic to certain hours to aid in traffic calming
- ◆ Riverfront – environmental opportunities in conjunction with existing parks, outdoor markets, ecotourism
- ◆ Zoning regulations, overlay district, buffering, setbacks, Open space

FALMOUTH VILLAGE — CHALLENGES

FALMOUTH VILLAGE — STRENGTHS



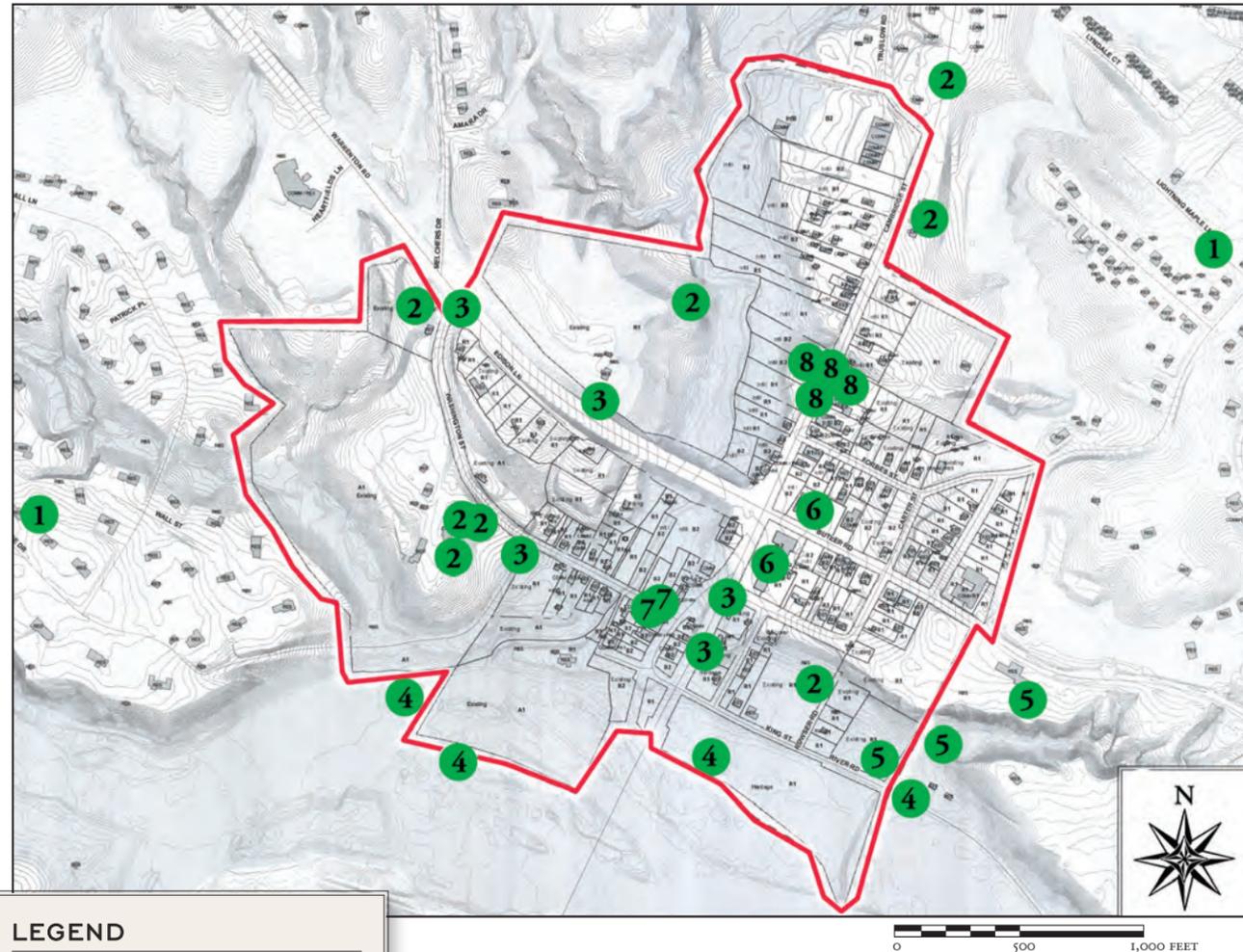
LEGEND

- 1 Rappahannock River, view shed, steep slopes
- 2 Traffic congestions, gateways, access
- 3 Flooding, steep slopes, old homes
- 4 Historic property, (Belmont and Underground Railroad)
- 5 Underutilized commercial, access, grids
- 6 Cut through traffic

LEGEND

- 1 Clearview Estate & Carlton Estate
- 2 Belmont Estate
- 3 Rappahannock River
- 4 Underground Railroad
- 5 Falmouth Village
- 6 Existing commercial

FALMOUTH VILLAGE — OPPORTUNITIES



LEGEND

- 1 Protect residential areas outside the redevelopment area (provide access to surrounding residents once redevelopment occurs)
- 2 Historic properties, NRHP and non-NRHP
- 3 Potential traffic improvements
- 4 Rappahannock River
- 5 Potential trail, open space, parks
- 6 Potential redevelopments, quadrants
- 7 Flood prevention, traffic reduction
- 8 Potential redevelopment of old commercial properties

PUBLIC INPUT SURVEY QUESTIONNAIRES

Each person was also asked to fill out two survey questionnaires. The first survey contained general questions that encouraged public to write anything and everything, while the second used a numeric value as answers to specific topics. Both surveys were consolidated into a table and graph respectively.

Notes on Survey Questionnaires

- ◆ 34 people attended the workshop
- ◆ 25 submitted questionnaire surveys
- ◆ Many questionnaire surveys submissions were repetitive
- ◆ The following are all the individual findings (repeated answers have been consolidated)

PUBLIC INPUT SURVEY QUESTIONNAIRE 1: QUALITATIVE ANALYSIS

Q: What neighborhood do you live in?

- A: Clearview Heights
- A: Hartwood
- A: Blythedale
- A: Falmouth
- A: Cardinal Forest
- A: Basil Gordon
- A: Sanford Drive (VA-670)
- A: Butler Road (VA-218)

Q: Should Falmouth Village and Southern Gateway be combined?

- A: No (13)
- A: Yes (11)
- A: Undecided (2)

Q: If Falmouth Village and Southern Gateway were to be combined, what should the boundaries be?

- A: South – out to Chatham
- A: North – Creek; South – River
- A: North – Centerport; South – River
- A: North – Interstate 95 (I-95)
- A: North – England Run; South – River
- A: North – England Run; South – Cambridge Street (US-1)
- A: North– Brea Church; South – Butler Road (VA-218)
- A: North – Airport; South – River
- A: As is

Q: What do you like most about Falmouth Village?

- A: Its history
- A: Charm
- A: Opportunity for a Pedestrian Village
- A: Village Atmosphere
- A: Peaceful Village
- A: Old Town look and feel
- A: Ability to walk to shops
- A: Close to the City
- A: Leave it like it is
- A: Nothing
- A: Potential
- A: Services Available

Q: What do you dislike most about Falmouth Village?

- A: Flooding: the river needs to be dredged
- A: Transportation
- A: Traffic
- A: Interstate 95 (I-95) & Warrenton Road (US-17) Interchange
- A: Not enough parking
- A: Nothing
- A: Everything, nobody visits Falmouth
- A: It is lost in a hole

Q: What do you like most about Southern Gateway?

- A: Location
- A: Potential for improvement
- A: Income from tourist
- A: Like to see it go out away from Falmouth
- A: Nothing
- A: Take traffic off Warrenton Road (US-17)
- A: Shopping

Q: What do you dislike the most about Southern Gateway?

- A: Traffic
- A: Transportation
- A: Taken of Old home

A: Too Commercial

A: Turning into another Route 1 [Jefferson Davis Highway (US-1)]

A: Lack of open spaces

A: Overdeveloped

Q: What do you feel is the greatest asset(s) in the areas?

- A: Tourism
- A: History
- A: Location
- A: Interstate 95 (I-95) & Warrenton Road (US-17) Interchange
- A: The older homes
- A: Job opportunities
- A: Quick access to surrounding areas
- A: Geico
- A: Open spaces
- A: Belmont

Q: What do you feel is the biggest challenge(s) in the areas?

- A: Transportation
- A: Better planning
- A: Build parks, trails and access to River
- A: Run down businesses
- A: Traffic Control
- A: Road infrastructure
- A: Zoning
- A: Change of elected officials
- A: Truck traffic
- A: A miracle to unravel this web
- A: Funding for transportation
- A: Growing too fast
- A: Water/Sewer
- A: Unwanted new ideas
- A: Convincing people that it will work
- A: The people

Q: What do you see happening to these areas in the future?

- A: Growth

- A: Beautiful buffered gateway
- A: Architecture to enhance history
- A: Adding Businesses and Housing
- A: Constrictions on property rights
- A: Less traffic
- A: Will become more congested
- A: Nothing
- A: Tourism Development
- A: A lot of empty buildings

Q: *What Land Uses do you want to see occur in these areas?*

- A: Depends on the Citizens
- A: Mixed-use/Traditional Neighborhood Development/Hospitality
- A: More Retail and controlled open spaces
- A: More parking
- A: Better use of feeder roads
- A: New parks or recreation centers
- A: Tourism Development
- A: More farms and parks

Q: *What Land Uses do you not want to see occur in the areas?*

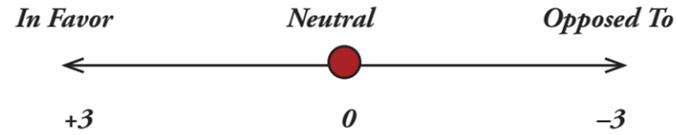
- A: High rise - meaning structures over 75'
- A: Big Box Development
- A: Car Dealers
- A: Special interest taking over
- A: Copy of Prince William or Fairfax Counties
- A: Crowded subdivisions and retail
- A: Losing homes
- A: Fly-over Intersection
- A: Industrial Development

General Comments

- ◆ Need a road to connect Warrenton Road (US-17) at Washington Street
- ◆ Need a road to connect Warrenton Road (US-17) with Centerport
- ◆ Interchange on Interstate 95 (I-95). Need to widen Truslow Road (VA-652)
- ◆ Need other back roads to parallel Warrenton Road (US-17) to allow easier access
- ◆ Access to housing developments
- ◆ Preserve the Mills along the River for parking decks
- ◆ Raised above the river flood plan
- ◆ Shops on top levels
- ◆ These structures are tall and represent culture and historical context of Falmouth
- ◆ Fix the roads before starting a new project
- ◆ Include the people in making plans for the county

PUBLIC INPUT VISUAL PREFERENCE SURVEY

The final survey was purely graphic and measured the public perception on various visual topics for future development. People were asked whether they were in favor of or opposed to certain photographic images of numerous topics. Their input was made quantitative so statistical analysis could be conducted similar to the qualitative analysis as demonstrated with survey questionnaire #2.



Notes on Falmouth Village & Southern Gateway Surveys

- ◆ 34 people attended workshop
- ◆ 24 submitted visual preference surveys

Three calculations were made, in order to eliminate any bias.

- ◆ **Mode:** Number given the most often by the public, max mode 3
- ◆ **Average:** Sum divided by total number surveys returned, max average of 3
- ◆ **Sum:** Total number of results given by the public, 24 surveys returned yielding max sum of 72 – Falmouth Village; 22 surveys returned yielding max sum of 66 – Southern Gateway

Other methods of eliminating bias

- ◆ Non-contextual pictures were included to allow for negative response
- ◆ Similar buildings were included to allow for refined responses

Falmouth Village Visual topics included:

- ◆ Commercial & Mixed-Use Architecture
- ◆ Residential
- ◆ Open Space and Parks
- ◆ Parking
- ◆ Streetscape

Southern Gateway Visual topics included:

- ◆ Mixed-Use Architecture
- ◆ Residential
- ◆ Commercial
- ◆ Open space & parks
- ◆ Parking
- ◆ Streetscape

COMMERCIAL & MIXED-USE IMAGE SAMPLES

Sum	-3
Mode	0
Average	-0.17



Sum	18
Mode	3
Average	1.00



Sum	12
Mode	3
Average	0.67



Sum	24
Mode	3
Average	1.33



Sum	-9
Mode	-3
Average	-0.50

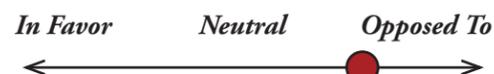
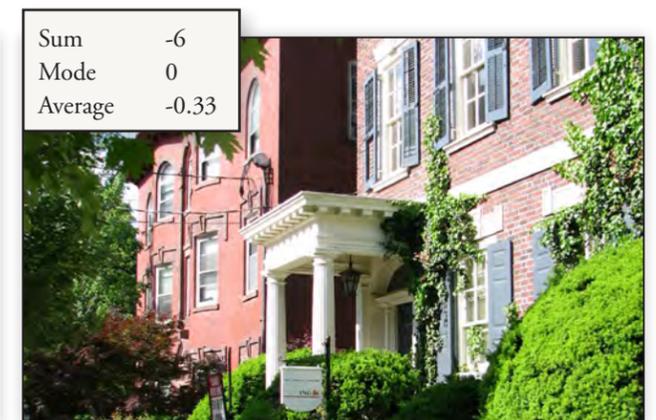
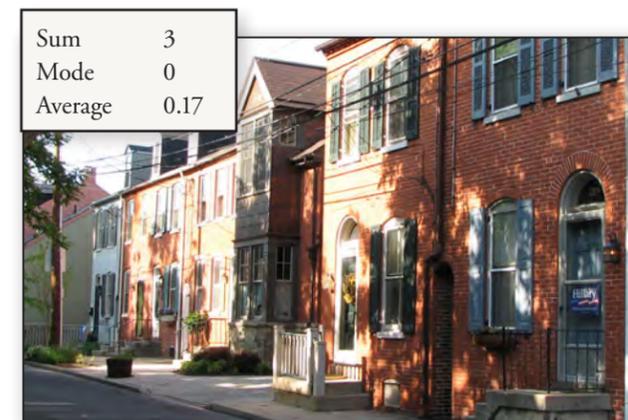
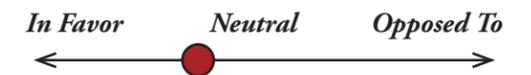
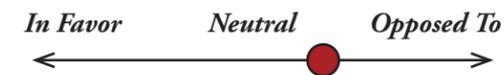
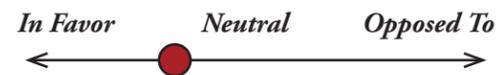
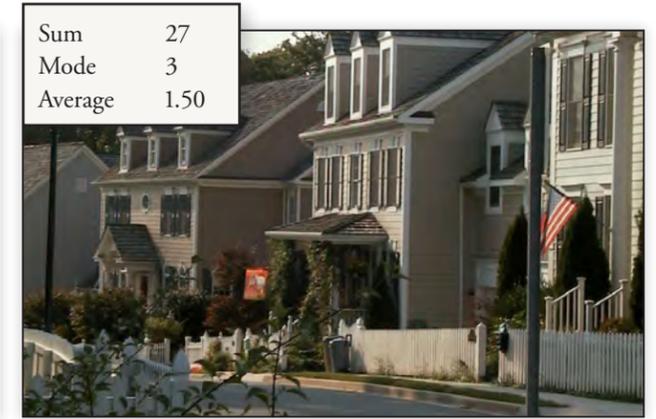
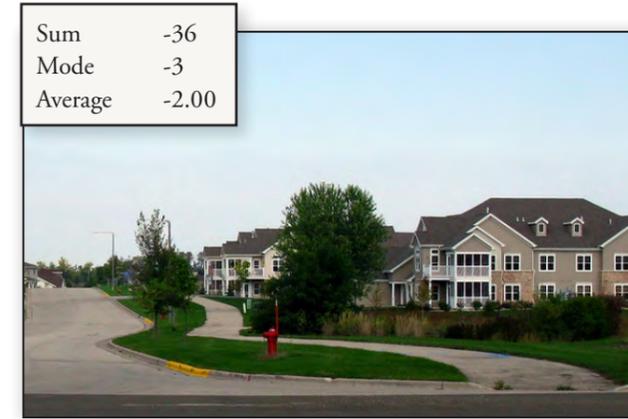
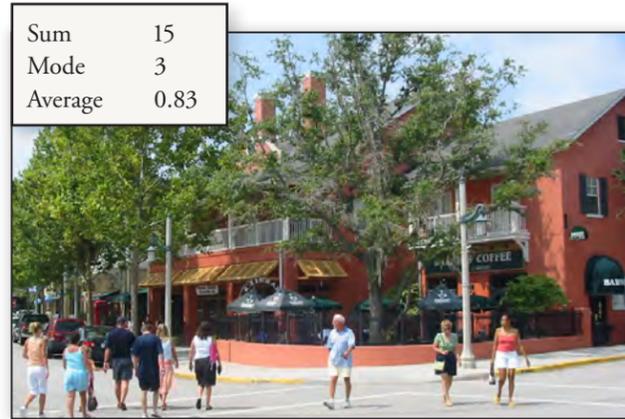


Sum	-54
Mode	-3
Average	-3.00



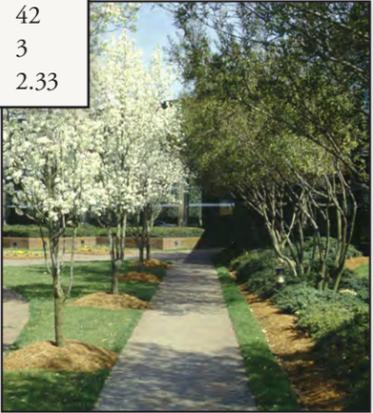
COMMERCIAL & MIXED-USE IMAGE SAMPLES

RESIDENTIAL ARCHITECTURE IMAGE SAMPLES



OPEN SPACE & PARKS IMAGE SAMPLES

Sum	42
Mode	3
Average	2.33



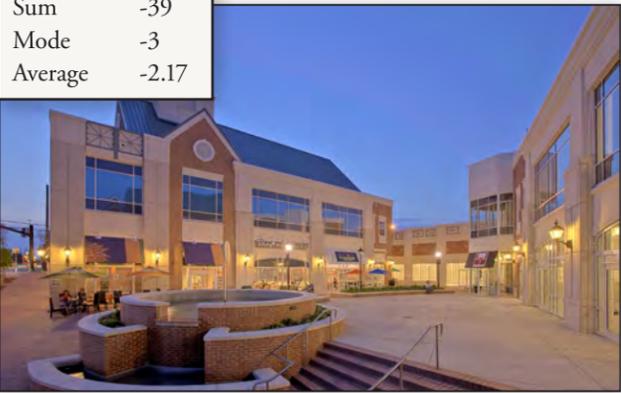
In Favor *Neutral* *Opposed To*

Sum	-36
Mode	-3
Average	-2.00



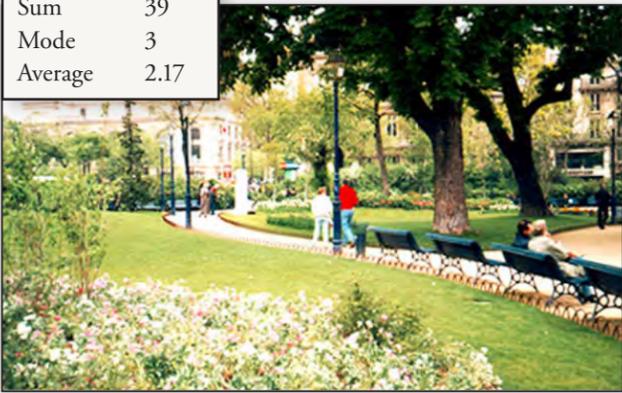
In Favor *Neutral* *Opposed To*

Sum	-39
Mode	-3
Average	-2.17



In Favor *Neutral* *Opposed To*

Sum	39
Mode	3
Average	2.17



In Favor *Neutral* *Opposed To*

Sum	30
Mode	3
Average	1.67



In Favor *Neutral* *Opposed To*

Sum	24
Mode	0
Average	1.33



In Favor *Neutral* *Opposed To*

PARKING IMAGE SAMPLES

Sum	-27
Mode	-3
Average	-1.50



In Favor *Neutral* *Opposed To*

Sum	-12
Mode	0
Average	-0.67



In Favor *Neutral* *Opposed To*

Sum	-27
Mode	-3
Average	-1.50



In Favor *Neutral* *Opposed To*

Sum	-21
Mode	-3
Average	-1.17



In Favor *Neutral* *Opposed To*

Sum	-36
Mode	-3
Average	-2.00



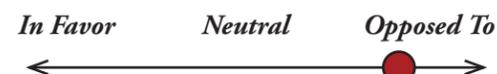
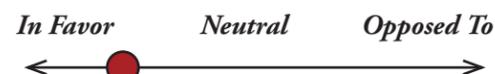
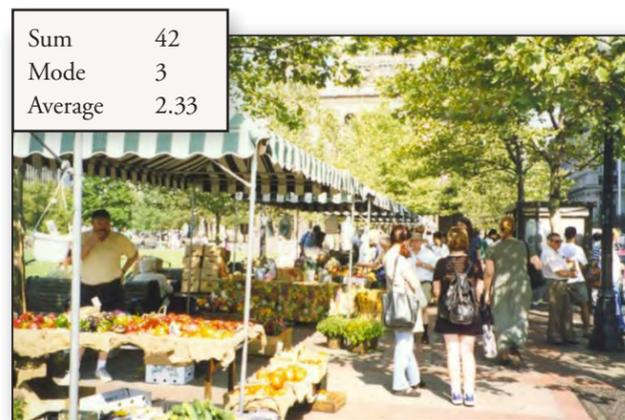
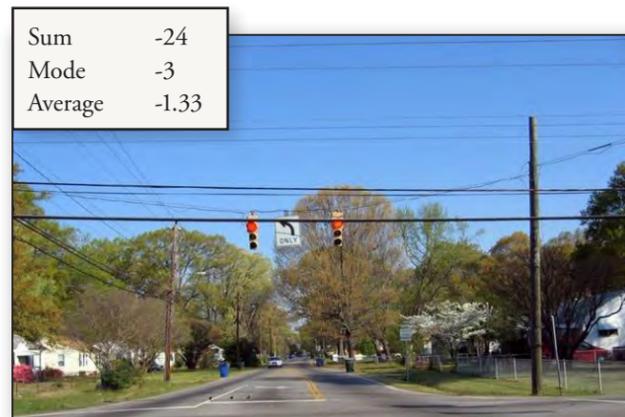
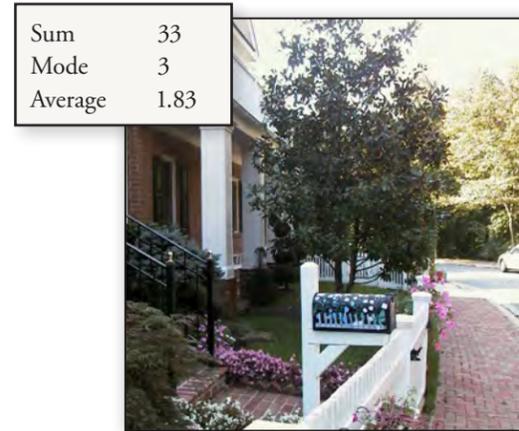
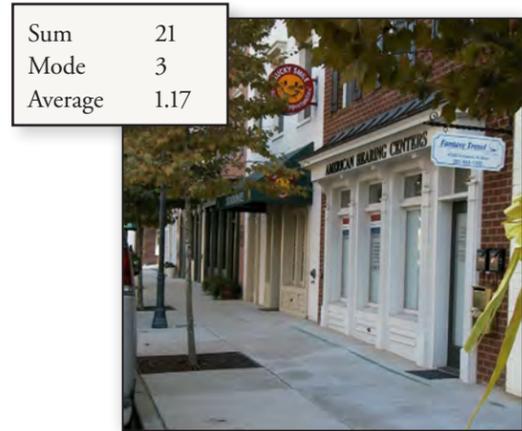
In Favor *Neutral* *Opposed To*

Sum	0
Mode	0
Average	0.00

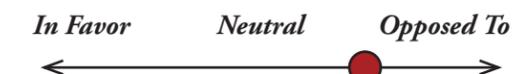
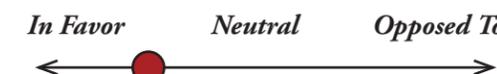
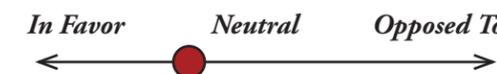
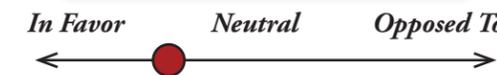
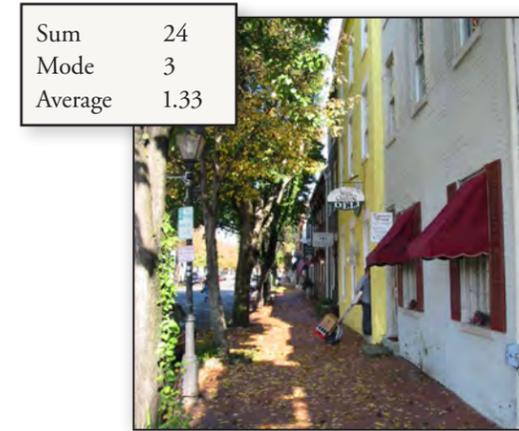


In Favor *Neutral* *Opposed To*

STREETSCAPE IMAGE SAMPLES



STREETSCAPE IMAGE SAMPLES



FALMOUTH VILLAGE & SOUTHERN GATEWAY PUBLIC WORKSHOP #1: CONCLUSION

The final, tangible product of this process is the following comprehensive program. Based on a broad consensus view of the various development challenges, community assets, and potential opportunities as identified by the community and stakeholders, this program establishes community goals, a future role for the area, and, ultimately, a vision of how the area could integrate into the whole of Stafford County that will form the basis for a Master Redevelopment Plan.

As a strategy to re-engineer a growing area of the County on the western side of Warrenton Road (US-17), and a small, historic village with traffic congestion on the eastern side of the same road, the community vision will guide the development of the master plan. For that the planning team needed to hear from the public their opinion on strengths and weaknesses and external conditions – opportunities and/or threats.

The community workshop provided a wealth of input on the future of the Falmouth and Southern Gateway areas and of the Warrenton Road (US-17) corridor that connects them. The following section summarizes those thought and opinions and will provide a valuable framework during the next phase of planning.

Falmouth Village

The public stated that traffic is the main concern and challenge for village residents, especially at the intersection of Jefferson Davis Highway (US-1) and Warrenton Road (US-17). Residents also feel that the fabric of the Village has been damaged. Positive comments included the Rappahannock River, which the community views as a great asset, particularly for its view sheds and recreation potential. Residents are also very aware of the rich historic properties (the modest village historic structures as well as the grander Belmont and Carlton Estates), and the value they bring to the area.

Nevertheless, the community listed the following as serious and continuing concerns related to the future of the district:

- ◆ The public is worried about the potential intersection improvements and the further isolation of its main quadrants should VDOT go ahead with current plans, stressing they would favor a proposal that would by-pass the Village instead.
- ◆ The public feels strongly about the way it could further fracture the Village fabric, as road widening could impact existing buildings, and stressed the need for traffic calming measures.
- ◆ The community is concerned with flooding, steep slopes, traffic congestion, lack of gateways, accessibility issues, and a broken street grid.
- ◆ Residents stated that commercial areas need to be protected while still providing access to surrounding residential areas and fostering development in underutilized commercial properties.
- ◆ Citizens feel that the steep slopes may prove a challenge for redevelopment.
- ◆ The community repeatedly mentioned the lack of an “entrance” from Interstate 95 (I-95) along the Warrenton Road (US-17) corridor, which fails to “announce” the historic destination that is Falmouth.

VISUAL SURVEY RESULTS

Commercial and Mixed-Use Architecture Preference

Most of the public were in favor of smaller-scale, more inviting one- and two-story buildings, with retail and places to eat at street-level and offices or residential “above the shop.” The public was very much opposed to traditional, cold, suburban and commercial architecture.

Residential Architecture Preference

The majority of the public was in favor of two-story town homes with gardens or small green fronts and tree-lined, nicely landscaped sidewalks.

Open Space & Parks Preference

An overwhelming majority was in favor of smaller, nicely landscaped sidewalks, parks and open plazas, and other gathering spaces with lighting and street furniture improvements.

Parking Preference

There was no clear consensus on the specific type but a good half of the public was in favor of on-street parking/landscaped areas.

Streetscape Preference

In general, the public seemed to be in favor of small front gardens and landscaped sidewalks, farmer market-style vendors, and outdoor cafes.

Most of the respondents were in favor of images that had green spaces, brick sidewalks, and smaller-scale buildings.

VISION STATEMENT:

The vision for the Falmouth Village area consists of redevelopment of commercial properties while protecting existing local residences and businesses. The most important improvements include increasing pedestrian connectivity, road and streetscape improvements, bicycle lanes, sidewalks, tree-lined medians, and a bypass road from the Warrenton Road (US-17) Corridor. Mass transit opportunities, convenient access to the local VRE Station, truck traffic restrictions, and traffic calming elements are also viewed as essential. The potential for redevelopment, including old commercial and private historic properties, flood prevention efforts, and traffic reduction, is an attractive prospect. The community wants zoning regulations with an overlay district, buffering and setbacks. Citizens also desire compatible architecture for historic district with well-planned mixed-use redevelopment, open space with riverfront environmental opportunities in conjunction with existing parks, outdoor markets and ecotourism opportunities, including walking/biking trails and a link to the historical trail from Belmont to Ferry Farm, as well as enhancement plans for pedestrian-access improvements along the riverfront. Regional storm water ponds, stream restoration, erosion and storm water education is also seen as a priority.

APPENDIX VI

FALMOUTH VILLAGE & SOUTHERN GATEWAY PUBLIC WORKSHOP #2

On April 24, 2009, Stafford County and the CMSS Planning Team hosted a second public workshop for the Falmouth Village and Southern Gateway redevelopment areas, focusing on the proposed planning efforts for each of these areas. The workshops included a digital presentation of the project background, an analysis of findings and a summary of the previous workshop's preferences as expressed by the residents in each of the redevelopment areas. It also included activities that sought to obtain public input on each area's draft master plan. The following report documents the workshop process and the results from the public input questionnaires.

The workshop was held at Mary Washington College of Graduate and Professional Studies on Thursday, April 24, 2009, from 7:00 p.m. til 9:00 p.m.

PUBLIC WORKSHOP #2 AGENDA

1. Introduction by Brad Johnson, Stafford County Redevelopment Director
2. CMSS Planning Team Digital Presentation
 - a. Review of Resources & Input
 - i. Comprehensive Plan: Land Use Plan
 - ii. Economic Development Report
 - iii. Cunningham + Quill's "Vision" plan from 2006
 - iv. Public Comments & Preferences from the first round of Public Workshops
 1. Community Goals
 2. Vision Statement
 - b. Present Draft Master Plan
 - c. Next Steps
3. Hands-on Activities, encouraging Discussion & Input
 - a. Review Draft Master Plans and Comments
 - b. Respond to Short Questionnaire
4. Conclusion & Summary

PUBLIC WORKSHOP #2 ACTIVITIES

In order to gather public input on the Proposed Master Plan for each area, following the initial presentation at the Falmouth Village & Southern Gateway Workshop, the public was free to participate in the activities conducted at each table. Many people gathered with the table moderators to share with the Planning Team their concerns and the various issues they would like to see addressed. Each table discussed the Proposed Master Plan for each redevelopment area.

Participants placed green dots on the plan to highlight positive comments and red dots to highlight concerns. The public's comments follow, referencing the numbers as indicated on the corresponding maps.

Table Discussion for the Falmouth Village & Southern Gateway Public Workshop included:

- 30"× 36" Black & White existing condition map for both Falmouth Village and Southern Gateway
- A quarter mile radius pedestrian walking circle template
- 30"× 36" Colored Proposed Master Plan depicting landscape, traffic improvements, building and land use proposals for both Falmouth Village and Southern Gateway
- Written questionnaire on general and specific issues of the Proposed Master Plan for both Falmouth Village and Southern Gateway
- Red and Green dots;
 - ◆ Red dots to note important concerns, reservations, and disagreements
 - ◆ Green dots to note agreements, commendations, and positive feedback
- Written comments (provided in *General Notes* section) for both Falmouth Village and Southern Gateway

PUBLIC INPUT & TABLE DISCUSSIONS

Please refer to the *Falmouth Village: Preliminary Master Plan (Buildings Colored by Use)*.

General Notes

- An elderly couple owning two homes said that they will fight any attempt to take their home down. One is located at the Butler Road and Warrenton Road (US-17) intersection, on the path of VDOT's plans, and the other located on Forbes Street where new development is shown.
- A gentleman currently owning property at 107 Carter Street indicated he loved the proposed Master Plan; however, the Plan shows this home as green and open space, but believes the Plan should keep this house as it is a 1793 home undergoing historic renovations.
- It was suggested to implement a stormwater Best Managed Practice (BMP) in the area near the proposed parking lot at south-east corner of Jefferson Davis Highway (US-1) and Warrenton Road (US-17).
- Some residents mentioned the need to have another bridge over the Rappahannock River, as the Jefferson Davis Highway (US-1) bridge currently provides the only exit-access for the area.

MASTER PLAN PUBLIC INPUT

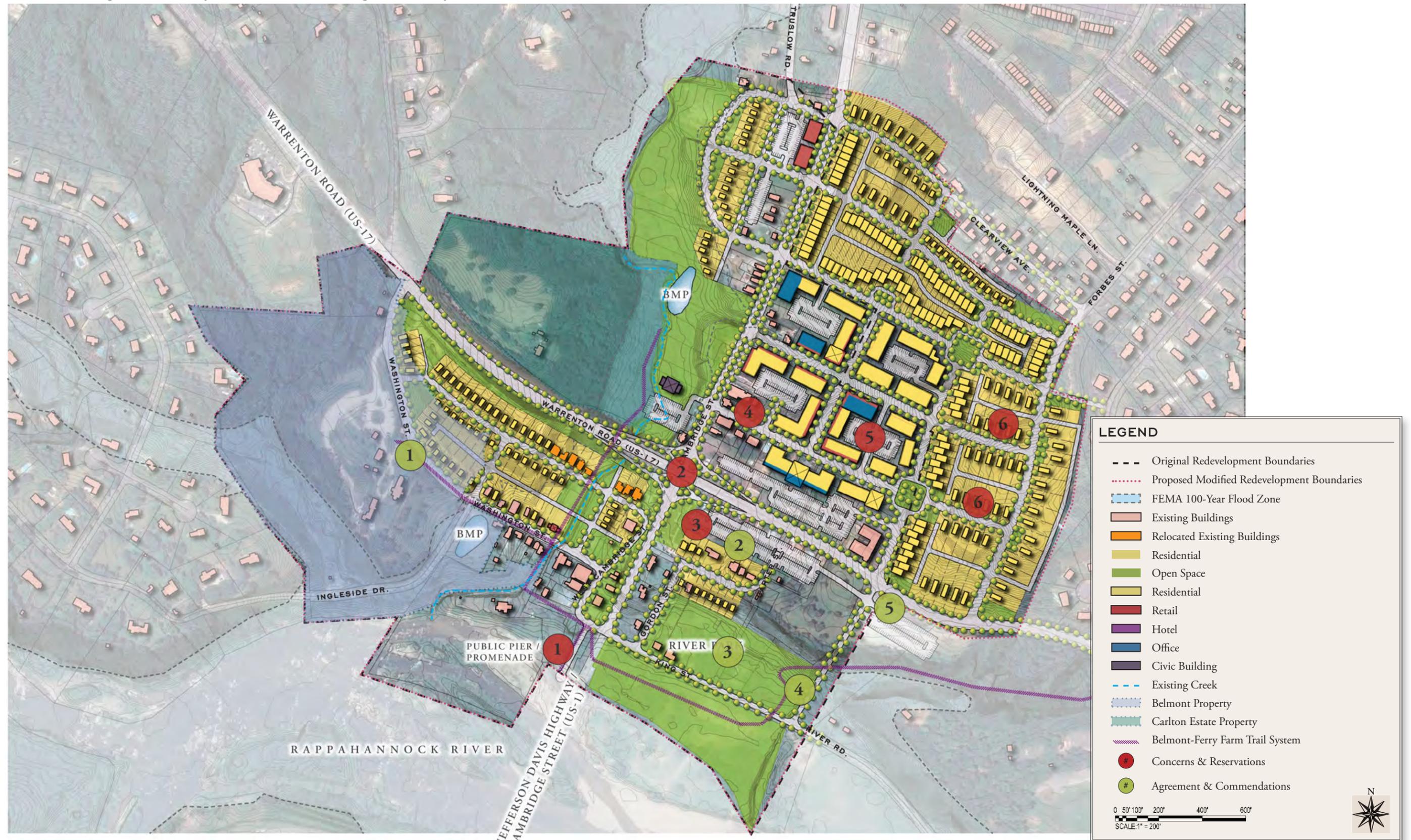
Concerns & Reservations (Red Dots)

1. The proposed pier would need to be well-designed and engineered in order to withstand river flooding; the pier could also exacerbate flood flow and require a detailed flood modeling/study.
2. The proposed interchange will not be sufficient for traffic flow; some believe that traffic will continue to back up, and wonder how the interchange will affect access.
3. Some would like to keep the house located at 107 Carter Street and add a Best Managed Practice (BMP).
4. The bank building at Jefferson Davis Highway (US-1) and Warrenton Road (US-17) is noted for flooding constantly.
5. Too much development may cause even more traffic; there needs to be more open space and preserve the already existing.
6. There will be no more housing north of Warrenton Road (US-17).

Agreement & Commendations (Green Dots)

1. Keep Washington Street (with stone wall on the Belmont Property) as it is historical, but also in order to slow traffic.
2. The public like the proposed homes; they have porches, open space, and a "quaint old town feeling."
3. Several people believed that a river park is a very good idea and one of the only things appropriate for this particular area.
4. The proposed park is an efficient use of resources, as it ties into St. Clair, Brooks Park, and the proposed Belmont-Ferry Farm Trail.
5. People liked the connection of Forbes Street to Butler Road.

Falmouth Village: Preliminary Master Plan (Buildings Colored by Use)



PUBLIC INPUT SURVEY QUESTIONNAIRE: PART 1

Notes about the Falmouth Village Questionnaire:

- ◆ 25 attended
- ◆ 9 surveys returned
- ◆ Repeated comments consolidated

What do you think about the following proposed solutions?

1. Pylon supported bridge for new interchange?

- ◆ “Yes”
- ◆ “It is okay”
- ◆ “Good idea”
- ◆ “Should be beautiful—stone or brick—a traditional look”
- ◆ “It had better be strong”
- ◆ “Not bad, what can be done about area below?”
- ◆ “Better than blocking it”

2. Layout for the Village of Falmouth in the Northeast quadrant of Warrenton Road (US-17) and Jefferson Davis Highway (US-1)?

- ◆ “Looks okay”
- ◆ “Not bad”
- ◆ “It is okay”
- ◆ “Good idea”
- ◆ “Looking wonderful!”
- ◆ “Too dense, we need open space there”
- ◆ “Need to rethink about the roads”

3. Layout for highlighting the more historic structures on the riverfront?

- ◆ “Good”
- ◆ “Okay”
- ◆ “Yes!”
- ◆ “Did not see it”
- ◆ “Good but perhaps needs to tie into the more historic areas in Fredericksburg”
- ◆ “There are other historic homes beside the river front”
- ◆ “What about upper Falmouth area and floodplain? (since the dam has been removed)”

4. The riverfront nature trail under Warrenton Road (US-17), extending the Belmont-Ferry Farm Trail?

- ◆ “Good” (2 times)

- ◆ “Yes”
- ◆ “Not bad”
- ◆ “Great”
- ◆ “Very good, will there be bike as well as pedestrian trails?”

5. Parking and landscape improvements?

- ◆ “Okay”
- ◆ “Good” (3 times)
- ◆ “Yes”
- ◆ “Great”
- ◆ “Happy to have parking located so close to home”

6. Streetscape improvements to Warrenton Road (US-17) from Interstate 95 (I-95) to Falmouth Village?

- ◆ “Good” (2 times)
- ◆ “Yes”
- ◆ “Wonderful!”
- ◆ “It did look better!”
- ◆ “Needs more study”

7. The height and density of the plan?

- ◆ “Okay” (2 times)
- ◆ “Yes”
- ◆ “Good” (2 times)
- ◆ “Great!”
- ◆ “Maybe too dense, don’t add traffic!”

8. The modifications and realignment to Forbes Street (VA-627)?

- ◆ “Yes”
- ◆ “Good”
- ◆ “Good to tie into Truslow Road (VA-652)”
- ◆ “Has anyone talked to people that live there?”
- ◆ “Did not see”
- ◆ “Don’t care”
- ◆ “No, I would have to go well out of the way to get to my home”

9. The architectural design planned for the area?

- ◆ “Good”
- ◆ “Yes”

- ◆ “Okay”
- ◆ “Nice”
- ◆ “Needs work”
- ◆ “Some of it was good”
- ◆ “Keep it quaint and traditional”

PUBLIC INPUT SURVEY QUESTIONNAIRE: PART 2

1. *Do you feel the plan has a balanced mix of uses?*

- ◆ “Yes” (3 times)
- ◆ “No”
- ◆ “Don’t need more residential”
- ◆ “No input from the people that lived there”
- ◆ “Yes, however economic development plans need to extend to larger hi-tech corporations such as Mitten, AT&T, IBM, Xerox. Any of them would open a lot of doors!”

2. *Do you think that the plan has adequate open plazas and parks?*

- ◆ “Yes” (3 times)
- ◆ “Yes, definitive improvement!”
- ◆ “Yes, however, need funds to spend from work-career opportunities within the area”
- ◆ “Not enough parks”
- ◆ “No, lots of natural areas please!”

3. *Do you have any comments and suggestions to improve the plan?*

- ◆ “Keep up the good work”
- ◆ “We have enough housing; we need to have a few shops and restaurants, that’s it!”
- ◆ “Is there a way to bring in more public transportation, metro/bus to make large events more appealing?”
- ◆ “It is a plan of action. You are doing a great job with encouraging citizen input”
- ◆ “[As owner of 107 Carter Street] I would like to see BMP and buffer from new elevated highway. Water runs off naturally drains from nearby properties and goes into my cellar”
- ◆ “What is the potential for another bridge across the Rappahannock River? It is seriously needed for safety and evacuation.”
- ◆ “Truck routes are needed to connect Interstate 95 (I-95); Warrenton Road (US-17) has become an inter-state road by default”
- ◆ “Yes, but no one listens”

FALMOUTH VILLAGE & SOUTHERN GATEWAY PUBLIC WORKSHOP#2: CONCLUSIONS

While the first workshop provided a great deal of information for planning of the redevelopment areas, this second workshop measured how the plans addressed the public’s concerns. Overall, the majority of the public approved of the plans, clearly giving a positive response to most of the questions asked about the plans. Additional information was provided in these workshops, which will allow the planning team to make specific improvements and enhancement to the draft master plans that favor both residents and businesses of Stafford County.

APPENDIX VII

FINANCIAL FEASIBILITY: ASSUMPTIONS & METHODOLOGY

Note: The findings herewith are the result of the Planning Team’s assumptions and their recommendations based thereon are typical for a master redevelopment study of this magnitude. It is also understood that the market will drive the master plan implementation. Stafford County does not have plans for consolidating land to directly implement the plan.

Economic Research Associates (ERA) constructed a financial pro forma development model to analyze the potential gross residual land value from the proposed Core Development Area development program for each of the redevelopment areas.

The results of the analysis indicate the maximum amount per acre a developer could pay for the land.

Aside from the assumptions by category below, all redevelopment area analyses assume, per discussions with County representatives that:

- The entire Core Development Area program (as summarized by master plan drawings and accompanying tables) is developed in one phase, in year 0 of the development pro forma. (Although in reality this may be multi-phased, the end results will be similar.)
- The Financial feasibility analysis for the master plan is for a ten year period from 2010-2020, with assumed reversion in year 10

Additional assumptions are outlined below in the attached tables and explained below as appropriate.

Efficiency ratios, which represent the percentage of built space which is usable (versus space that is dedicated to circulation or building core that is not rentable), are based on industry experience of buildings that are newer and more efficient. They vary slightly by type – from 85–95%.

Vertical Development Costs are a cost per square foot figure for building the building (not internal streets or other site infrastructure). These were garnered from R.S. Means, an industry standard for cost estimation with adjustments based on the experience in the market of the Master Planning Team Members. They include both hard and soft costs.

Tenant Fit Out costs are costs to finish interior spaces specifically for tenants’ needs. These are based on local rental surveys as well as discussions with the Master Planning Team Members and are adjusted upward for inflation.

Parking annual maintenance costs are based on industry averages. Based on discussions with the Master Planning Team Members, it is assumed that all developer-provided parking is on surface lots.

A percentage of the total cost is often added to development costs as Contingency costs for unforeseen overruns and expenses.

The **Developer fee** in this analysis is represented as a percentage, and is a stand in for the minimal amount of profit for the developer. The general contractor fees and other fees are included in the vertical development costs.

Operating assumptions provide the backbone of the revenues and expenses which create the value of the development. These include rents, other revenues, and operating expenses such as utilities. The sources for these are noted on the associated table.

Other assumptions include the stabilized occupancy rate (which is the occupancy rate at which most buildings are considered “full” to allow for tenant turnover and other factors), an assumed percentage of units or space that will be presold/preleased, and loss on unsold units. These variables are based on industry experience.

The program used for each redevelopment area is based on information provided by the Master Planning Team. ERA used numbers of square feet, units, and parking spaces by type (designated as either multifamily residential, office, retail). Average unit sizes are calculated by dividing total square feet by the total number of units. ERA further distributed the residential between rental apartments or condominiums, and the retail between general retail and restaurants (because restaurants have a higher construction cost and greater tax implications). This distribution, and the annual absorption, is professional judgment based on ERA’s experience with similar projects, the findings of the market study, and consideration for the likeliest market position for the redevelopment area. Because of the conceptual nature of the plan, these represent best guess estimates.

Each area’s analysis begins with an estimation of construction and development costs. The vertical construction costs are the result of the per square foot costs multiplied by the gross building area (GBA). By contrast, the tenant improvements use the net rentable area (NRA). Parking was calculated on a per-space basis (\$2,500 per space for surface lots). Additional horizontal costs (infrastructure and site work) are added on a per acre basis. The Master Planning Team members provided ERA with the horizontal cost data, at \$250,000 per acre, which is assumed to provide the necessary on-site parking. Additional infrastructure costs were added to the Boswell’s Corner Redevelopment Area for a linear park. A 5% contingency and 4% developer fee were added to the total vertical and horizontal costs.

ERA then prepared a pro forma operating statement analysis by land use type (office, retail, restaurant, hotel, rental apartment, and for sale condominiums, as applicable for the redevelopment area). These found the net operating income of each use by taking the total revenue minus the total expenses. The resulting net operating income (NOI) was capitalized at prevailing capitalization rates to find an approximation of sale value, less a 5% cost of sale (for marketing of the property).

This is unleveraged, meaning it does not represent the cost of money to the developer (financing). In a subsequent step, ERA performs a cash flow analysis to find the net costs and revenues to the developer. The net present value of the revenue at a discount rate of 12% minus the net present value of the construction costs at the same rate represents the residual land value for each area’s development. Again, it is important to note that this analysis only represents development of the program for the Core Development Areas. The full step-by-step analyses for each redevelopment area can be found in the Appendix tables.

FISCAL OVERVIEW

This fiscal overview is intended to give an estimate of the tax revenues generated by the proposed Core Development Area in the four redevelopment areas. This is not intended to be a net fiscal analysis, which would consider sources and uses of funds and the costs associated with the development. The fiscal overview examines the property values of the new investment (using construction costs as a proxy for assessed value) and any county infrastructure investments, and determines the corresponding revenues for Stafford County in the following tax categories, using the most recently available rates from the County (as of the FY 2010 budget):

- **Real Property Tax:** \$0.84 per every \$100 of assessed value. Construction costs are used as a proxy for assessed value in this analysis.
- **Retail Sales Tax:** The state collects 1% for local jurisdictions. The analysis includes retail sales taxes collected for on-site spending, for resident retail sales that happen off-site, and for construction materials bought in the County.
- **Meals Tax:** The County collects 4% dedicated to the School Board, in addition to the 1% local sales tax and 4% state sales tax. Again, this is estimated for both on-site spending, and for resident spending off-site in the County.
- **Transient Occupancy Tax:** The County currently collects (in addition to the retail sales tax) 5% transient occupancy tax – 2% for the general fund and 3% for tourism development. This is estimated for the redevelopment areas, where a hotel is planned in the Core Development program.

Stafford County also collects personal property, business property, machinery and equipment, and BPOL taxes (starting in 2010).¹ Because these vary by value of equipment and by revenue levels, they would require too many unknown assumptions to compute with a reliable accuracy.

As a summary, the total impacts of all four redevelopment areas during the construction period would be \$1.8 million, including \$1.5 million in sales taxes on construction materials, and \$290,000 in sales and use taxes from construction worker spending. Annually, the Core Development program for all four redevelopment areas would benefit the County with \$3.2 million in property taxes, \$4.2 million in on-site sales and use taxes, and \$511,000 in off-site sales and use taxes for a total of \$7.9 million annually. These summary figures are shown in Table 14 (*Summary of Core Development Area Annual and Construction Period Fiscal Benefits*), and the methodology and results for each of the impacts are in the following section. As a typical assumption for a financial/fiscal analysis on a master redevelopment plan, it does not include adjacent property value increases due to redevelopment.

Table 14: Summary of Core Development Area Annual and Construction Period Fiscal Benefits

ANNUAL				
Redevelopment Area	Property Tax ¹	On-Site Sales & Use Taxes ²	Off-Site Sales & Use Taxes ²	Total
Boswell's Corner	\$1,027,926	\$1,488,293	\$131,525	\$2,647,745
Courthouse Area	\$1,217,035	\$1,549,669	\$252,716	\$3,019,419
Falmouth Village	\$146,663	\$291,546	\$18,597	\$456,807
Southern Gateway	\$800,238	\$883,460	\$108,387	\$1,792,086
Total	\$3,191,862	\$4,212,969	\$511,225	\$7,916,057

CONSTRUCTION PERIOD			
Redevelopment Area	Construction Materials Sales Tax	Sales & Use Taxes on Construction Worker Spending ²	Total
Boswell's Corner	\$477,251	\$92,269	\$569,520
Courthouse Area	\$565,052	\$109,243	\$874,295
Falmouth Village	\$72,725	\$14,060	\$86,785
Southern Gateway	\$383,483	\$74,140	\$457,623
Total	\$1,498,512	\$289,712	\$1,788,224

¹Construction Cost (not including land) is used as a proxy for full market value. Using 2009 Rates, per County website @ \$0.84 per \$100.00 value. It is assumed that all construction construction purchases are made in Stafford as often, jurisdictions charge taxes on materials even if they are purchased elsewhere.

²Includes local retail sales tax of 1%, meals tax of 4%, and hotel tax of 5%, as appropriate.

Source: Stafford County Commissioner of the Revenue; ERA, 2009.

REAL PROPERTY

As described above, real estate is taxed at a rate of \$0.84 for every \$100 of assessed value. For this study, the construction cost of the new development is used as the assessed value. The same values as were used for the feasibility study are used for the fiscal analysis. The per square foot costs were estimated using published rates by building type from RS Means adjusted using the industry experience of the Master Planning Team and ERA.

A summary of the results by redevelopment area follow. It is important to note that this does not represent a net impact (existing uses and their impact are not removed, and the costs of County services to these new uses are not represented).

Table 15: Summary of Property Tax Benefits by Redevelopment Area

Use	Value ¹	County Tax ²
Boswell's Corner	\$1,22,372,178	\$1,027,926
Courthouse Area	\$144,885,069	\$1,217,035
Falmouth Village	\$17,459,910	\$146,663
Southern Gateway	\$95,266,451	\$800,238

¹Construction Cost (not including land) is used as a proxy for full market value

²Using 2009 rates, per County website @ \$0.84 per \$100.00 value.

Source: Stafford County Commissioner of the Revenue; ERA, 2009.

¹ BPOL is on business revenues, not retail sales, and it is not computed on gross sales, but is dependent on the number of businesses and how much each earn.

SALES AND USE

ERA calculated sales and use taxes both for the annual sales of on-site retail, restaurants, and hotels; for the estimated expenditures of residents (annual, at buildout of the Core Development Area), office workers, and construction workers (for the construction period) throughout the County (exclusive of on-site sales to these groups); and for the sales tax on construction materials.

On Site

Retail sales tax of 1% is imposed upon all retail sales. Sales tax rates to the Commonwealth of Virginia differ by type of sale (some food products food and non-prescription drugs are taxed at lower rates than other retail goods).

Retail sales for the various developments were estimated by taking the total rents used in the financial feasibility pro forma and dividing by 10%. 10% is the industry benchmark for the percentage of revenues spent on rent.

Meals in the County are taxed at 5% – 4% Meals and 1% sales tax. Restaurant sales were calculated using the same benchmark as retail – assuming rents represented 10% of sales.

Hotel stays in the county are taxed for transient occupancy tax at 5% and 1% for sales tax. ERA used room revenue – as assessed in the financial pro forma analysis – as a basis for sales. Other sales in the hotel are assumed to be mostly food sales, and are taxed as meals (5% total).

The results of all on-site sales and use are found in Table 16 (*On-Site Sales and Use Tax Revenue*).

Table 16: On-Site Sales and Use Tax Revenue

Boswell's Corner			
Use	Est. Sales /1	County Tax Rate /2	County Tax
Retail			
General Retail	\$37,886,778	1%	\$378,868
Restaurant	\$16,435,827	5%	\$821,791
Hotel			
Hotel--Rooms	\$4,793,905	6%	\$287,634
Hotel--Other	\$2,518,298	5%	\$125,915
Total	\$59,116,510		\$1,488,293
Courthouse			
Use	Est. Sales /1	County Tax Rate /2	County Tax
Retail			
General Retail	\$81,856,566	1%	\$818,566
Restaurant	\$14,622,062	5%	\$731,103
Total	\$96,478,628		\$1,549,669
Southern Gateway			
Use	Est. Sales /1	County Tax Rate /2	County Tax
Retail			
General Retail	\$46,665,884	1%	\$466,659
Restaurant	\$8,336,033	5%	\$416,802
Total	\$55,001,917		\$883,460
Falmouth			
Use	Est. Sales /1	County Tax Rate /2	County Tax
Retail			
General Retail	\$4,810,024	1%	\$48,100
Restaurant	\$4,868,923	5%	\$243,446
Total	\$9,678,947		\$291,546

1/ Sales are estimated assuming rents represent 10% of sales (benchmark for retail operations)

2/ Sales Tax rate is 1% for localities in Virginia; to this is added 5% rooms tax for hotel rooms and 4% meals tax for restaurants and hotel's "other" revenue.

Source: Stafford County Commissioner of the Revenue; Virginia Department of Taxation; ERA, 2009.

Resident and Office Worker Annual Retail Sales and Meals

New households, hotels, and office space will bring new daytime populations to Stafford County. To quantify the impact of these populations on sales taxes, ERA used the following methodologies:

Residents: ERA took the number of projected households (based on the new units in the Core Development Area) and estimated retail sales by category based on 2009 ESRI spending per household for the County. It was assumed that between 50% and 80% of total sales would be spent within the County (not counting sales on-site which are counted separately in the analysis).

Office workers: to estimate employees in proposed office space, ERA assumed an average of 250 square feet per employee. To estimate retail sales, ERA used information published by the International Council of Shopping Centers on office worker spending patterns. This is the same data used in ERA’s market analysis work for the redevelopment areas. It was assumed 70% of all employees’ workday spending would be captured in the County (excluding on-site purchases).

Hotel visitors: Boswell’s Corner is the only redevelopment area to have a proposed hotel in the Core Development Area. To estimate visitor spending, ERA multiplied the number of rooms (110) by the estimated occupancy rate (70%) and multiplied the result by 365 to find the yearly room nights. Using spending data by the Virginia Travel Corporation (VTC), ERA calculated approximate total visitor group spending and estimated that of this, 40% would be captured within the County off-site.

The results of this analysis are shown in Table 17 (*Resident, Office Worker, & Hotel Guest Sales Tax Revenue from Off-Site Spending*).

Table 17: Resident, Office Worker, & Hotel Guest Sales Tax Revenue from Off-Site Spending

Boswell's Corner		
	County Sales	County Tax
Households	\$3,577,048	\$65,974
Hotel Visitors	\$533,510	\$14,983
Office Workers	\$2,352,000	\$50,568
Courthouse		
	County Sales	County Tax
Households	\$8,479,637	\$156,396
Office Workers	\$4,480,000	\$96,320
Southern Gateway		
	County Sales	County Tax
Households	\$4,701,604	\$86,715
Office Workers	\$1,008,000	\$21,672
Falmouth		
	County Sales	County Tax
Households	\$681,912	\$12,577
Office Workers	\$280,000	\$6,020

Source: Stafford County Commissioner of the Revenue; Virginia Department of Taxation; ERA, 2009.

Construction Period Sales and Use Taxes

For the construction period sales and use taxes, ERA assessed two components: construction of the Core Development Area program and additional infrastructure improvements by the County for the Core Development. There were assumed to be additional infrastructure needs in the Falmouth and Southern Gateway areas, based on information provided to ERA by the civil infrastructure members of the Master Planning Team. Both these infrastructure costs and construction costs of the development program were broken down into hard and soft costs. As a benchmark, costs break down to approximately 65% hard costs and 35% soft costs. Hard costs include the cost of construction—including materials and the labor to construct the building; soft costs include costs such as financing and architecture. Hard costs can subsequently be divided into labor and materials costs. The cost of labor represents approximately 40% of total hard costs, with materials making up the balance.

For sales county-wide from these construction workers, ERA took the total costs of labor, and using standard retail benchmarks based on the U.S. Bureau of Labor Statistics Consumer Expenditure Survey, assumed that these workers will spend 28% of income on general retail purchases and 6% on meals in restaurants. Of these, ERA estimated that half of all spending would be in Stafford.

Additionally, developers would pay sales tax on building materials purchased for construction. It is assumed sales tax for Stafford would be levied on 100% of the materials. The total construction-period impacts are shown by redevelopment area in Table 19 (*Sales and Use Tax Revenues from Construction Period*).

Table 18: Core Development Area Construction Costs for Materials and Labor

Boswell's Corner			
Use		Development Program	Other Infrastructure Expenditures
Total		\$122,372,178	n/a
Estimated Hard Costs	65%	\$79,541,916	n/a
Estimated Soft Costs	35%	\$42,830,262	n/a
Estimated Hard Costs		\$79,541,916	n/a
Estimated Materials Costs	60%	\$47,725,149	n/a
Estimated Labor Costs	40%	\$31,816,766	n/a
Courthouse			
Use		Development Program	Other Infrastructure Expenditures
Total		\$144,885,069	n/a
Estimated Hard Costs	65%	\$94,175,295	n/a
Estimated Soft Costs	35%	\$50,709,774	n/a
Estimated Hard Costs		\$94,175,295	n/a
Estimated Materials Costs	60%	\$56,505,177	n/a
Estimated Labor Costs	40%	\$37,670,118	n/a
Southern Gateway			
Use		Development Program	Other Infrastructure Expenditures
Total Construction Costs		\$95,266,451	\$3,062,585
Estimated Hard Costs	65%	\$61,923,193	\$1,990,680
Estimated Soft Costs	35%	\$33,343,258	\$1,071,905
Estimated Hard Costs		\$61,923,193	\$1,990,680
Estimated Materials Costs	60%	\$37,153,916	\$1,194,408
Estimated Labor Costs	40%	\$24,769,277	\$796,272
Falmouth			
Use		Development Program	Other Infrastructure Expenditures
Total		\$17,459,910	\$1,187,585
Estimated Hard Costs	65%	\$11,348,942	\$771,930
Estimated Soft Costs	35%	\$6,110,969	\$415,655
Estimated Hard Costs		\$11,348,942	\$771,930
Estimated Materials Costs	60%	\$6,809,365	\$463,158
Estimated Labor Costs	40%	\$4,539,577	\$308,772

Source: Urban, Ltd.; ERA, 2009.

Table 19: Sales and Use Tax Revenues from Construction Period

Boswell's Corner		
	Development Program	Other Infrastructure Expenditures
Sales Taxes from Materials	\$477,251	n/a
<u>Construction Worker Spending</u>		
General Sales Taxes	\$44,543	n/a
Restaurant	\$47,725	n/a
Courthouse		
	Development Program	Other Infrastructure Expenditures
Sales Taxes from Materials	\$565,052	n/a
<u>Construction Worker Spending</u>		
General Sales Taxes	\$52,738	n/a
Restaurant	\$56,505	n/a
Southern Gateway		
	Development Program	Other Infrastructure Expenditures
Sales Taxes from Materials	\$371,539	\$11,944
<u>Construction Worker Spending</u>		
General Sales Taxes	\$34,677	\$1,115
Restaurant	\$37,154	\$1,194
Falmouth		
	Development Program	Other Infrastructure Expenditures
Sales Taxes from Materials	\$68,094	\$4,632
<u>Construction Worker Spending</u>		
General Sales Taxes	\$6,355	\$432
Restaurant	\$6,809	\$463

Source: Urban, Ltd.; Stafford County Commissioner of the Revenue; ERA, 2009.

FINANCIAL IMPLEMENTATION CONSIDERATIONS & TOOLS

Implementation of the development programs will be highly depended on:

- Availability of infrastructure appropriate to the land uses and scale;
- Availability of financing for the specific development or land uses proposed (including the timing of economic recovery of capital markets);
- Ability of each specific market (retail, residential, office, etc.) to absorb space as it is developed (greatly linked to the availability of qualified tenants).

To address the issue of infrastructure implementation, development plans should start in the locations within each redevelopment area that already has adequate infrastructure for the proposed uses, while planning for eventual growth over a period of 10 to 30 years (30 years being a common period for infrastructure bonds). Issues of financing availability are linked to the individual developer, whether there is a public financing mechanism that can be used to cover infrastructure or other costs (thus lowering the amount of financing required) such as tax-increment financing (TIF) or enterprise funds that might be available. Market absorption was addressed in the market analysis of the redevelopment areas.

At the time of the development of this plan, the residential, retail and office market opportunities are limited, with the possible exception of medical-related office and supporting retail in the Courthouse Area. As Marine Corps Base Quantico expands, additional market support will improve for office and supportive retail and residential development in Boswell's Corner.

While grant funds and programs for commercial redevelopment are limited, the tools listed below are an example of organizations, funds and programs that may be available for use in the various redevelopment areas.

ECONOMIC DEVELOPMENT SUPPORT – STAFFORD COUNTY

Economic Development Authority

The Stafford Economic Development Authority (EDA) is a Board-appointed commission of the county that assists the Board of Supervisors in attracting and financing industry and commerce. The Stafford EDA and the State of Virginia provide incentives to businesses based on the return on investment that they will bring to the community. Incentives include industrial revenue bonds, a loan guaranty program, capital access program and work force training. The EDA would seem to be a logical key actor in the implementation of the redevelopment program, along with local economic development organizations.

The Economic Development Authority (EDA), in cooperation with the Virginia Electronic Commerce Technology Center (VECTEC), offers 50/50 E-commerce Grant Funds for small businesses expansion.

TECHNOLOGY ZONES

Virginia cities, counties and towns have the ability to establish, by ordinance, one or more technology zones to attract growth in targeted industries. Each jurisdiction designs and administers its own program. According to the enabling legislation (Virginia Code 58.1-3850), this enables jurisdictions to grant tax incentives and provide certain regulatory flexibility.

Tax incentives may be provided for up to ten years and may include:

- Reduction of permit fees
- Reduction of user fees
- Reduction of any type of gross receipts tax.

In addition to tax incentives, the jurisdiction can also provide regulatory flexibility such as special zoning, a special permitting process, exception from certain ordinances, or other incentives. These are also binding for a period of ten years. Having a technology zone does not preclude the County from also taking advantage of an enterprise zone program.

ECONOMIC AND BUSINESS DEVELOPMENT TOOLS – COMMONWEALTH OF VIRGINIA

Tax-Increment Financing (TIF)

Tax Increment Financing (TIF) is an economic development tool available for use in Virginia designed to stimulate economic activity within specific geographic boundaries. A TIF district is effective for redeveloping areas, encouraging private investment in areas with limited prospects for growth, and improving areas where a much higher quality of development is desired. A key element of the TIF is a “but for” statement – that the economic benefits of the new private development would not otherwise occur (“but for”) without the public investment within the TIF district. TIF is most often used to support bonds used for infrastructure improvements. The calculation of funds available is based on the difference between a baseline assessed value and a projected future assessed value after improvements. Use of a TIF district should be carefully planned so as to not over estimate the potential increment and to accurately anticipate development absorption and market values.

Virginia Small Business Financing Authority

The Virginia Small Business Financing Authority (VSBFA) provides debt financing assistance to established, existing, Virginia-based businesses, entrepreneurs, and to qualifying businesses wishing to expand into Virginia. The VSBFA's financing programs include:

1. ***Economic Development Loan Fund (EDLF):*** The Economic Development Loan Fund (EDLF), funded by the federal Economic Development Administration (EDA), offers gap financing between private debt financing and private equity. Funds are available to economic development authorities and qualifying new and expanding businesses that are creating new jobs or saving “at risk” jobs in qualified underserved and distressed areas of Virginia as defined by the EDA. Funds are also available to Virginia businesses which derive 15% or more of their revenues from defense-dependent activities and can demonstrate economic hardship related to defense downsizing. Funds can be used for the acquisition of land and buildings, construction or improvements to facilities and the purchase of machinery and equipment. Funds can also be used to assist defense-dependent businesses transition to private sector markets. The maximum loan available from the EDLF for each project is limited to \$1,000,000 or 40% of the total project cost, whichever is less.
2. ***Loan Guaranty Program:*** Through the Loan Guaranty Program, the Virginia Small Business Financing Authority will guarantee a portion of a loan or line of credit extended by a commercial bank to a qualified Virginia business. With a guaranty from VSBFA, the bank benefits by reducing its risk in lending to the Virginia business, and the business benefits by accessing financing it would not otherwise have been able to obtain. The maximum guaranty under the program is 75% of the loan or line of credit up to a maximum

guaranty of \$500,000. The program can be used to provide a guaranty for a short-term line of credit or a term loan of up to three years in duration. Applications for the Loan Guaranty Program are made by the bank requesting the guaranty.

3. Virginia Capital Access Program (VCAP):

The Virginia Small Business Financing Authority's (VSBFA) Virginia Capital Access Program (VCAP) provides access to capital for Virginia businesses by encouraging banks in Virginia to make loans that they would otherwise not make due to a borrower's riskier profile. Unlike government guaranty programs which provide a guaranty of a specific loan, VCAP utilizes an insurance concept on a portfolio of loans. The Program establishes a loan loss reserve at each participating bank which is funded by enrollment premiums paid by the Borrower/Bank and VSBFA. Because the participating bank determines what loans to enroll without VSBFA's involvement, the Program is a flexible, non-bureaucratic tool to assist banks in meeting the financing needs of Virginia businesses. If the participating bank determines that the proposed financing request does not meet the bank's normal underwriting guidelines, the bank will then determine whether the proposed loan transaction would be acceptable if the loan were enrolled in VCAP.

4. Industrial Development Bond Program: Companies seeking to finance new manufacturing plants or improvements to existing manufacturing plants can obtain long-term financing at favorable interest rates through the use of industrial development bonds (IDBs). An IDB is a form of tax-exempt municipal bond issued by a state or local government entity to finance the acquisition, construction or equipping of a facility. IDB tax-exempt financing for manufacturing projects has been restored under the federal Revenue Reconciliation Act of 1993 on a permanent basis. Today IDBs continue to provide companies with an important alternative to conventional financing of manufacturing projects. Some of the benefits of IDBs are:

- a. Sub-prime pricing. Since interest earned on IDBs is exempt from federal income taxes, IDBs provide lower interest rates than conventional financing.
- b. 100% project financing. IDBs enable companies to finance virtually all the costs of a project, including site preparation, capitalized interest during construction and most issuance costs, up to \$20 million.
- c. Long-term financing. IDBs can have an average maturity of up to 120% of the economic life of the assets financed.

5. Virginia Department of Housing and Community Development - The Community Economic Development (CED) fund:

The CED fund is designed to support economic development activities, particularly those creating employment opportunities for low- and moderate- income persons in Virginia Community Development Block Grant Eligible Localities. Assistance is limited to projects involving employment creation by private, for-profit basic industries. Projects involving commercial development or other types of job creation may be eligible for competitive grant funding. Activities eligible for CED funding include:

- a. Off-site improvements related to industrial location or expansion, including water and sewer system improvements, streets, and drainage.
- b. On-site improvements are also eligible, pending underwriting, but the funding required for these improvements will be provided to localities in loan form.
- c. This is a relatively broad strategy; therefore certain communities with higher median income are not always eligible, and funds are implemented in a case-by-case basis.

6. Governor's Opportunity Fund (GOF):

The GOF supports economic development projects that create new jobs and capital investment according to state guidelines:

- a. Project investment & job creation are achieved
- b. Locality participates with matching financial commitment
- c. Project is not an intrastate relocation
- d. Performance agreement is effected between the locality and the business to ensure fulfillment of promised job creation and investment GOF is coordinated by the Virginia Economic Development Partnership (VEDP)

7. Virginia Department of Taxation Major Business Facility Tax Credit:

Qualified businesses locating or expanding in Virginia receive a \$1,000 corporate income tax credit for each new full time job created over 100 jobs. (not available to businesses utilizing Enterprise Zone job grants.)

8. Community Development Authority (CDA):

A Community Development Authority is an entity authorized by the Board of County Supervisors (upon petition by a majority of property owners, or those owning a majority of the assessed value, within the proposed CDA boundaries) for the purpose of providing public infrastructure. The CDA is empowered to issue tax-exempt bonds for thirty different kinds of infrastructure improvements including, in part, roads, parks, recreation facilities, educational facilities, water and sewer, and fire prevention and control systems.

Any bonds issued by the CDA are repaid through assessments (other than county tax assessments) levied upon the property owners within the boundaries of the CDA district. Assessments can be levied in two ways.

1. Ad Valorem Assessments limited to 25 cents per \$100 unless all property owners agree to a higher rate;
2. Special Assessment based on use and benefit from the improvements. Assessments cannot exceed the cost of the improvements.

Potential Benefits of a CDA:

There are several reasons to consider using a CDA as a funding mechanism for infrastructure improvements. Some reasons would include:

- a. Providing a development incentive for potential developers and property owners by reducing the costs of development of infrastructure;
- b. As a means of accelerating the project timing by financing all of the improvements over the 30-year bond period but implementing the infrastructure improvements in the initial phases of the redevelopment;
- c. Owners/developers might be able to increase development value of their investments by having such infrastructure and funding available;
- d. The CDA can require levels of development quality, thus improving the overall redevelopment area;
- e. It is a lawful and ready redevelopment tool that is already being used in other areas of the Commonwealth;
- f. The CDA could assume expenses that otherwise could be County expenses.

Caveats Using CDA Bonds:

Using CDA bonds is not without risk. As with any issuance of debt, the primary concern is default on bonds as a result of insufficient ad valorem tax revenues (if that is the method chosen) or the inability

of property owners to pay special assessments due to slow absorption or poor financial performance of developments within the CDA district. Other concerns might include:

- a. Property value decline could reduce the bond repayment revenue stream. Recent economic experience nationwide with property value declines raises the question of whether values can be kept constant or increasing over the life of the bonds;
- b. There is default potential in the development start-up phase when most land in the CDA owned by developers or property owners and is not yet improved. This time gap can be problematic if extended as bond repayments may have to begin before sufficient revenues are available for repayment;
- c. Insufficient sales/rents to feed bond repayment revenue stream could be a problem if the land uses within the CDA do not perform well;
- d. Cyclical economic downturn could hurt property values, sales prices and/or sales of goods and services that ultimately support the values and/or assessments;
- e. Cost overruns on infrastructure improvements could lead to a liquidity problem
- f. If the CDA fails to perform financially, the County could be at risk to cover the repayments;
- g. The higher tax burden on property located within a CDA might make owners within the boundaries less likely to support the creation of the CDA and risk of higher burden should the CDA fail could reduce citizen support for general County bond referenda;
- h. A potential policy issue exists with the permissibility of using CDA bond proceeds to satisfy proffer obligations. As most CDA-type improvements would likely be eligible for funding under the use of proffers, using CDA funding in this manner results in a depletion of total available County CDA debt capacity. There is also the policy issue of shifting responsibility for paying for proffered improvements directly to the property owner as opposed to specific developers.

ERA was not tasked to complete a CDA sensitivity analysis or to conduct an analysis that reliance upon which debt or securities should be issued. To understand the full implication of the risks and potential of the establishment of a CDA, a full detailed analysis would be needed.

Note: Master plan implementation may require that there will have to be some public funds invested for infrastructure improvements if the CDA vehicle isn't used. These could be paid through:

- a. General obligation bonds as they might any infrastructure or
- b. As a pay-as-you-go using the general fund, the utility fund or a combination of the two.
- c. For any large single developer within the redevelopment areas, a proffer structure may also be used to pay for needed improvements to support the development (however, but, unless such developers are "ready to develop right away, some incentive such as a CDA to reduce the cost of development may be needed).

FEDERAL ECONOMIC DEVELOPMENT TOOLS

Economic Development Administration (EDA)

1. **Public Works and Economic Development Program:** Public Works and Economic Development investments help support the construction or rehabilitation of essential public infrastructure and facilities necessary to generate or retain private sector jobs and investments, attract private sector capital, and promote regional competitiveness, including investments that expand and upgrade infrastructure to attract new industry, support technology-led development, redevelop brownfield sites and provide eco-industrial development. Eligibility is based on economic distress levels, which is determined at the time of application. The

EDA defines economic distress as having one or more of the following criteria: an unemployment rate 1% above the national average for 24 months; per capita income that is 80% or less of the national average per capita income; or a "Special Need," as determined by EDA. The EDA may approve projects that are in sub-areas of regions that do not meet this criteria if the project has "substantial direct benefit" to a geographic area that meets the criteria by providing significant employment to unemployed or low-income residents.

Department of Housing and Urban Development

1. **Community Development Block Grants (CDBG):** CDBG funds are available to eligible localities for off-site activities such as water and sewer extensions or treatment facilities and road & rail access. Funds may be available for on-site assistance that supports economic development, subject to underwriting.

Community Development Finance Institutions Fund (CDFI)

1. **The Community Development Financial Institutions (CDFI) Program** uses federal resources to invest in and build the capacity of CDFIs to serve low-income people and communities lacking adequate access to affordable financial products and services. The Fund provides monetary awards for Financial Assistance (FA) through the CDFI Program. CDFIs use FA awards to further goals such as economic development (job creation, business development, and commercial real estate development) and affordable housing (housing development and home ownership).
2. **Financial Assistance (FA) Awards:** Through FA awards, the Fund invests in certified CDFIs that demonstrate they have the financial and managerial capacity to:
 1. Provide affordable and appropriate financial products and services that positively impact their communities;
 2. Be viable financial institutions;
 3. Use and leverage CDFI Fund dollars effectively.
3. **New Market Tax Credits:** The New Markets Tax Credit (NMTC) Program permits taxpayers to receive a credit against Federal income taxes for making qualified equity investments in designated Community Development Entities (CDEs). Substantially all of the qualified equity investment must in turn be used by the CDE to provide investments in low-income communities. An organization wishing to receive awards under the NMTC Program must be certified as a CDE by the CDFI Fund. To qualify as a CDE, an organization must:
 - i. Be a domestic corporation or partnership at the time of the certification application;
 - ii. Demonstrate a primary a mission of serving, or providing investment capital for, low-income communities or low-income persons;
 - iii. Maintain accountability to residents of low-income communities through representation on a governing board of or advisory board to the entity.
4. **Office of Economic Adjustment:** Stafford already receives BRAC-related funds to establish a baseline for further planning in the Boswell's Corner area, and to establish Jefferson Davis Highway (US-1) in Boswell's Corner as a regional improvement priority.

Within the planned redevelopment areas, all of the census tracts are reported by the CDFI Fund as eligible to receive NMTC funds. NMTC may also be used in conjunction with federal and state historic rehabilitation tax credits (HTC) in eligible areas for historic properties. There may be opportunities for such reinvestment activity in the Falmouth Village redevelopment area.



© 2009 CMSS ARCHITECTS, PC

4505 COLUMBUS STREET, SUITE 100
VIRGINIA BEACH, VA 23462
T 757.222.2010 | F 757.222.2022

11921 FREEDOM DRIVE, SUITE 250
RESTON, VA 20190
T 703.481.6677 | F 703.481.6675