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*Chapter I:*

**INTRODUCTION**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter I:* **INTRODUCTION**

*Note, the following represents a Temporary Placeholder for the Introduction section: The Cox Company will consult with Peter Stephenson to update the intro section upon Plan adoption.*

### **Introduction**

The phrase “Fail to plan then plan to fail” summarizes the Town of Smithfield’s commitment during the past two decades to prepare our small but growing community for future generations. Smithfield should be proud of its initiative and proactive stance in planning for the future of the town, and working to protect and enhance our community character. The exhaustive work of the Planning Commission in developing this plan is noteworthy. Former chairman Daniel Smith and Director of Planning, Engineering and Public Works William Hopkins deserve our special recognition for their leadership roles. The Cox Company, our consultant, helped us every step of the way. Thank you!

Peter M. Stephenson, AICP  
Town Manager  
Smithfield Comprehensive Plan

This plan is dedicated to honor the memory of Daniel Smith, the long time Mayor and Planning Commission Chair in the Town of Smithfield, who passed from this life in 2008. Danny’s contributions to the Town’s planning efforts over the past fifteen years have been nothing short of remarkable. His leadership in the development of the Town’s two most recent Comprehensive Planning efforts, as well as the introduction of a new Zoning Ordinance has been absolutely essential to the successful introduction and implementation of modern planning tools in the Town. It is simply hard to fathom how the Town could have possibly implemented all that it has over the past decade without his wise counsel and valuable insights into what makes Smithfield, and the area “Between the Bridges”, the unique community that it has been and continues to be. Danny Smith will be deeply missed in Smithfield. We hope that this Plan represents an important part of his legacy to the community.



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2009 SMITHFIELD COMPREHENSIVE PLAN UPDATE

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*Chapter II:*

**GOALS AND OBJECTIVES**

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## *Chapter II:* **GOALS AND OBJECTIVES**

### **Goals and Objectives for the Development of Smithfield**

In updating the 1999 Plan, the new Comprehensive Plan has been designed to be a guide for the physical development of Smithfield as the Town advances through the first quarter of the new century. The Plan addresses the entire Town, and is intended to positively influence all of the physical elements which make up its urban form. Towards this end, the purpose of the plan is to encourage the continued development of a safe and healthy community by offering a distinctive “vision” for the continued growth of Smithfield. Many factors will affect the new ideas and decisions which will mold the course of action for the Town. The Plan focuses on those particular areas which the Town, through its leadership in urban planning and growth management, can and should have a progressive impact towards defining what is in the best public interest.

By preparing a future land use plan which is integrally tied to its precedent goals, objectives and planning policies, the old adage that *“a locality can be no better than its aspires to be”* is underscored. An intelligent and comprehensible plan cannot be structured without energetically seeking and taking the necessary steps to define the common components of the locality’s vision for its future. The first steps taken towards establishing the fruits of the planning process were (1) to define future goals, (2) to translate those goals into objectives by which they would be realized, and (3) to establish policies and strategies to implement the goals for the betterment of the community. This effort is a progression which bases future planning actions on policies and strategies that are founded in thoughtfully integrated goals and objectives.

Before arriving at this set of draft goals and objectives, three distinct efforts have been undertaken in order to ensure that the planning process proceeds on a rational path with the assurance that adopted future land use recommendations will be founded on firm social, economic, and legal underpinnings. The first step in the consultant’s efforts was to review past goals, objectives and policies associated with Town Comprehensive Plans and to incorporate them into a first draft for consideration by the Planning Commission. This initial effort was a thorough review and analysis of all previous Town plans, ordinances and growth management documents. Based on this examination, in most instances the goals, objectives and policy initiatives are still valid, and as such have been carried forward into the current plan.

The following set of goals, objectives and policies reflect the refinement of the goals and objectives from the prior Comprehensive Plan in light of the following activities: (1) the consultant's initial review and update; (2) preliminary input from the Commission and Staff, dating back to the beginning of the Plan Update in 2004; (3) more recent input based on the Planning Commission "hot spots" exercise begun on March 2, 2005; (4) a first draft of the goals and objectives reviewed with the Planning Commission on May 18, 2005; (5) a second draft of the goals and objectives reviewed with the Planning Commission on August 31, 2005; (6) incorporation of public input obtained from the survey of Town residents and business people; (7) final recommendations by The Cox Company through October 5, 2005; (8) approved draft planning commission goals, dated November 9, 2005; and (9) subsequent revisions and refinements based on consultant input and Town Council actions, through June, 2008.

Town planners believe that the development of an effective Comprehensive Plan must have the full participation, support and understanding of its constituencies. Without the public's active involvement in arriving at the community "vision," the acceptance of individual elements of the Comprehensive Plan, ultimately, could potentially be blind-sided by the very same public. Thus, the final step needed to complete this process was to formally solicit public input regarding the development of the goals, objectives and policies for the Plan. From the outset of this study, the process taken in updating the goals and objectives was to incorporate a broad range of citizen input and public participation opportunities. In doing so, the Town was able to best enable all interested parties to express their individual vision and expectations for the future of the community. The citizens' survey is deemed crucial to the adoption of the final goals, objectives, policies and strategies upon which the Plan will be based.

In late May, 2005, the Town distributed a "citizens' survey" which was designed by the Commission, Staff and consultants over a six month period. The survey was designed to allow Town residents to respond to specific questions relating to "hot button" land use issues, as well as to provide their "vision" for the future of Smithfield. Three thousand survey forms were distributed by the Town. Once the surveys were placed in the hands of the citizens and subsequently returned to the Town, the Cox Company compiled, reviewed and tabulated the survey instruments. In total, 722 survey responses were returned and tabulated, representing a 24% response rate. This response is considered extraordinary and without question represents a statistically valid sampling (and then some). The consolidated findings of the survey responses and the public comments received during public work sessions have been fully absorbed by the Planning Commission in revising the latest draft goals and objectives for this Plan.

The following goals and objectives are provided to the Planning Commission as a means of encouraging the Commission to finalize its thinking about linking their "vision" for Smithfield with specific objectives and land use policy initiatives. This far-reaching endeavor represents the last step in the planning process associated with recommending the adoption of the final goals and objectives to the Town Council.

From a topical standpoint, the Town's goals-setting influence can be grouped into eight general categories as outlined below. Within each of these areas, we believe the following "citizen inspired" goals and objectives, if systematically following by Town leadership, will serve to have a direct and beneficial effect on the quality of future development and the sustainability of the ambiance, culture and social fabric of Smithfield.

- (1) *Community Development*
- (2) *Economic Development*
- (3) *Housing*
- (4) *Historic Preservation, Parks and Recreation*
- (5) *Land Use*
- (6) *Public Services*
- (7) *Transportation, Traffic and Parking*
- (8) *Environment*

## **I. Community Development**

### **Major Goal Statement:**

**Protect and enhance both existing and future development in Smithfield through pro-active growth management programs and progressive community design guidelines.**

### **Planning Objectives and Policies:**

- A. Protect and enhance the unique qualities of Smithfield's small town charm, as well as its sense of history and place.
- B. Promote development opportunities which respect, preserve and protect the Town's ambiance, historic properties, waterfront areas and sensitive environmental areas.
- C. Reduce structural decay of buildings throughout the Town by strengthening planning, zoning and building code enforcement.
- D. Support the continued use of Community Development Block Grant (CDBG) programs and funding sources as a means of revitalizing threatened neighborhoods and commercial areas.
- E. Support the continued use of ISTEA-21 programs and other funding sources for transportation-related improvements within the Town.

- F. Emphasize adherence to thoughtful and coordinated urban design programs as well as the coordinated phasing of adequate public infrastructure to support the Town's remaining undeveloped and underdeveloped parcels. Explore opportunities to work with service providers to employ state-of-the-art technologies where feasible.
- G. Encourage continued streetscape, landscaping and pedestrian improvements throughout the Town.
- H. Ensure the high quality of future development in the Town by enacting creative urban design standards and implementation procedures. Emphasize, encourage and employ cluster development where feasible.
- I. Implement gateway and corridor improvements recommended by the Entrance Corridor Master Plan to enhance the visibility and attractiveness of Smithfield.
- J. Provide stronger and better coordinated planning and project review of development proposals in Isle of Wight County that could potentially impact the Town.
- K. Recognize and plan for the potential of Smithfield to become a major parks and recreational destination for tourists, as well as citizens of the Town and County.

## II. Economic Development

### Major Goal Statement:

**Expand the Town's existing economic base by exploring opportunities for economic development diversification in the areas of tourism and active recreation, as well as retail commerce and industry in order to strengthen the existing economy and generate additional revenue and employment opportunities.**

### Planning Objectives and Policies:

- A. Encourage new commercial retail and service development in appropriate areas in order to promote and expand the diversification of the Town's consumer-oriented economic base.
- B. Identify areas suitable for new economic development or the expansion of existing local operations, with an emphasis on long-term planning opportunities for light industrial facilities.
- C. Work with existing businesses and property owners to ensure the continued viability of the Town's existing commercial areas.

- D. Identify areas suitable for redevelopment, particularly along South Church Street and develop specific strategies on a site-by-site basis to encourage such redevelopment.
- E. Identify business linkage opportunities within the existing marketplace, and actively promote Smithfield as an ideal location for the future location of firms and industries that could properly take advantage of these opportunities.
- F. Encourage adaptive re-use within the Town's downtown areas, emphasizing architectural quality and compatibility.
- G. Identify sectors within the local retail marketplace in which local spending is "leaking" to surrounding localities, and actively promote the development of new and specialty retailers to take advantage of market niche opportunities.
- H. Conduct feasibility studies to determine the appropriateness of future annexation as a means of increasing the Town's tax base and limited geographical area remaining for economic development.
- I. Create and budget for a position on the Town Staff devoted entirely to leading economic development, including the active promotion of tourism, recruitment of industry, management of events and volunteerism, strengthening the downtown merchant organization, pursuing grants, and carrying out the initiatives of the Town Manager and Town Council.



### III. Housing

**Major Goal Statement:**

**Provide for a wide variety of housing options for all Smithfield residents with an emphasis on quality site planning in future residential development areas.**

**Planning Objectives and Policies:**

- A. Adopt a pro-active housing program which targets and promotes opportunities for the improvement of substandard dwellings. Identify housing funding sources and grant opportunities that may be available to Smithfield residents.
- B. Identify threatened neighborhoods and work to reverse their decline by proactive enforcement of building codes and focusing rehabilitation efforts in these areas.
- C. Encourage the continued development of nursing homes, adult care centers, assisted living facilities, and other housing types which provide a range of amenities that are attractive to retirees.
- D. Identify and promote new development opportunities for single family detached residential units including creative use of cluster development, new urbanism design concepts, and “smart growth” practices which enable the most efficient use of undeveloped land, while also enabling the preservation of open space.
- E. Recognize the disproportionate allocation of multifamily housing within the Town and limit future development within this sector of the housing market. Insure that any and all future development of multifamily housing adheres to strict design standards established in the Town Zoning Ordinance and serves to provide affordable workforce housing opportunities. Make necessary adjustments to existing zoning districts if and where appropriate.
- F. Promote the implementation of new or updated zoning districts that provide incentives which encourage the development of affordable housing opportunities in the Town.
- G. Play an expanded role in the coordination and facilitation of low and moderate income housing development and redevelopment by private sector and institutional sector participants (such as Habitat for Humanity) within the Town.
- H. Coordinate with Isle of Wight County in the ongoing effort to develop an affordable workforce housing initiative.

## IV. Historic Preservation, Parks and Recreation

### Major Goal Statement:

Preserve and protect the Town's rich architectural and cultural heritage which positively impacts tourism and contributes to the overall well-being of the community. Integrate opportunities for pro-active expansion of the Town's public parks and recreational amenities within the context of Smithfield's historic and cultural traditions.

### Planning Objectives and Policies:

- A. Preserve the integrity of the architectural and historic character of Smithfield by protecting historic buildings and neighborhoods from inappropriate uses and design practices and materials.
- B. Encourage the appropriate adaptive reuse of both publicly and privately owned, historically significant structures in the Town.
- C. Guide contemporary development in a way which compliments the historic fabric of the Town and works to strengthen the overall character of the community.
- D. Update and expand the inventory of privately held historic properties of significance, and develop strategies for their protection.
- E. Encourage the continuation of the ongoing revitalization activities along the South Church Street corridor.
- F. Evaluate the feasibility of the Town maintaining the Windsor Castle property for long-term historic preservation, incorporating appropriate and compatible public and quasi-public parks and recreational uses by the Town.

## V. Land Use

### Major Goal Statement:

**Plan for a balanced mix of residential, commercial and economic development uses which will accommodate the projected demands for housing, shopping and tourism, as well as promote new employment opportunities, for present and future residents.**

### Planning Objectives and Policies:

- A. Identify and promote new development and infill opportunities on vacant or underutilized properties which are compatible with existing neighborhoods.
- B. Develop and implement initiatives and procedures to encourage development in target areas identified as having the strongest urban development potentials.
- C. Develop and implement procedures which will result in the conservation and preservation of environmentally and historically sensitive properties and land areas that could be adversely impacted by new development and redevelopment activities.
- D. Designate suitable areas for commercial, office, economic development and public recreation use to provide sufficient tax revenues, and usage fees to balance the cost of future residential growth.
- E. Cooperate with Isle of Wight County to integrate their land use planning and economic development efforts with the Town's Comprehensive Plan.
- F. Focus particular land use planning attention upon the undeveloped "edge" properties along the existing Town boundary for the purpose of determining: (1) the vision for the future development of these areas; (2) their relationship to adjoining neighborhoods and land uses; and (3) the efficient future allocation of public utilities.
- G. Ensure that new development will be adequately supported by existing or planned public services and associated infrastructure.
- H. Promote the ongoing effort by private, nonprofit housing groups to redevelop and improve deteriorating housing stock, and encourage more groups to participate in this initiative.
- I. Implement creative growth management techniques and design guidelines which foster suitable new and redevelopment activities.

- J. Examine opportunities to expand Town boundaries via future annexation or boundary line adjustments.

## **VI. Public Services**

### **Major Goal Statement:**

**Provide adequate levels of public services to all the people in the Town, recognizing that the regional implications of certain facilities and services necessitate regional planning and inter-jurisdictional cooperation.**

### **Planning Objectives and Policies:**

- A. Continue long range master planning for the determination of the most effective timing and routing of public utility system extensions.
- B. Ensure compliance with public utility consent orders.
- C. Coordinate future water and sewer requirements with regional service authorities.
- D. Continue to participate in Hampton Roads Regional Water Supply Plan in order to serve the long-range municipal water supply requirements for the Town of Smithfield.
- E. Develop and implement a comprehensive Stormwater Management Plan and Best Management Practices (BMPs) design manual which addresses local stormwater management and stormwater drainage issues and ensures that all future development includes adequate and sufficient stormwater management controls.
- F. Plan for and maintain public buildings to serve the future needs of the community.
- G. Explore options for the consolidation of Town administration offices and other facilities with the realization of the importance that such facilities have for the future management of and quality of life within Smithfield.
- H. Enhance and expand facilities and systems for police, fire and judicial operations which protect and serve Town residents and visitors.
- I. Identify areas of Town with insufficient street lighting which may contribute to an unsafe environment, and develop specific recommendations to enhance lighting in these areas.

- J. Maintain the cooperative public education system with Isle of Wight County with a shared goal of providing superior educational opportunities for all children.
- K. Assess the long-term economic impact on the Town of providing extra-territorial services and infrastructure, including potential opportunities for annexation.
- L. Increase utilization of the Paul D. Camp Community College and promote other local continuing education and vocational opportunities.
- M. Expand and enhance the Town's system of parks and open space to provide recreation, while preserving scenic vistas, natural areas and historic sites.
- N. Identify and secure waterfront property to provide public access to the Pagan River for recreational opportunities.
- O. Encourage new residential developments to provide sufficient open space and neighborhood parks.
- P. Establish a cash proffer policy to enable the Town to provide a framework by which applicants seeking to re-zone properties for a higher residential density are encouraged to proffer cash to offset Town capital expenditures and other local impacts associated with the proposed development.
- Q. Encourage the acquisition, planning and development of appropriately-sized properties for the establishment of new parks and recreational areas within the Town to serve both local and regional recreational demands.
- R. Encourage the preservation of Windsor Castle and plan for its long-term use as a recreation and tourism destination within the Town.

## VII. Transportation, Traffic and Parking

### Major Goal Statement:

The location, character and capacity of Smithfield's transportation facilities (including thoroughfares, local streets and parking) should be compatible with the Future Land Use Plan. Planning for future road and street improvements and alignments should be compatible with emerging land uses, and should provide adequate capacities to serve future growth.

### Planning Objectives and Policies:

- A. Implement street improvements which are of the appropriate scale and capacity to serve long-range traffic demands, while respecting the environment and scale of surrounding neighborhoods.
- B. Maintain the integrity of Downtown Smithfield by implementing four-way stops, traffic calming strategies, and other traffic safety measures to minimize the impact of traffic in the historic area.
- C. Increase parking capacity in the downtown area by providing for new and/or expanded public parking facilities. As part of this effort, the Town shall initiate a study that yields a consolidated downtown parking plan.
- D. Discourage the development of private roads within single-family residential subdivisions.
- E. Establish and reserve new public street alignments and adequate rights of way in future development areas.
- F. Establish strategies for transportation implementation and phasing in conjunction with the development of properties.
- G. Promote the use of alternative modes of transportation by encouraging the incorporation of pedestrian and bicycle paths within new developments.
- H. Examine the existing sidewalk system in established neighborhoods and study the feasibility of extending or providing "infill" sidewalks within these areas and adjacent neighborhoods.
- I. Study the possibility of linking a bike trail in Smithfield to the regional bicycle trail system.

- J. Incorporate expanded standards into the Design Standards for the Town of Smithfield for road and drainage improvements.

## VIII. Environment

### Major Goal Statement:

**Enhance and protect the ambiance and natural setting of Smithfield while promoting a greater awareness of the natural beauty and positive attributes of the Town.**

### Planning Objectives and Policies:

- A. Promote the conservation of open space within the Town and actively promote the long-term preservation and maintenance of valuable natural resource areas through public acquisition, private dedication of easements and other cooperative efforts.
- B. Identify environmentally sensitive areas within the Town and implement innovative growth management procedures which promote design sensitivity to the environment at a site-specific level.
- C. Coordinate with the Chesapeake Bay Local Assistance Department (CBLAD) to ensure that future development meets the standards of the Chesapeake Bay Preservation Act and respects the designated Chesapeake Bay preservation areas.
- D. Coordinate environmental preservation efforts with neighboring jurisdictions, and establish an action plan targeting environmental concerns that require a regional approach.
- E. Promote environmental design standards for new and redevelopment projects that incorporate creative approaches to implement Low Impact Development, bio-engineering measures, and Best Management Practices.
- F. Recognize the importance of the Jericho Planning Area for its environmental, cultural, and historic significance within the Town and region.
- G. Initiate specific planning activities to ensure that future land uses that are contemplated for this area are consistent with State and Federal environmental regulatory processes.

*Chapter III:*  
**POPULATION**

**ADOPTED  
AUGUST 4, 2009**



## *Chapter III:* **POPULATION**

### **Population Characteristics**

Fully understanding the existing demographic, economic and sociopolitical characteristics of Smithfield and the surrounding region is a key component in developing a land use plan that will realistically guide future growth and a housing plan that will help to provide more affordable workforce housing opportunities. With these goals in mind, this chapter includes the most recent population estimates, population growth trends, demographic characteristics and household information. Whenever possible, this chapter incorporates the most recent population estimates provided by the Weldon Cooper Center for Public Service at the University of Virginia and Claritas MarketPlace demographic resources. However, the most in-depth and comprehensive information describing the demographic, social and economic conditions found in Smithfield and the surrounding region is still found in the 2000 Census. Although the 2000 Census data are now outdated, they best reflect the unique characteristics of the people who live within the Town of Smithfield and the surrounding region.

### **Population Growth**

A regional growth perspective is vital to understanding existing development pressures confronting the Town of Smithfield. Smithfield is one jurisdiction within the Hampton Roads area of the Commonwealth. The Town is located in the northern portion of Isle of Wight County. Both Isle of Wight and Smithfield are located in the Hampton Roads Planning District (HRPD), an expansive planning district incorporating four counties and ten independent cities. The population of the HRPD in 2000 was 1,533,739. The Weldon Cooper Center estimates that the 2007 population for the HRPD was 1,604,243. The three urban jurisdictions nearest to the Town of Smithfield are the City of Suffolk, the City of Newport News and the City of Hampton. Together, these jurisdictions combine with Isle of Wight County to define Smithfield's regional context. For the purposes of this section of the Comprehensive Plan, these jurisdictions will be analyzed jointly as a means of providing a regional comparison of emerging demographic trends.

While the entire region has experienced strong population growth over the past three decades, these localities have been growing at a decreasing rate since 1970 as illustrated in Table III-1 on the following page. As is reflected in this table, Smithfield reached an estimated population of 6,987 by 2007, and the overall region of influence had grown to approximately 449,968 people. The Weldon Cooper Center provides an annual population estimate for towns, counties and cities throughout the State, and as of the printing of this Plan, the 2007 estimate was the most current state generated population figure provided for the Town. According to the 2000 Census, Smithfield has a population of 6,324 persons.

### **Smithfield Comprehensive Plan**

The Town of Smithfield has grown at rates more than triple that of the regional average since 1970. For example, from 1970 to 1990, Smithfield's population increased at a compound annual growth rate of 2.77 percent as compared to the region's overall growth rate of only 0.86 percent, as is reflected in Table III-2 on page 5. More recently, Smithfield's growth has slowed, yet still continues to grow much faster than the overall region. From 1990 to 2000, Smithfield's population increased by 3.08 percent annually, two full percentage points above the regional rate of 1.02 percent. This emerging pattern of population growth has continued into the most recent period of comparison, from 2000 to 2007, when the region experienced a decrease in its annual rate of growth (from 3.08 to 1.387 percent), and the Town declined from 3.08 percent annual growth in 1990 to 1.38 percent in 2007 (see Table III-3 on page 6). Regional population trends over the past two decades reveal a slow, steady increase in population, with Smithfield and Isle of Wight growing at rates much faster than the region as a whole.







The high rate of growth experienced in Smithfield relative to its neighbors may best be explained by its relative attractiveness to newcomers based upon its unique small town charm, its high quality of life, its access to steady employment opportunities and its wide variety of affordable housing opportunities. Perhaps most importantly, residents of Smithfield enjoy the qualities of small town living while being in close proximity to a major metropolitan area. They also enjoy a unique and walkable Downtown area which boasts a charming historic district and several points of waterfront access. Furthermore, the meat packing industry has been a source of steady employment for generations in Smithfield, while neighboring localities have been subject to the less reliable military based economy in the Hampton Roads area. Finally, the Town has a diverse housing stock that provides opportunities for people across several income levels. All of these factors have combined to allow Smithfield to experience population increases at almost double the regional rate for the last thirty years.

### **Age**

As can be seen in Table III-4 on the following page, the regional population is normally distributed among all age groups. The highest concentrations are found among young adults between the ages of 35-44. Children represent another significant portion of the population. Twenty-two percent of the Town's population is under the age of fourteen. Per Claritas Market Place demographic resources, the Town's median age is 37.4 years of age.

The smallest segment of the population in Smithfield is comprised of those aged sixty-five and older. However, this segment is growing rapidly. In the Town, only 13.7% of the population falls into this age category. This is up from 10.5% in the late 1990's. This trend is consistent with the overall region in which senior citizens comprise approximately 10.5% of the total population (up from 9.5% in 1995). However, this region contrasts sharply to the nearby City of Williamsburg where older residents comprise a significant portion (20%) of its population. Older residents seek housing opportunities in localities which provide amenities they desire. The lack of these types of housing units in both Isle of Wight County and Smithfield are likely to contribute to the small proportion of senior citizens living in the area.



The age distribution of the population of the Town strongly correlates to levels and types of services demanded by residents. The current figures suggest that presently, there are a large percentage of school-aged children who require public education. It can be assumed that this figure will remain strong in the coming years as young couples within the region continue to find affordable living opportunities in the Town and surrounding county. Seniors are another age group whose needs require increased levels of government services. The current age distribution of the population in Smithfield identifies 25.3 percent of the population as falling between the ages of 45 and 64. Over the next twenty years, these people will be entering the retirement phase of their lives. The implications for the Town of Smithfield are substantial as older citizens demand services, particularly those related to health care. If the Town of Smithfield intends to have its citizens remain in town during their retirement years, consideration must be given to providing the suitable living opportunities, services and amenities aging citizens require.

### **Sex**

Based on 2006 estimates, females comprised 52.5% of Smithfield's population. This female "predominance" is consistent with the prevailing national demographic trend. The future aging of the baby boom generation is expected to magnify this trend. Currently, the region and the State are about equally divided between genders, but State demographers project that this trend will establish a slight female majority for those larger geographic areas as well.

Nearly twenty percent (19.44%) of all residents have attained a bachelor's degree or higher in terms of educational pursuits. Over seventy-five percent (75%) of all residents have attained a high school diploma, GED or higher degree.



## **Households**

A household, according to the U.S. Census definition, includes all persons who occupy any given housing unit. A housing unit is a single room or a group of rooms occupied as a separate living quarters. Within a housing unit, there must be either direct access from outside the building or from a common hall and complete kitchen facilities must be available for the exclusive use of the members of the household. A single family detached home, a townhouse unit, an apartment and a condominium are all considered single housing units. From the Census Bureau's perspective, all persons whom are not members of households must live in either group quarters, such as dormitories, barracks and rooming houses or institutions, including hospitals, asylums and jails. As seen in Table III-5 on the following page, in each of the jurisdictions comprising the region of influence, non-household residents represent a relatively small proportion of the total population. In Smithfield, non-household populations are not a significant area of concern.

## **Household Size**

Household size is the average number of persons living in a given housing unit. This size is critical in projecting future housing demand. The average household size in a community is determined by dividing the household population by the number of households. The average household size for Smithfield in 2007 was estimated to be 2.49.

Average HH size in Isle of Wight County has decreased drastically over the past thirty years. In 1970, the average household size was 3.59 in the County. In 1980, it decreased to 3.04. By 1990, it had decreased to 2.75. In 2000, the Census determined the average household size in the County to be 2.63.

The regional trend of decreasing household size over the last twenty years is consistent with national demographic trends. The trend is expected to continue in the future as families continue to have fewer children and single parent households become increasingly more common. Moreover, it is likely that both Smithfield and Isle of Wight County will experience an increase in the total number of households as the population continues to grow and smaller households with different needs are formed and enter the market such as transient singles, retirees selling larger homes and married couples without children.



### **Household Composition**

In addition to household size, the mix of household types influences the kind of housing that will be demanded within a community. The 2000 U.S. Census classifies households as families and non-families. A “family” is defined as a household where two or more related individuals live together.

Table III-6 provides a summary of the breakdown by number of residents occupying households in the Town and the overall region.

### **Household Income**

Household income is the total income of all wage earners who live within a household. In most cases, this income level controls the level of retail spending patterns as well as the type and quality of housing a household can afford. Two measures of household income are provided in this analysis: median income and percentage of households by income range. Both measures reveal that the residents of Smithfield have buying power at competitive levels with the residents of neighboring jurisdictions. However, as described in Table III-7 below, Smithfield's median household income level (\$50,543) exceeds the statewide level (\$46,677) by a significant amount. Recent estimates indicate that income levels are rising in the region. As can be seen in Table III-8 on the following page, when 1989 income levels are adjusted for inflation to 2006 dollars, a significant increase in household income is noted. The estimated household income for Smithfield in 2006 was \$50,543.



## SUMMARY

The analysis of the current demographic character of Smithfield and its neighboring jurisdictions provides a sound basis for making future planning decisions. Some of the most important characteristics that have been considered during the development of the future land use plan are:

- *The comparatively high rate of population growth in Smithfield relative to the rest of the region;*
- *The high proportion of school age children and relatively low proportion of elder citizens (65+) currently residing in the area;*
- *The significant portion of the population projected to reach retirement age over the next twenty years; and*
- *The rise in household income reflected in the Town over the past two decades.*

*Chapter IV:*

**ECONOMY**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter IV:* **ECONOMY**

### **Characteristics**

The prevailing economic conditions within Smithfield and the surrounding region of influence will shape the development opportunities and constraints facing future growth in the Town. Gaining a thorough understanding of the existing marketplace is another important component in developing a comprehensive and implementable land use plan that will successfully guide future growth in the Town. To that end, this section provides an analysis of past trends in economic growth, employment and retail sales. As the largest urban center in Isle of Wight County, Smithfield serves as the major economic hub for the surrounding area. Its main economic functions are twofold: it provides area residents with numerous job opportunities and it serves as the center for commercial activity in the northern half of the County.

The Town of Smithfield has historically functioned as a regional employment center due largely to the major local presence of the meat packing/meat processing industry. This still holds true today, as three of the four largest employers in Smithfield continue to operate within this industry. As the major trade center for the northern portion of the County, the Town also provides numerous employment opportunities in the service and wholesale/retail trade sectors. Many residents of Smithfield and the surrounding rural areas rely on local merchants for their basic staple goods. The Town is also the principle site for medical, professional and legal services in the area. In addition, the Town has a significant number of food and specialty retail establishments that are convenient for residents of both the Town and the northern end of the County, as well as for visitors from throughout the region.

From an economic market analysis perspective, the Town of Smithfield is situated within a unique geographical trade area which circumscribes components of its primary, secondary and tertiary competitive marketplace. Within this context, the County of Isle of Wight represents the primary market area for Town residents and those living in the northern half of Isle of Wight County. While Smithfield is located within the periphery of the expansive Norfolk-Virginia Beach-Newport News Metropolitan Statistical Area (MSA), it is aligned more specifically within the marketplace defined by the cities of Newport News, Chesapeake, Hampton and Suffolk. These four localities combine with Isle of Wight County to form a larger “region of influence” or “regional trade area.” This region of influence incorporates the



primary, secondary and tertiary markets into one larger market model used to describe existing regional shopping patterns.

While boundaries of the various trade areas are typically defined in terms of driving time from the central shopping area, they are extremely fluid due to the fact that consumers are often willing to travel farther for specialty items or to shop at a particular retail establishment where a greater variety is available and a strong sense of customer loyalty and/or preferences have been established. Consumers are also usually willing to make several shopping trips to compare items before purchasing “shopper’s goods,” which include durable items representing more expensive purchases. On the other hand, customers seek convenience and staple goods almost exclusively at the most accessible locations. Following this theory, residents of the primary marketplace (Isle of Wight County) rely most heavily on the Town of Smithfield for convenience and staple goods and often travel to one or more of the four adjacent urban areas in the region of influence to shop for specialty or “big ticket” items in order to take advantage of the greater variety and price competition offered in these larger shopping environments. An acknowledgement of this regional shopping alignment is necessary in order to properly analyze both the demographic and the economic trends exhibited in the Smithfield region. While slightly more geographically remote, the influence of the residents of Franklin, Williamsburg and Surry County should not be ignored either. For the purposes of simplicity, the Comprehensive Plan’s economic analysis will focus on the growth trends reflected in the identified region of influence. However, the influence of these outlying localities, especially that of Williamsburg, on regional shopping patterns is significant and will necessarily be factored into the future development equation.

### **Economic Growth**

The Town of Smithfield has exhibited steady economic growth in recent years. One of the best indicators of change in a local economy is employment. Town-specific information provided by the Virginia Employment Commission is limited; therefore, Isle of Wight County figures will be used to track recent employment trends in the Smithfield area. It is assumed that such an analysis will serve as an accurate and relevant description of the Town’s employment market since the Town serves as the chief employment center for Isle of Wight County. As suggested in Table IV-1 on the following page, the County has added a significant number of jobs since the last Comprehensive Plan was adopted. In fact, employment in the County expanded by 5.6 percent from 2001 to 2006 (the most recent year for which data is provided by the Virginia Employment Commission). This rate of growth is competitive among the other localities in the region of influence and the overall regional planning district.



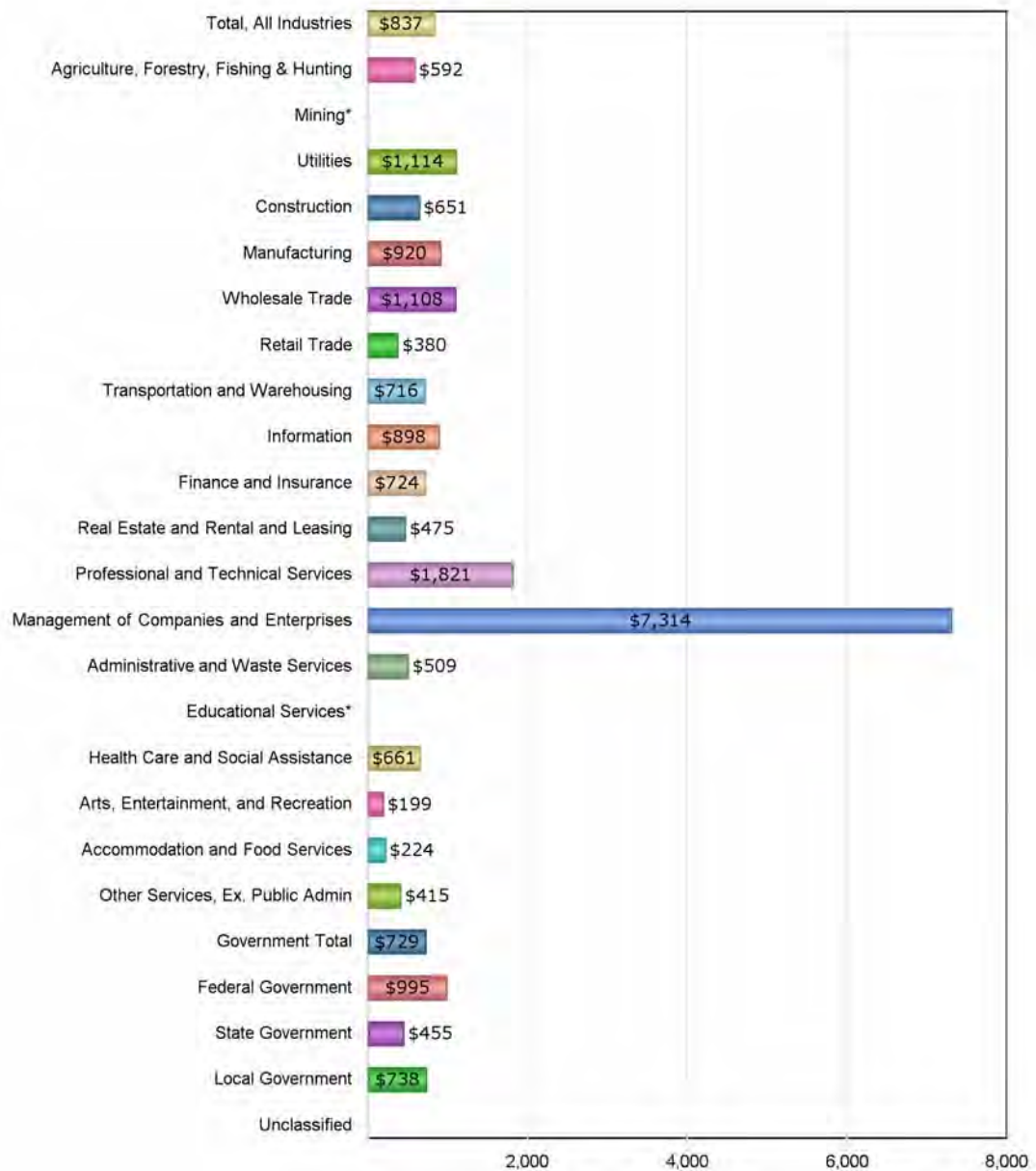
Job growth has been particularly strong in the local and State government, construction, manufacturing and service sectors. Each of these industries have experienced employment growth exceeding 30% since 2001, with the state government sector leading the way with an increase of over 109.5%. The local manufacturing industry has remained strong, as indicated by the net gain of over 179 new jobs since 2001. These increases offset significant employment losses in the wholesale trade, and information sectors. Both of these industry groupings suffered decreases in employment exceeding 17% since 2001, with the wholesale trade sector losing over a thousand jobs during this decade.

### **Smithfield Employment**

As is reinforced by the analysis of the most recent data available for the employment composition of the County, (reported for the Second Quarter of 2008 as described in Table IV-2 on the following page), Smithfield has maintained its stature as a major economic hub within the region of influence. This data, as reported by the Virginia Employment Commission, lists the number of employees by industry group for establishments which are covered by the Virginia Unemployment Compensation Act. Each firm's employment, as reported to the VEC, is classified in "sectors" according to the major type of economic activity in which it is engaged.

Exhibits on the following pages present average employment, wage data and new hires made by major industry/employment groups for Isle of Wight County. Once again, in the absence of Town-specific information, it is assumed that the County figures effectively describe the Smithfield employment environment since the Town is home to the vast majority of employers located within Isle of Wight County. To maintain the confidential nature of the data submitted by employers, data for industry groups have not been shown separately where there are (1) fewer than three reporting units or (2) one or two firms combine to constitute 80 percent or more of total employment in the industry. These omissions are denoted by a "D" in the tables. However, data omitted from single sectors are included in the "bottom line" totals for all industries.

As illustrated in these exhibits, residents of Smithfield and Isle of Wight County rely heavily on the manufacturing sector as the major source of employment. In 2006, 30% of all jobs in the County were in manufacturing. This is down from over 58.6% from slightly over a decade ago, however. Employment in government and government enterprises is the second leading source of employment for residents constituting 9.8% of the total employment. Employment in the retail trade sector trails only slightly, accounting for 9.5% of all jobs in the County. Between 2001 and 2006, employment in the County has gained steadily.



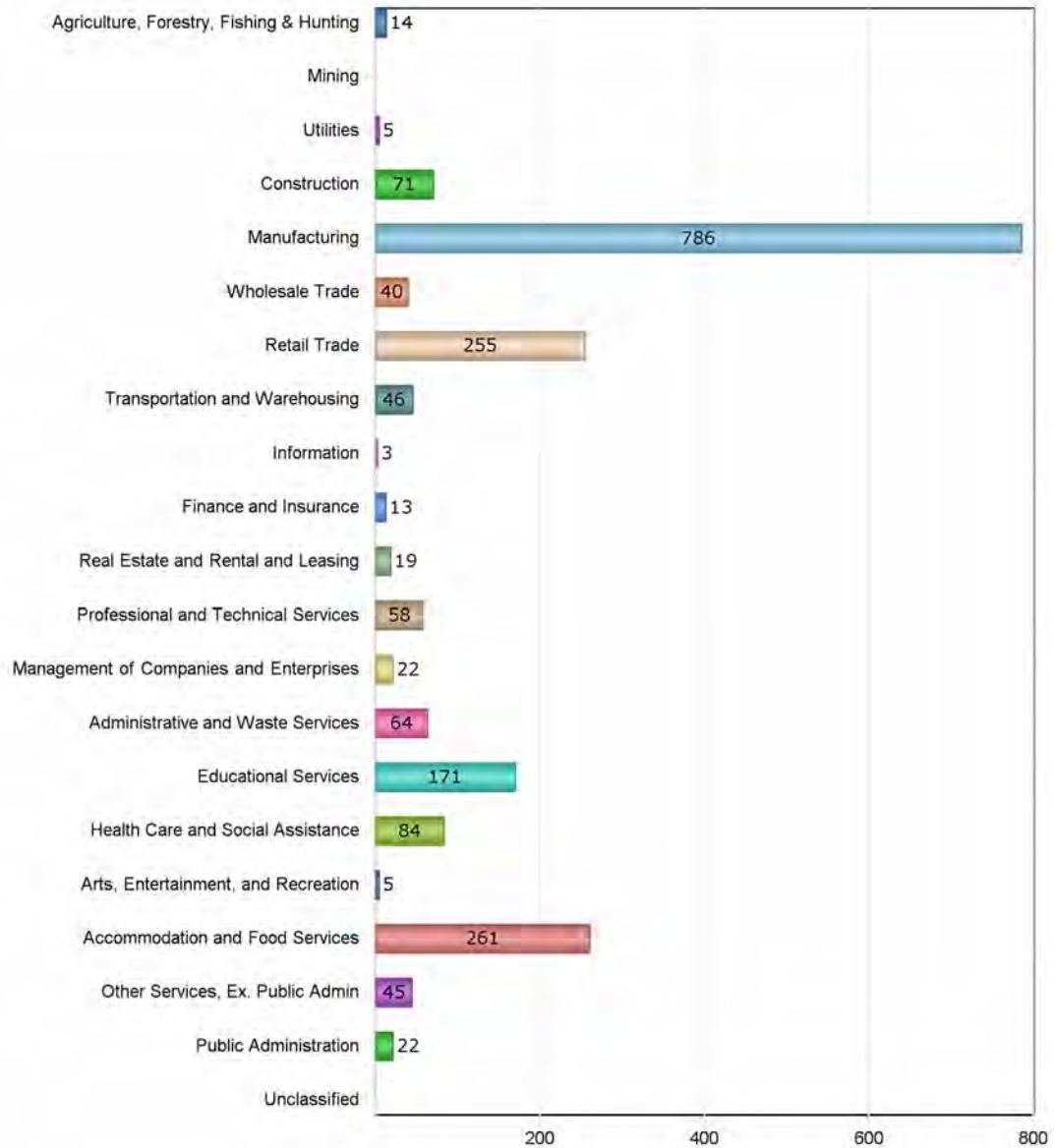
**Table IV-2: Average Weekly Wage by Industry**

**Note: Asterisk (\*) indicates non-disclosable data.**

**Source: Virginia Employment Commission**

**Quarterly Census of Employment and Wages, 2nd Quarter (April, May, June) 2008**





**Table IV-4: New Hires by Industry**

**Source: U.S. Census Bureau, Local Employment Dynamics (LED) Program, 4<sup>th</sup> Quarter (October, November, December) 2007, all ownerships**

The employment and wage data reveal a local economy heavily dependent on a single industry: meat production and packaging. Economic case history shows that difficulties often arise from similarly constructed local economies when that industry falls victim to cycles in the economy and is forced to reduce its output or ceases operations altogether. If this were to occur, a locality with a diversified economy could rely on the strength of the other sectors to absorb displaced workers. Smithfield, by relying so heavily upon one industry sector, is positioned for severe economic challenges should a sudden change occur in the strength of that sector. Fortunately, the meat processing industry has remained strong over the past decade as demand for meat products has been steady. The outlook continues to be bright for this industry in the short term. Adding the corporate headquarters of the Smithfield Foods operation to the Town has been a boon. Future economic development efforts in the Town should be aimed at further strengthening those employment sectors which are currently relatively weaker in order to diversify its economy. For instance, employment in the Finance, Insurance and Real Estate sector supports one of the highest weekly wage, yet accounts for only 2.7% of the total employment base. Opportunities exist to attract more white-collar professionals by building upon Smithfield Foods' decision to locate its corporate offices in the Town, thereby increasing this sector's share of overall employment in the area. The Transportation, Information and Utilities sectors, while growing at a rapid pace nationwide, constitute only 4% of the overall employment in Isle of Wight County. Strengthening these sectors, particularly by attracting new high tech industry, has the potential to bring better paying, higher skilled jobs to Smithfield, and will significantly impact other sectors of the economy which are becoming increasingly dependent on high-tech service.

Niche opportunities exist to import technological innovations, especially those in the communications industry into the local economy in order to bring it into the 21st Century. Advances in this industry would promote economic linkages into other sectors of the economy, and as the economy continues to grow stronger and more diverse, the demand for services in the Financial, Insurance and Real Estate sectors will increase, thereby providing more professional employment opportunities in the area.

## Unemployment

Unemployment in the County has mimicked the rates reflected in the overall Commonwealth in recent years. The County's rate is right in line with State-wide averages of 2.9%, and has been decreasing during the most recent economic cycle. At 2.9% in 2007, unemployment is significantly lower in the County than the national average of 4.6%.

**Table IV-5**  
**Trends in Unemployment Rates**  
**Comparing Isle of Wight County, Commonwealth of Virginia, and U.S.**  
**1997-2007**

	<b>Isle of Wight County</b>	<b>Virginia</b>	<b>United States</b>
<b>1997</b>	<b>4.2%</b>	<b>3.7%</b>	<b>4.9%</b>
<b>1998</b>	<b>3.1%</b>	<b>2.8%</b>	<b>4.5%</b>
<b>1999</b>	<b>2.6%</b>	<b>2.7%</b>	<b>4.2%</b>
<b>2000</b>	<b>2.2%</b>	<b>2.3%</b>	<b>4.0%</b>
<b>2001</b>	<b>2.7%</b>	<b>3.2%</b>	<b>4.7%</b>
<b>2002</b>	<b>3.5%</b>	<b>4.2%</b>	<b>5.8%</b>
<b>2003</b>	<b>3.6%</b>	<b>4.1%</b>	<b>6.0%</b>
<b>2004</b>	<b>3.4%</b>	<b>3.7%</b>	<b>5.5%</b>
<b>2005</b>	<b>3.6%</b>	<b>3.5%</b>	<b>5.1%</b>
<b>2006</b>	<b>3.0%</b>	<b>3.0%</b>	<b>4.6%</b>
<b>2007</b>	<b>2.9%</b>	<b>3.0%</b>	<b>4.6%</b>



Source: Virginia Employment Commission, Local Area Profile

**Major Employers**

A list of the major employers in Smithfield emphasizes the prominence of the meat packing industry in the local economy. Of the five top employers in Town, four are manufactures of meat products. The top eight Smithfield employers ranked according to the total people employed are:

**Table IV-6  
MAJOR EMPLOYERS  
Town of Smithfield**

<u>Firm</u>	<u>Product/Service</u>	<u># of Employees</u>
1. Smithfield Packing (a)	Meat Packing	2,500
2. Gwaltney Foods of Smithfield (a)	Meat Packing	2,400
3. Farm Fresh	Retail Grocery	105
4. Smithfield Station	Marina/Restaurant/Hotel	56
5. Smithfield Medical	Medical Office	55
6. Town of Smithfield	Government	50
7. Bloom	Retail Grocery	50

*(a) Owned by Smithfield Foods, Inc.*

Smithfield’s meat packing plants have traditionally drawn much of their labor from the Town and the adjoining counties. It is estimated that approximately 15 to 20 percent of the processing and packaging plants’ employees work in white-collar, clerical or administrative positions; the balance of the employees work in direct production posts. Turnover among these positions is relatively high, and as a result, the plants must continually compete with the shipyards and other manufacturing centers in nearby Newport News, Hampton and Norfolk for labor.

**Table IV-7**  
**MAJOR EMPLOYERS**  
**Isle of Wight County**

- |                                       |  |
|---------------------------------------|--|
| 1. Gwaltney of Smithfield             | 26. Magnum Enterprises Inc.                      |
| 2. International Paper Company        | 27. Dominion Management Group Inc.               |
| 3. Isle of Wight County School Board  | 28. Gwaltney Transportation                      |
| 4. County of Isle of Wight            | 29. Dairy Queen                                  |
| 5. Food Lion                          | 30. Department of Social Services, Isle of Wight |
| 6. Cost Plus Inc.                     | 31. Manhattan Janitorial Service                 |
| 7. Smithfield Foods                   | 32. Home Sweet Home Care Inc.                    |
| 8. Riverside Regional Medical Center  | 33. Community Electric Co=operative              |
| 9. Farm Fresh                         | 34. Carrolls Foods                               |
| 10. Alphastaff Inc.                   | 35. Commercial Ready Mix Products                |
| 11. Isle of Wight Academy             | 36. Annas Ristorante Inc.                        |
| 12. Peninsula Metropolitan YMCA       | 37. C.W. Cowling                                 |
| 13. Virginia Department of Health     | 38. Cypress Creek Golfers Club                   |
| 14. Atc Panels, Inc.                  | 39. Smithfield Gardens                           |
| 15. Franklin Equipment Company        | 40. Smithfield Inn Corporation                   |
| 16. Richmond Cold Storage Inc.        | 41. Surprising Pizza Inc.                        |
| 17. Farmer's Bank                     | 42. Hardee's                                     |
| 18. Postal Service                    | 43. Southern Structural Steel Inc.               |
| 19. Smithfield Station                | 44. Delmarva Bojos LCC                           |
| 20. Zuni Presbyterian Center          | 45. Home Care Providers                          |
| 21. Town of Smithfield                | 46. Poquoson Motors, Inc.                        |
| 22. McDonald's                        | 47. Comprehensive Compensation Man               |
| 23. Smithfield Packing Transportation | 48. Farmers' Service Company                     |
| 24. H. & B. Railroad Construction     | 49. The Oaks Veterinary Clinic                   |
| 25. East West Partners of VA Inc.     |  |

Source: Virginia Employment Commission, Quarterly Census of Employment and Wages (QCEW), 2<sup>nd</sup> Quarter (April, May, June) 2008

## Commuting

A significant amount of commuting into and out of the Town occurs on a typical weekday. Past land use decisions in the Town dictate many of these commuting trips. A great many of the employees in Smithfield's manufacturing plants cannot afford to purchase homes or rent dwellings in the Town boundary. Thus, they commute into Town from outside the Town boundary, often from significant distances. The underlying home prices dictate that many of those living in Smithfield must commute out of the Town to their places of employment. Little specific commuting data is available for the Town. However, the 2000 Census summarizes commuting patterns in Isle of Wight County as follows:

**Table IV-8**  
**Top 10 Places Residents are Commuting To**  
**Isle of Wight County**

<b>Area</b>	<b>Workers</b>
Newport News, VA	2,544
Suffolk, VA	1,284
Hampton, VA	1,160
Portsmouth, VA	787
Norfolk, VA	674
Chesapeake, VA	526
Franklin, VA	350
Surry County, VA	289
Virginia Beach, VA	281
Southampton County, VA	153

Source: 2000 Census

**Table IV-9**  
**Top 10 Places Residents are Commuting From**  
**Isle of Wight County**

<b>Area</b>	<b>Workers</b>
Suffolk, VA	1,615
Southampton County, VA	1,151
Franklin, VA	636
Portsmouth, VA	462
Surry County, VA	415
Newport News, VA	394
Hampton, VA	358
Chesapeake, VA	294
Hertford County, NC	224
Gates County, NC	223

Source: 2000 Census

## **Retail Sales**

Retail spending, which is subject to the Virginia sales and use tax is reported monthly by all State jurisdictions to the Virginia Department of Taxation. These sales include hotel/motel receipts and all retail sales (except sales of certain motor vehicle fuels, motor vehicles and trailers, as well as alcoholic beverage sales by A.B.C. stores). Calculated as such, retail sales serve as a significant contributor to Smithfield's economy and as a significant source of local tax revenue. The Virginia Department of Taxation provides this retail sales data only for cities and counties in the Commonwealth. Therefore, taxable sales data is unavailable at the Town level. Figures are provided for Isle of Wight County, inclusive of Smithfield. Past Comprehensive Plans have estimated Smithfield's share of Isle of Wight County's retail trade at approximately 68 percent. In the absence of better available data, the current Plan will assume that this share is still roughly accurate. In order to provide a comprehensive snapshot of the current local retail marketplace and a better understanding of past trends in this important sector, a detailed analysis of retail sales is presented in the following section. Much of this analysis is based on the data exhibited within the series of tables included in this section. These tables provide the following information:

Table IV-10 provides a summary of the latest retail sales made available by the Commonwealth Department of Taxation for Isle of Wight County. Retailers in Isle of Wight County totaled \$15,728 per household in 2007. Statewide, retailers in the Commonwealth totaled \$30,314 per household.

Isle of Wight County is particularly strong in food and beverage sales, general merchandise sales, and building material and garden equipment sales. Table IV-11 compare the constant dollar changes in total retail sales and per capita retail sales, respectively for each of the major store groupings since the last Comprehensive Plan was adopted. As is reflected in the table, the County has experienced a strong growth in total retail sales since 1996. Dramatic increases in apparel sales have been witnessed during this time period. At the same time, sales have dropped significantly in machinery, equipment and supplies, as well as in automotive retailers.

A comparison of per capita retail sales figures across all retail categories to regional and State totals are included in Tables IV-12, IV-13 and IV-14.













The importance of retail sales volumes lies in the fact that they serve as a valuable indicator of the relative strength of a local economy, in addition to generating a significant share of the Town's tax revenues received from the State. A brief comparison of the County's sales figures to those of other localities within the Commonwealth point to the relative weakness in the local retail economy. As is reflected in Table IV -10, the County's \$5,980 per capita sales falls far below the State average of \$11,935. This relatively poor performance in per capita retail sales indicates that the County and the Town show large potential for capturing a greater percentage of regional retail sales dollars and the accompanying tax revenue. As was the case in 1996 as part of the base economic data compiled for the Comp. Plan Update of 1998, analysis of the most recent County Taxable Sales figures provides statistical support that the County's sales revenues are highly dependent on food sales and other basic staple goods and services.

The County exhibits a marked disadvantage in a number of retail sectors relative to its more urban neighbors within the region of influence. The most glaring weaknesses in the local retail economy are in the apparel, general merchandise, furniture, home furnishing and equipment and restaurant sectors, as exhibited in "market leakage" calculated for the local retail environment. Market leakage represents the per capita share of retail sales in each sales category that are "escaping" the primary marketplace and are being captured elsewhere within the region of influence or the Commonwealth. . This trend echoes the sentiment expressed by respondents to the Town's recent Citizen Survey (see the Appendix for a detailed summary of the survey responses). Both the region of trade and the Commonwealth retail figures support the notion that Town and County residents prefer to travel to neighboring communities in order to take advantage of larger shopping malls, more competitive prices and a wider variety of goods and services. Smithfield's existing shopping opportunities center mostly around neighborhood and community level commercial centers and stores. The majority of this commercial development is located primarily along the Route 10 commercial corridor and in the small shops lining Main Street in the Downtown area. Currently, no retail shopping centers are sufficiently large to support or attract, a high-quality, full-line anchor department store(s) that would help to strengthen the area's performance in the retail categories mentioned above. In essence, the critical population mass required to support regional-level shopping facilities does not exist within the Smithfield region's primary market area.

Historically, Smithfield area residents generally travel either to one of the more urban localities within the region of influence or to points beyond to obtain these types of shopping goods. Shopping malls such as Chesapeake Square capture a great deal of local spending dollars, particularly in the apparel and specialty goods sectors. Other regional shopping centers within

the region of trade, including the shopping areas along Mercury Boulevard in nearby Newport News capture a large share of the local demand for general merchandise and furniture. With its wide variety of outlet and specialty stores, Williamsburg also captures a sizable portion of local retail spending, particularly within the specialty goods, gift and apparel sectors. While Smithfield will continue to grow as a regional trade center, it remains limited by the relative accessibility of these larger and more diverse regional shopping centers. Eventually, population growth in the Smithfield area will provide sufficient incentive to attract larger and more diverse retail complexes to locate in or around the Town. Thus, increased competition with the other localities within the region of trade for retail spending will eventually occur. This emerging trend should be considered in future land use decision-making as sites suitable for quality commercial shopping centers will be held in high demand. Until population growth in Smithfield provides this required incentive, however, future retail growth in Smithfield may have to rely entirely upon incremental growth in its present base of community level and neighborhood-level retail trade, as well as in the growth of specialty goods (tourism-oriented) sales.

A simple exercise allows one to view changes in Smithfield's retail spending over time. By comparing the County's retail sales in 2007 to those seen during the time of the last Comprehensive Plan Update, one can get an idea of how the regional economy is changing. As reflected in Table IV-11, the decade of the 2000's has brought prosperity to the local economy in terms of gross retail growth. Total retail sales in the County are up by more than \$64,000,000 since 1996. This growth is important because it shows that there is a positive outlook for the local retail economy as evidenced by the large number of new merchants entering the marketplace.

In order to account for inflation over the six year period, one can use the Consumer Price Index (CPI), to compare sales from each year in constant dollars (see Tables IV-11 and IV-13). The CPI tracks average prices for a mixed bag of goods across the nation in an attempt to gauge price fluctuations. This index is the most commonly accepted means of measuring inflation over time. Using the CPI figures for 1996 (156.9) and 2007 (207.342), one can determine that the adjustment for inflation between 1996 and 2007 is 1.32. Using this adjustment rate, one can calculate the value of 1996 retail sales in terms of 2007 constant dollars, thereby allowing a fair comparison between sales performances in each year (see Tables IV -11 and IV-13 on the preceding pages).

Once the total sales figures are put into comparable dollar terms, one can then calculate the real sales growth rate of the retail economy since the last Comprehensive Plan Update. Retail sales, expressed in constant dollars, have increased significantly (by 11.5%) in Isle of Wight County

during the nineties as is reflected in Table IV-11. However, in terms of sales per capita, the County has actually witnessed a slight decrease since the last Plan was adopted.

Further, Isle of Wight is trailing its competitors within the region of influence, however, as indicated by data provided in Table IV-13.

Despite the relative lack of diversity in the local retail economy, Smithfield and Isle of Wight County have maintained their limited share of the regional market since the last Comprehensive Plan was adopted. As is reflected in Table IV-11, Isle of Wight County captured 5% of the total retail sales volume in the region of influence in 2007, just as it did in 1996. Although Isle of Wight County and Smithfield have but a fraction of the population that its urban neighbors maintain (less than 3% of the total region of influence), they compete with these larger localities for the retail spending of Town and regional residents. Per capita sales figures indicate that Isle of Wight County and the Town of Smithfield have tremendous potential to capture additional retail sales within the region of influence, particularly as the area continues to grow.

The Town cannot successfully compete for the escaping retail spending with its existing retail assets; however, new retail establishments and shopping centers catering to the local shopper's demand for increased variety and competitive pricing will be needed to capture an increased percentage of this demand. As a part of the Future Land Use Plan, suitable commercial sites will be identified and proactively marketed for such uses.

*Chapter V:*  
**PROJECTIONS**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter V:* **PROJECTIONS**

The main purpose of providing population and land use projections is to establish benchmarks against which future land use decisions regarding the type, mix, character and quantity of future development products may be tested. This study focuses on those relationships for a defined planning period that extends from present time to 2030. In order to accurately project future land use demand, the “Projections” chapter will include the following data and analysis: population projections, household projections, residential land demand, retail sales projections, retail land demand, employment projections and office and industrial land demand.

### **Population Projections**

Population growth will greatly influence future demands for residential, office, retail and industrial properties in the Town of Smithfield. Population forecasting is at best an “educated guess.” For this reason, population forecasts developed in conjunction with the Town’s Comprehensive Plan Update should be used only in the context of establishing a generalized analytical framework for the allocation of future land uses.

The future number of persons who choose to live in Smithfield will be influenced by market forces and the growth management policies of the Town, Isle of Wight County and other neighboring jurisdictions, in addition to several other inter-related factors. Thus, Smithfield’s population growth must be viewed in a regional context. While it is reasonably clear that a significant amount of growth will occur within the land areas annexed a decade ago by the Town from Isle of Wight County, it is difficult to predict precisely the pace at which this future development will occur because of the changing availability of land served by adequate community facilities.

In order to provide a projection for the Town of Smithfield, two different methods have been used: the straight-line method and the population growth capture method.

**Straight-Line Method**

The straight-line method uses a locality's past annual population growth rates to make educated guesses concerning future growth. As is reflected in Table V-1 below, three different annual compound growth rates (ranging from 1.38% to 3.0%) were incorporated into the straight-line method in order to provide a reasonable range of what the Town's future population could become based upon annual growth rates reflected within the Town over the past three decades. Using the straight-line method, it is estimated that the Town of Smithfield will have between 9,576 and 13,789 residents by the year 2030.



### **Population Growth Capture Method**

The Population Growth Capture Method is slightly different from the Straight Line Method in that it uses current and projected population estimates for Isle of Wight County as the basis for projecting Smithfield's future population growth. This strategy is based on the assumption that Smithfield will continue to absorb a certain percentage of the projected growth for Isle of Wight County given the Town's role as the primary urban area in the County. According to the 1990 Census, Smithfield constituted 18.7% of the total population of Isle of Wight County. Smithfield captured approximately 20% of the total population growth in Isle of Wight County between 1990 and 1996. However, with the Town annexing 3.9 square miles of largely undeveloped County property in 1998, it is assumed that this capture rate will increase by a significant amount in the next ten to twenty years. Thus, three different capture rates (between 16% and 35%) were incorporated into the population growth capture method in order to provide a reasonable range of predicted future growth in the Town.

This method assumes that the Town will capture a constant annual percentage of Isle of Wight's growth between 2007 and 2030. Using this method, it is projected that the Town of Smithfield could grow to a total population of between 9,870 and 13,293 by 2030 (see Table V-2 on the following page).

### **Summary of Population Projections**

Although each method discussed above utilizes a different approach in projecting future population growth, both are based entirely on historical growth trends within the region and assume a relatively rapid pace of continued growth. Neither, factors in the "supply side" of the future population growth equation, however. In other words, both methods are based solely on demographic statistical demand absent of any consideration of the political boundaries or physiographic features or the economic or political contingencies that could limit future development within the Town. Clearly, these factors will need to be considered along with these conservative population projections in the process of making sound future land use decisions.

In the meantime, these figures can be used to aid in the forecasting of future land demands, community facility demands and infrastructure support requirements. Based upon the results obtained using each of the two methods described hereinabove, it is projected that the Town of Smithfield will have a total population of between 9,576 and 13,789 by the year 2030. This would represent an increase of between 2,589 and 6,802 new residents during the upcoming twenty-three-year planning period.



### **Residential Land Area Requirements**

A major objective of the Comprehensive Plan is to identify adequate areas for future development of appropriate residential housing units. For the Town of Smithfield to reach its projected 2030 population of between approximately 9,576 and 13,789, a range of new housing products of varying size, density and pricing must be accommodated within the corporate limits. These housing units will be built upon currently vacant property or developed in concert with the revitalization and redevelopment of existing structures and occupied parcels within the Town.

For planning purposes, it is important to use the Town's average household size projections to forecast the number and type of housing units that may be required to shelter the Town's future residents. Smithfield's estimated current average household size of approximately 2.49 is consistent with regional and State standards, in that it is declining over time. This reinforces the Town trend towards an increasing population of family household formations. Based upon Smithfield's average household size, it is projected that approximately 1,333 new households will be formed between 2007 and 2030, assuming that 75% of the projected population growth during this time will represent new household formations.

The amount of land that will be required to accommodate future housing units will be a function of the density of residential development allowed for differing housing products within the Town. Generally, housing type and density are related in the following manner:

- *Suburban single family detached residences at 1-3 dwelling units per acre;*
- *Townhouses at 6-8 dwelling units per acre; and*
- *Apartments at 12-14 dwelling units per acre.*

Obviously, the demand for housing types is influenced by many factors, including size of household, household composition and household income. In adhering to Town housing goals, the Plan's residential land use designations should allow enough flexibility to provide housing opportunities for persons of all economic backgrounds, focusing particularly on providing more single family detached residential housing opportunities.

The planning process should strive to reserve adequate and sufficient residential land areas for housing orientations satisfying the full range of potential development densities. Accordingly,

the average residential density is based on 3-6 dwelling units per acre. This average density may be applied to the projected level of new household formations to determine a range of anticipated acreage demanded for new housing in the near planning term. As can be seen in Table V-3 below, a range of between 222 and 444 acres is anticipated to be absorbed for new housing between 2007 and 2030.

### **Retail Land Area Requirements**

An extended market analysis of existing retail sales volumes was developed in order to forecast the amount of commercial land which should be accommodated in the Comprehensive Plan. In basic terms, future sales volumes, and, hence, retail spatial demands for Isle of Wight County are projected based on the increased buying power of the anticipated future population growth increment. Since no Town-specific retail sales information data is available, County retail sales data are used for this retail market analysis. Using this sales data provided by the State Department of Taxation, per capita sales figures were calculated across twenty-four sales categories for the County. This County-based ratio is employed in computing linear extensions of future retail sales growth based on the forecasted population increases.

As is reflected in Tables V-4, V-5 and V-6 on the following pages, Isle of Wight County should realize an increase of nearly \$100 million in retail sales between 2007 and 2030. Reflected in this figure is the assumption that the existing store mix, tourist trade, and local buying power will continue at approximately the same pace over the projection timeframe. Although the development of a new shopping center and improvements to existing retail outlets in the Smithfield area may, in some ways, alter the character of the sales in the region, the retail market analysis model provides sufficient reliability to make commercial land areas assignments.

In order to calculate the Town's share of projected County retail sales growth, a retail "capture" rate (the percentage of the County's commercial trade expansion which will locate within the Town's corporate limits) must be carefully analyzed. Based on the existing retail share relationship within the region (the Town currently captures approximately 67% of existing regional sales) and retail growth precedents in similar communities throughout the State, the Town should anticipate and plan for the potential "capture" of between 67% and 75% of the region's consumer retail trade growth between 2007 and 2030. Applying this estimate, it is projected that the Town will experience an increase of between \$64.4 and \$73 million in annual retail sales.

This increase of between \$64 and \$73 million of retail trade growth between 2007 and 2030 can be translated into leasable square footage for new stores and total land area requirements to accommodate retail development. As is presented in Tables V-4 through V-6, the sales volumes are converted to Gross Leasable Area based on observed ratios as recommended by the Urban Land Institute. The total development area is then projected by using the basic relationship that

for every square foot of leasable space, three additional square feet are needed to provide a suitable and operable business site. This relationship between leasable space and gross land area needed to adequately support the space on a site is commonly referred to as a floor area ratio (FAR), a term that will be used extensively in the Future Land Use Plan of this Comprehensive Plan. These land area requirements include service areas within the buildings, common areas, minimal open spaces, storage spaces, parking lots and other site features. This generalized market study indicates that the Town will likely absorb between 29 and 33 acres in new commercial development between 2007 and 2030. The biggest challenge for the Town is to determine the proper locations for retail development and possible redevelopment, and to preserve them for such use.









## **Employment Forecast**

Smithfield is projected to expand its employment base modestly in future years. This is consistent with its projected moderate increase in population. The method used to project the amount of employment growth within Smithfield is founded in the basic relationship that exists between the number of people who live within the region and the number who can find employment within the region (number of employees per population). According to the Virginia Employment Commission's (VEC) annual state employment report for 2006, Isle of Wight County provides a very attractive rate of 473 jobs per 1,000 residents (up from 427 in 1996). This figure is much higher than that of the overall region. Since no Town-specific data are made available by the VEC regarding job and wage census, the Plan will use County data as a means of estimating Town employment demands. The VEC data indicate that significant job expansion has taken place within the region in the past decade. This trend will have to continue if the region is to sustain this high rate of employment for the population levels projected.

In projecting employment levels, it has been assumed that the underlying population forecasts for the region, and more specifically, for the County are accurate. From these figures, we have determined the amount of employment expansion which would have to occur to support this growth. The projected County employment increases reflected in Table V-7 on the following page are obtained by multiplying these ratios by the assumed population growth; i.e. (Employment Growth = (Employment / 1,000 Population) \* Population Growth). As reflected in the table, County employment growth projections are summarized for the period between 2006 and 2030. The retail trade industry group is not included within this forecast because retail employment growth is more accurately determined by an analysis of the retail sales projections. For planning purposes, retail employment levels are not critical in the assignment of land uses, since the amount of retail land demands can be more readily predicted from the sales forecasts as outlined in the previous section.

Between 2006 and 2030, an increase of 6498 employment sector personnel (not including the retail sector) are forecast to be employed within Isle of Wight County. The purpose for developing this analysis is to determine the amount of office and industrial land which will be required during the planning period. The following two sections outline the most probable demands for these two land use categories within the Town.



### **Office Land Area Requirements**

Just as with the Retail Land Area projection process, the local market share “capture” technique is employed in the effort to project and allocate the appropriate land areas for office space in the Town. Predicted office growth is correlated to the number and type of firms that are likely to be attracted to the area. The number of employees which will work within these offices is calculated based on the number of future employees in the following industry groups: (1) Finance, Insurance & Real Estate; (2) Services and (3) Government employment.

The land area which will be needed to supply sufficient office space for employment within these sectors is estimated from normative standards for office development and spatial usage. Generally, 200 to 250 square feet of floor area is provided for each employee. The range of requisite floor area is determined by multiplying the number of employees by 200 and 250 SF/Employee, respectively. The total land area is then calculated by applying a FAR (Floor Area Ratio) range for suburban office space of .20 -.25. FAR represents the ratio of building area to total site area (Building Area / Site Area). Using this method, the County’s office land area demanded is projected to be in the range of between 44 and 68 acres (as is reflected in Table V-8 on the following page). Several major factors will influence the quantity of projected regional office growth which the Town stands to capture within its corporate boundaries--1). The relatively abundant amount of attractive (from a locational and economic standpoint) office land available throughout the region; and 2). the incentive, interest and ability of the Town to market itself as a competitive and attractive office-related employment environment in which to work. Given the numerous advantages of sites within its neighboring counties, the Town can expect to capture no more than between 75% to 80% of the projected County share. During the 2006-2030 planning horizon, this constitutes 33 to 55 acres of land demanded specifically for potential office development within the Town.



### **Industrial Land Area Requirements**

Using the same method described in the previous section, industrial land requirements for Smithfield have been analyzed and projected below. By extending current County employment per capita ratios over the 2006-2030 timeframe, the overall increase in industrial-based employment could exceed 691 employees. Based on modern land use norms, the projected levels of new employment could absorb from 241 to 4290 acres of industrial development throughout the region (see Table V-19 on the following page).

The Town of Smithfield has a strong foundation upon which to attract growth in light industry. Several, minor light industries lie scattered within the Town today; although they currently account for a small portion of the overall economic base of Smithfield relative to the meat processing operations in Town. The majority of light industrial enterprises in the County are currently located outside of the Town boundary; however, if the Town were to pursue an aggressive economic development strategy including light industrial development, it is hoped that the Town could achieve a light industrial market share exceeding existing levels. Nevertheless, it is projected that the Town will capture only 50% to 60% of the forecasted County totals in new light industrial job growth. This projected capture rate translates into potential industrial land area requirements of between approximately 121 and 257 acres in the Town.



### **Urban Land Area Requirements: Summary**

Using the projections established in the preceding sections of this chapter, one can begin to obtain a clearer vision of the future demands and pressures that will be placed on the Town. Each of these sections has presented the techniques, assumptions and forecasts for future land absorption within the Town for the major private sector land use orientations. Table V-10 on the following page summarizes these demand-based forecasts of urban land area requirements for the year 2030. Future residential land uses will continue to consume the largest amount of undeveloped Town properties. In comparison to all projected private sector development activities, residential growth will absorb approximately 5.5 acres out of every 10, with a potential land coverage ranging between 222 and 444 acres by 2030. This residential demand estimate provides a relatively broad band, even for planning purposes. In allocating these future residential demands to available land within the Town, it will be necessary to evaluate several different land use models of residential development density (by type and housing character).

Projected demands for retail, office and industrial space will likely compete, in many instances, for the same available properties. Between approximately 183 and 345 acres will be required to accommodate demands for these three land use orientations during the 23-year planning period. These demands will consume approximately 4.5 out of every 10 acres of private-sector development (excluding hotels and motels) by the Year 2030.

Estimates of areas to support private-sector development--i.e. future rights-of-way, public easements and public/institutional development--are provided in the urban land use forecasts, as well. Included are land areas which should be contemplated for support municipal services, facilities and infrastructure--ie. public roads, bike trails, developed parks, fire facilities, police and rescue services, schools and the like. Public rights-of-way for roads, streets and sidewalks will consume approximately ten percent of the total areas to be developed for urban land uses, while public and institutional uses will absorb five percent of this total.

The range of 405-789 acres of private sector land use absorption potential assumes that real estate opportunities will be readily available within the Town and that properties will be priced competitively within the regional marketplace. Thus, from a public planning perspective, the future land use plan must provide for choice and not simply allocate "an acre of land for an acre of demand."





Local land use plans can exacerbate this problem by not allocating acreages “over and beyond” the predicted levels of real estate product demands. Table V-14 introduces the concept of “free market multiplier adjustments” in an attempt to compensate for the potential for the Plan to “undersupply” private sector land uses within the Town’s corporate boundaries. This figure simply represents a multiple of actual land use demands yielding a “planning target” acreage to be provided on the master plan. From an economic standpoint, greater opportunities to capture the regional “fair share” of a given land use arise when larger “multipliers” are accommodated on the land use master plan. Where “multipliers” are low, capture potentials diminish from lack of choice, the residual land available for a given use is soon “priced out of the market,” and surrounding jurisdictions pick up the spill over demand.

In planning for Smithfield’s Year 2030 land use horizon, adhering to a “free market multiplier” equal to 3.0 would direct the land use plan to accommodate a range of 1,398 to 2,722 acres of private-sector development. In the formulation of the General Land Use Plan, the physical land holding capacities of the Town’s available undeveloped tracts have been considered to plan a distribution of land uses which both: 1). accommodates the projected land demands and 2). preserves Smithfield’s distinctive environment.

*Chapter VI:*

**FUTURE LAND USE**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter VI:* **FUTURE LAND USE**

### **Introduction**

The Future Land Use Plan for Smithfield seeks to achieve the following major goal:

*The Town shall plan for a balanced mix of residential, commercial and economic development uses which will accommodate the projected demands for housing, shopping and tourism, as well as promote new employment opportunities, for present and future residents.*

Each and every significant decision made and recommendation developed as this Plan evolved was made with this overall major goal in mind. The Future Land Use Plan chapter is organized into four sections which describe (1) the existing land use and physical development patterns of the Town, (2) the planning process which supports the selection of future land use designations, (3) the future land use categories to be included in the Future Land Use Plan and (4) a summary of recommendations for the Future Land Use Plan.

In the “Existing Land Use” section, the existing variety, allocation and concentration of land uses within the Town is presented and analyzed. The “Planning Process” section reviews the general approach to determining Smithfield’s future development, with the background analysis linked to the physical, ecological and economic realities of the Town. In this section, the following key planning concepts are also defined: Districts and Corridors, Planning Areas and Sub-Areas, Urban Land Suitabilities and Net Developable Acreage. The “Land Use Categories” section defines the dominant categories of land use (residential, commercial, economic development, institutional, public, recreational and conservation) which are intended to constitute the optimal mix of uses for the Town. The final “Future Land Use Plan” section summarizes the recommended future development pattern for Smithfield.

### **Existing Land Use**

The foundational underpinning of the Comprehensive Plan Update is an understanding of Smithfield’s existing land development patterns. As of December, 2008, approximately 2,874 of the 6,409 acres within the Town’s corporate boundaries were classified into various “active”,

developed urban land use categories (see Table VI-1 on page VI-10 for a complete existing land use summary). The remaining 3,535 acres (approximately 55 percent) are undeveloped and are maintained primarily as woodlands, open spaces, tidal marshes and other natural areas. The future development patterns and growth management strategies for the existing undeveloped lands will be greatly influenced by the Town's existing distribution and concentration of residential, commercial, industrial and institutional uses.

Nearly 30% of the Town's total land area is currently developed for residential related uses, as compared to only approximately 23% in 1991. The vast majority of recent growth in the town has occurred in single family residential development within subdivision developments located east of Cypress Creek, although several smaller, low density residential areas are scattered in the western portion of the Town. Future Town planning strategies and programs should seek to preserve and enhance these stable residential areas. Approximately 95% of the Town's total land area devoted to residential areas is allocated for single family dwellings. The remaining acreage is devoted to largely to multi-family units (including apartment buildings).

Commercial development within the Town is generally located either in shopping centers, highway corridor locations or downtown retail areas. The majority of the Town's commercial development is located along South Church Street (Route 10). A total of approximately 170 acres, or approximately 3 percent of the Town's total land area, are engaged in commercial/retail/personal service-related uses, as compared to 100 acres (approximately 3 percent) from two decades ago.

The Town has a significant amount of land which is developed for traditional industrial purposes, the majority of which is comprised of the Smithfield Foods, Inc. pork production operations. A total of 195 acres (approximately 3 percent) of Town lands are engaged in industrial uses, as compared to 147 acres (4 percent) in 1991. Smithfield's economic stability and environmental quality has been, and will continue to be, greatly influenced by Smithfield Foods' development decisions, as well as its continued commitment to the appropriate quality and scale of development in expansion.

In contrast to many of the rapidly urbanizing cities of the Tidewater area, Smithfield continues to retain its natural beauty and its recreational opportunities while, at the same time, experiencing a steady pace of growth. The protection of active open space and provision of recreational facilities is evidenced in that 38 acres (nearly 1 percent of the Town's total land area) are committed to park and recreational uses. Through the 1998 annexation process, the Town gained its first golf course. The 183-acre golf course, located within the Cypress Creek subdivision in the southern annexation area, operates as a semi-public facility that affords local,

regional, and visiting players a challenging alternative to other, older courses in the Hampton Roads region.

Bordering this variety of “active” uses is an expanse of vacant property. Over one-third of the total Town land area is undeveloped and maintained as a wooded and estuarial backdrop to Smithfield’s historic setting. Nearly seventy percent of this property (over 1,650 total acres) was incorporated into the Town during the 1998 annexation.

One of the primary objectives of the 2009 Plan Update has been to reevaluate and refine the Town’s vision for the future of the remaining tracts of undeveloped land originally addressed in the 1999 Plan. The Town has been diligent in its quest to analyze recent development trends within the Town, and to incorporate this analysis into the development of a range of land use allocation alternatives that will afford the Town its best range of options for future managed growth. The final land use allocation presented in the Future Land Use Map and described in detail in the following sections of this chapter represents the Town’s preferred option for future growth into the 21st Century.

### **The 2008 Comprehensive Planning Process**

The comprehensive planning process employed for the 2008 Plan is similar in many respects to that of the 1998 Plan. However, many refinements have been incorporated in an attempt to bring further insight and sophistication to this effort. In the preparation of the updated plan, the process has been segmented into four principal areas: (1) research, (2) analysis, (3) synthesis and (4) land use prescriptions. In seeking the optimal path to orchestrate future growth and to accommodate land use demands within the Town, this four phase process has revolved around a systematic investigation of the natural and manmade environment in the Town, with the resultant product yielding a set of resource-based, future land use recommendations.

The individual land use decisions leading to the Future Land Use Plan were resolved through a process of comparative analysis. In this process, a range of alternative land use allocation concepts were carefully weighed against the physical, social, ecological and economic underpinnings of the Town. The net result of this process is a recommended Future Land Use Plan which concurrently:

1. *Best expresses the "Vision for Smithfield" by successfully integrating the community's planning goals and objectives;*
2. *Is capable of implementation within the context of satisfying both (a) the marketplace demands and (b) the ability of the local government to responsibly supply municipal services and infrastructure; and*
3. *Provides positive community-wide benefits with the least negative impact on the measured values making up the existing physical, social, political and economic environment.*

In this regard, ecological sensitivity and land-carrying capacities must be considered principal determinants to the allocation of land use and setting rational limitations on future growth. The underlying thesis is that the Smithfield community can employ its own rational value system in preparing its local comprehensive plans. This must be achieved through a systematic planning process rather than through the sometimes obscure and artificial criteria employed in drawing conventional zoning districts and "first generation" land use plans. The geographical configurations of Smithfield's future land use patterns are deemed to be a function of the Town's environmental limitations and potentials, rather than land use patterns established by simply following property lines and political boundaries. This affirms the theory that zoning

cannot be considered a useful planning tool for Smithfield unless and until resource-based plans are drawn which reflect the intrinsic development suitabilities of the land.

The first and second stages in the planning process were to collect and analyze all necessary data and background information to create a descriptive model of the Town. This information is recorded in conjunction with both current and past Town planning studies and is included in exhibits which address the historic, physiographic, cultural, man-made systems and community infrastructure characteristics of the Town. These maps and supporting documentation, to be maintained and periodically updated by the Smithfield Planning Department, are incorporated into this Plan by reference and address the following geophysical considerations:

1. Surficial geology
2. Soils groupings
3. Hydrologic environments
4. Soil drainage environments
5. Existing vegetation
6. Physiographic features
7. Slopes and contours
8. Existing land use
9. Historic landmarks
10. Cultural features
11. Urban facilities and infrastructure
12. Ambience and community scale
13. Demographic and economic environment

### **Community Development Stages**

As with most urban areas, Smithfield's distribution of land uses and development concentrations vary widely. For planning purposes, it is necessary to establish a well-ordered system of geophysical classifications for the Town's neighborhoods and development areas. This results in a determinant based, physical organization of the Town into separate (1) planning areas and (2) entrance corridors which have a distinct order and organization, while possessing unifying physical, environmental and social characteristics.

The concept of the community development stage is integral to the process of clearly establishing planning area and corridor boundaries. Thus, the interpretation of the Town's planning areas and corridors was based, in part, on their historical "stage" (or "status") within the Town's overall community development patterns. Three general stages of development have been defined as: (1) *stable*, (2) *infill/transition*, and (3) *vacant/undeveloped*. An understanding of these three stages of development within corridors and planning areas is fundamental to the overall planning process.



### **Stable**

The Plan's primary goal for the stable districts and corridors is the preservation of the Town's existing residential neighborhoods, commercial areas, institutional properties and public resources. The main feature of these districts and corridors is the existence of a sufficient critical mass of land development (whether it be entirely single family homes, a shopping center or tourist commercial strip) to establish a definite character that is not likely to be changed by any reasonable development of the remaining vacant land. Protection and enhancement involve taking actions to reinforce the existing character of the area and preventing actions that would compromise or degrade its character.

Over the past two decades, certain areas formerly classified as stable have come under close scrutiny, both within the marketplace and by Town planners. Given their potential vulnerability for redevelopment and/or adaptive reuse, these areas are given more focused attention in the current updating process. Several of these areas are located along prime commercial corridors within the Town and have been identified as being currently "underdeveloped", meaning that the property is currently being used in a fashion that does not represent the highest and best use for the property; and therefore, is suitable for commercial redevelopment. As such, these properties have been separately classified as "Redevelopment Areas" in the current Future Land Use Plan. Also, a number of neighborhoods considered stable in the 1998 Plan have been reclassified as "threatened" by outside pressures. These pressures include a general decline in the maintenance of the existing housing stock, an increase in traffic congestion and/or growing redevelopment pressures in the neighborhood. The current Plan will attempt to identify these "threatened" and "substandard" neighborhoods, focus on the source of the mounting pressures in each, and make specific recommendations concerning measures that the Town can implement in order to help these neighborhoods remain viable.

### **Infill/Transition**

The main feature that characterizes these districts and corridors is a partially developed urban quality creating opportunities for the incorporation of new development patterns within the context of the old. In most cases, these areas are located between two incompatible stable uses which threaten to expand into the adjacent undeveloped or underdeveloped properties. The Plan has focused on several of these districts and corridors and has devised strategies on a case-

by-case basis, where appropriate. This should ensure that appropriately-scaled and buffered development is implemented.

### **Vacant**

Vacant districts and corridors generally do not have an established land development pattern which will dictate future land use decisions. Past planning efforts in Smithfield have focused specifically on the Town's vacant districts and corridors to determine the limitations and alternatives for the future use of these properties. The current planning process continues to prioritize vacant areas, particularly in light of the broad attention being given to economic development.

The Plan's approach is to focus on infill/transition and vacant areas, since these evolving growth sectors could have the most dramatic impact on the future of the Town. These targeted growth areas are subsequently referred to as "Planning Areas" and "Planning Corridors". Also, a number of stable areas which have become suitable for redevelopment have been folded into certain "Planning Areas" and "Corridors" and separately classified as "Redevelopment Areas," as explained above.

### **Planning Areas: The Synthesis Process**

The third stage of the planning process—the synthesis process, established the physical and ecological values inherent in the decisions preceding prescriptions for the utilization of Smithfield's physical and natural resources. Once done, this synthesis revealed ten distinct Planning Areas within the Town, each having its own unique geophysical attributes, development potentials and physical suitabilities for various types and configurations of land uses which may be demanded in Smithfield.

In turn, each "Planning Area", upon detailed examination, is further subdivided into "Planning Sub-Areas" in order to identify the internal geophysical components of the larger Planning Area which have prime development potentials for specific real estate orientations. In other words, the Planning Sub-Area is the portion of the overall Planning Area where urban uses should be concentrated. These areas were defined per the Town's stated objectives of identifying and promoting new development and infill opportunities on vacant or underutilized properties which are compatible with existing neighborhoods. Further, the synthesis process sought to identify those areas comprising the strongest urban development potentials. Particular attention was paid upon the undeveloped "edge" properties along the existing Town boundary for the purpose of determining: (1) the vision for the future development of these areas; (2)

their relationship to adjoining neighborhoods and land uses; and (3) the efficient future allocation of public utilities.

When the Town's Planning Areas are viewed in the aggregate, land use recommendations can be drawn to ensure that the Town's future land use demands are directed to those properties having: (a) optimal development suitabilities, (b) environmental compatibility and (c) prime opportunities for the enhancement of the adopted planning values, goals and objectives of Smithfield. As examined on an individual basis in subsequent sections of this chapter, specific recommendations have been prepared for the following Planning Areas:

### **Planning Areas**

1. *Battery Park North*
2. *Battery Park South*
3. *Cypress Creek*
4. *Jericho*
5. *John Rolfe*
6. *Pagan Pines*
7. *River Residential*
8. *Smithfield Industrial*
9. *Southern Gateway*
10. *West Main*

The analysis and recommendations for each Planning Area is detailed in the following sections. As is displayed in the table on the following page, these ten Planning Areas constitute 5,118 of the Town's 6,409 total acres. Over 1,225 acres are identified as net developable areas, which represents approximately 19% of the Town's total land area.



## **Entrance Corridors**

A major emphasis of the development of the Comprehensive Plan has been the recognition of the unique character of the Town's entry corridors and arterial roads which serve as the gateways to Smithfield's historic districts or points of tourism or cultural destinations. Five such entrance corridors have been identified:

1. *U.S. Route 258 from the west;*
2. *State Route 10 Bypass from the north;*
3. *State Route 10 Business from the north;*
4. *State Route 10/U.S. Route 258 from the southeast; and*
5. *Battery Park Road (Route 669) from the east.*

The Town's entrance corridors are those major entranceways that convey the initial perception of the character and image of Smithfield to those traveling through the outlying community and into the Town. Each of the corridors was selected because of its importance as an entrance to the Town of Smithfield and to the Historic Area in particular. The importance of the functional and aesthetic character of these corridors leads us to examine how each entranceway could be protected and enhanced thereby reflecting citizens' aspirations concerning the improvement of the design, appearance and image. The main goal embedded in this strategy is to improve the functional and visual character of the corridors for both vehicular and pedestrian movement. The intersection of Route 258 and Route 10 Bypass serves as the major gateway into Town from the west, while the South Church Street/Route 10 Bypass/Route 258 intersection forms the primary gateway from the east. It is believed that the Battery Park Road/Nike Park Road intersection will emerge as another primary gateway in the near planning term as future development east of Town will increase vehicle trip demand along this arterial.

The Town plans to introduce protection and design control measures for these corridors and gateways in order to stimulate complementary new development which will be compatible with Smithfield's historic character and which will enhance the Town's attractiveness to tourists, visitors and its residents.

Within the identified Planning Areas, it is argued that inherent social and ecological values represented by the natural processes for a given tract of land are, in many cases, suitable for a multitude of human uses. For example, moderately sloped and well-drained land may be as well suited for apartment or shopping center development as for active recreational or open space uses. Similarly, areas of historic or scenic value could, at the same time, be highly

desirable for commercial or office development. The synthesis stage in the planning process focuses on resolving any apparent conflicts which exist for the individual citizen whose property is subject to the recommendations and outcomes of the Comprehensive Plan.

The next step in the process is to determine the Town's geographical areas most suitable for future urban uses. While each Planning Area was analyzed for its intrinsic suitabilities for a range of uses—urban, conservation, agricultural, recreational, etc.—the synthesis effort made it possible to assess each Planning Area attempting to assign a “single optimal and preferred use” for each. In doing so, the degree of compatibility of that particular use with other existing and future land uses was determined.

All land within each of the Planning Areas and Planning Sub-Areas has been examined in detail to determine its urban suitabilities. Superimposed on these measurements are the social, market and ecological values supported by the planning goals and economic realities of the area. By applying sound ecological analysis to each Planning Area, it becomes obvious that internal Planning Sub-Areas with prime urban development potentials provide sufficient capacities and opportunities to absorb the Town's growth projections into the first quarter of the twenty-first century. On the other hand, the lands situated outside the Planning Sub-Areas identified as Environmentally Sensitive Areas should be maintained as open space, recreation and/or other uses which do not require significant structures.

### **Urban Land Suitabilities**

The 2008 Plan introduces a new means for the Town by which it may determine the suitability of land for urban development. This creative approach has been successfully implemented in similarly-sized communities throughout the Middle Atlantic region in the past twenty-five years. It recognizes that the physical components of the “urban suitability selection process” allow the land to “speak for itself” in a geophysical sense. Whereas most traditional zoning regulations and comprehensive planning practices in Virginia have allocated land use categories and development densities to the landscape in an indiscriminate fashion, the process of employing scaled suitability rankings allows land use allocations to be a function of the specific character and attributes of the land to which they apply. Thus, more responsive physical planning decisions can be drawn from this approach: for instance, the analysis process recognizes that flat land works better and produces more than steeply sloped land for commercial development. Similarly, it provides a sensitivity process by which the lot development yield in a residential subdivision can be quantitatively limited by the presence of floodplains, highly erodible soils, and stream valleys. Thus, the physical planning process recognizes the fact that steep slopes and significant environmental areas significantly reduce the

development potential of the land, and future land use recommendations are made subject to these and other considerations. Virginia's enabling statutes for planning and zoning lend support to such a process which applies a more sophisticated approach to orchestrating and allocating community land uses.

The synthesis process identified the significant physical parameters to be included in the urban suitability selection process. The following considerations are considered in the land use allocation models for the Smithfield Planning Areas and in structuring the boundaries of internal Planning Sub-Areas:

1. *Slopes less than ten percent (10%) are generally suitable for urban uses, infrastructure systems and transportation improvements.*
2. *Slopes in the ten to twenty percent range (10% - 20%) begin to restrict the urban development potentials and overall physical capacities of individual parcels within the Planning Areas.*
3. *Slopes greater than twenty percent (20%) pose significant capacity constraints for urban uses and development thereon should be restricted to a greater degree than more gently sloping properties.*
4. *Areas of significant archaeological and geologic features pose significant capacity constraints for urban uses and development thereon should be avoided to the extent possible.*
5. *Floodplains, tributary streams and major drainage channels constitute physical systems necessary to maintain hydrologic equilibrium in the watershed and development thereon should be avoided and development adjacent thereto should be allowed only under close scrutiny.*
6. *Tidal marshes and wetlands constitute physical systems necessary to maintain water quality as well as the ecological and hydrologic balance in the watershed and development thereon should be avoided.*
7. *Soils of low bearing capacity have restricted suitabilities for intense urban development and the total allowable density thereon should be restricted accordingly.*
8. *Soils of high erodability pose limitations on urban uses, and the scale, density and character of development thereon should be allocated and extensively managed in such a fashion as to restrict adverse environmental impacts.*
9. *Significant and/or rare vegetative cover is a valued element of a Planning Area's natural system, and the allocation of urban uses must respect the environmental maintenance and conservation thereof.*

10. *Future land uses adjoining existing built environments within Planning Areas must respect the architectural scale, density and character of contiguous developments as well as related urban design objectives.*
11. *Land areas identified by the Plan as being necessary to accommodate public facilities, utilities, rights-of-way and related infrastructure to serve urban land uses should be reserved and, in most instances, should not be included in the determination of allowable density within the Planning Area.*
12. *Construction is prohibited on land identified as Resource Protection Area by the Town Zoning Ordinance in compliance with the Chesapeake Bay Preservation Act. All future development in land identified as Resource Management Areas should incorporate sufficient storm water management facilities in order to meet the standards described by the Chesapeake Bay Preservation Act for development within the RMA.*

Emphasis on the protection and preservation of historic, cultural and natural resources surfaced as a dominant theme throughout the responses received as part of the Citizens' Survey conducted as part of the Comprehensive Plan process. Eighty-three percent of the survey respondents agreed or strongly agreed that the protection and preservation of the Town's waterfront areas are high priorities, and should be a major goal for future land use planning in Smithfield. Local citizens also support the preservation of historic sites and buildings in the Town. Seventy-one percent of the survey respondents agreed or strongly agreed that the Town should use public funds to promote and maintain these sites and structures as a means of protecting the Town's historic character. With this strong public consensus in mind on these issues, the Town has evaluated the land within each of the ten identified Planning Areas within the context of these evaluation parameters.

By applying these evaluation parameters to each of the Planning Areas, certain conclusions could be drawn regarding the following: (a) the intrinsic suitability of the Planning Area for urban uses, (b) the range of most appropriate uses within the Planning Sub-Areas, (c) the land use carrying capacity of the Planning Area for the identified urban uses, (d) the identification and location of "sensitive environmental areas" within the Planning Area on which urban uses should be restricted or strictly limited and (e) the identification and location of specific land units within the Planning Area which should be reserved for transportation improvements, public facilities, infrastructure and other uses supportive of and benefiting the allocated urban uses and densities. Derived from this is a recommended set of uses and net densities to be included in the adopted Future Land Use Plan for the Town of Smithfield.



### **Net Developable Acreage Concept**

The Land Use Plan's land-use yields (usually expressed in terms of dwelling unit counts or commercial/office floor areas in square feet) for the Planning Areas and Sub-Areas are a function of the comparative suitability ratings for each area. The concept of "net developable acreage" provides for a rational approach for estimating the land carrying capacity of the Planning Areas. Similarly, the Plan recommends that the zoning districts for Smithfield should employ the "net developable acreage" calculation technique in arriving at the land use yield for any given property subject to a specific development proposal. The Town has incorporated this concept into its current Town Zoning Ordinance.

The "net developable acreage" methodology enables the planner and landowner to establish a truer estimate of a given property's development capacity. For example, a Planning Area with a gross acreage of 100 acres, but having 20 net acres of land which have been identified as "sensitive environmental areas", would yield 80 "net developable acres". Within each of the Town's major Planning Areas, these "net developable acres" (or land deemed most suitable for development) are generally depicted as a discrete Planning Sub-Area on the Future Land Use Plan. Where possible, the Planning Sub-Areas identified on the Future Land Use Plan have been delineated so as to exclude "sensitive environmental areas" (as defined by the zoning ordinance) that should be protected from future development. These sensitive environmental areas will be referred to in the Plan as "primary sensitive environmental areas. Internal to individual Sub-Areas, additional discrete pockets of land which qualify as sensitive environmental areas will likely be identified upon site-specific analysis. In order to differentiate these lands from those larger environmentally sensitive areas, these internal pockets of land will be referred to as "secondary environmental areas."

The application of this concept offers an environmentally sound process through which the land use yield of a given Planning Area or Sub-Area can be measured. When the "net developable area" concept is used in conjunction with site planning for individual development projects, the zoning district regulations, in effect, will combine conventional zoning standards with environmental performance standards. The end result is a technically sophisticated implementation process which is more responsive to the physical characteristics of the land than found in other conventional zoning and planning approaches. Thus, the land is truly allowed to "speak for itself", and, in so doing, fulfill the basic tenets of Virginia planning and zoning law which are grounded in the principle of "uniformity". This net developable acreage concept provides a consistent formula for applying land use criteria to tracts of varying size and physical characteristics.

## **FUTURE LAND USE CATEGORIES**

The Future Land Use Plan assigns land use classifications based on the Planning Commission's recommendations for the preferred arrangement of land uses within the Town at full development. The Future Land Use Plan map illustrates these various use classifications or "planning categories". Several of the categories which were included on the 1998 Land Use Map have been revised and enhanced to satisfy existing land use needs. In addition, several new categories have been added to specifically address land use issues which have been inadequately regulated in the past or that have only recently become important to the community. A summary of the land use categories and their applicable zoning districts is included in the table on the following page.

The following is a description of the residential, commercial, economic development and public and conservation land use planning categories along with the various types of uses which are recommended for each category.



## **Residential Land Use Categories**

Smithfield's housing stock accommodates diverse residential dwelling types and densities which span a wide range of real estate market values. Projections developed for this Plan (see Chapter V) indicate that the future residential marketplace will create demands for a range and mix of housing opportunities. Therefore, the Plan's goals and objectives encourage well designed, sensitively phased and appropriately scaled neighborhood locations for a mix of housing types, with a strong emphasis placed on providing sufficient opportunities for single family detached housing in the Town. Special attention is given to the newly annexed land areas which came into the Town under zoning designations compatible with those of Isle of Wight County. Four separate residential planning categories have been selected for inclusion in the planning process:

- 1. Low Density Residential - Single Family Detached**
- 2. Suburban Residential - Single Family Detached**
- 3. Attached Residential - Townhouses/Duplex**
- 4. Multi-family Residential and Retirement Residential**

Each residential planning category was structured according to its appropriateness to satisfy the adopted goals for future housing in Smithfield. Based on research of other Virginia communities, the recommended residential densities (or land use "yields") have been carefully studied and tested for each of the recommended residential categories. These densities are generally expressed in terms of dwelling units per net developable acre. The scope, intent and envisioned character of the four residential categories to be designated by the Future Land Use Plan are presented on the following pages.

## **Residential Planning Categories**

### **1. Low Density Residential - Single Family Detached** **1-3 du/net ac.**

This category addresses the lowest intensity of subdivided residential land areas included in the 1999 Comprehensive Plan, and as such, encompasses the vast majority of land in the Town. The Low Density Residential land use category is used to represent undeveloped land areas which would be most appropriate for the future development of large lot, single family detached residences. These residences should be supported by public utilities organized within the context of integrated open space, recreational and environmental amenities. This planning category is also intended to recognize existing subdivisions in the older sections of Town, including the Grimesland, Pagan Point, Red Point Heights and Moonefield neighborhoods, as well as the Downtown Historic District.

Residential development densities within this category range from 1 to 3 dwelling units per net developable acre, with conventional lot sizes ranging from 12,000 SF to 30,000 SF, depending upon net developable area ratios for particular subdivision projects. Clustering is encouraged to achieve greater efficiency and density within new subdivisions. Although several of the older subdivisions in Town are developed at a higher density than that which is promoted in this category (numerous lots in these subdivisions are smaller than 12,000 square feet in area), the low density residential designation is appropriate for planning purposes for these existing subdivisions because they are considered stable and few, if any, infill opportunities exist within them. Where opportunities do exist to develop new homes within these neighborhoods, it is recommended that future development respect the framework of the existing neighborhoods and be sympathetic to the surrounding uses in terms of its density, scale, setbacks, etc. Thus, the low density residential category provides for the most efficient means for planning future infill development within these established neighborhoods.

Historically, this land use category has been implemented via the old Town Zoning Ordinance through the R-1A, R-1S and R-1 zoning districts. However, these zoning districts failed to effectively address contemporary lot size, density and yard regulations for low density single family development supported by public utilities, and they are not significantly different in their design and scope of regulation. As part of its revision of its Zoning Ordinance, the Town replaced these districts with two new zoning districts—the Neighborhood Residential (N-R) and Downtown Residential (DN-R) districts-in order to further enhance the objectives of the Low Density Single Family Detached Residential planning category.

The N-R district is applied only to the lands formerly zoned as R-1 and applicable R-1S zoned areas. Some of the large rural parcels formerly zoned R-1S were rezoned to C-C, Community Conservation. Additionally, the D-R zoning district has been developed to replace the old R-1A district, as well as to support the types of residential uses allowed in the old ordinance by the MX and R-O zoning districts. Net developable area performance standards, which were inadequate in the old zoning ordinance, have been fully incorporated into these new districts. Furthermore, the new zoning districts prohibit future residential development from relying upon private well and septic systems.

**Recommended Zoning Districts for Implementation of Low Density Residential Land Areas:**

- C-C, Community Conservation district
- N-R, Neighborhood Residential district
- DN-R, Downtown Neighborhood Residential district

**2. Suburban Residential - Single Family Detached**

**3-5 du/net ac.**

Land areas carrying this designation are planned for single family detached residences developed at a moderate density in the range of 3 to 5 dwelling units per net developable acre, with conventional lot sizes of 8,000 SF to 12,000 SF. Clustering is encouraged where appropriate within these areas in order to achieve greater land use efficiencies and environmental protection. The Suburban Residential category is intended to promote the development of affordable detached housing on lots located within master planned, traditional-styled subdivisions. All future development within this land use category should be supported by public water and sewer systems. The category focuses principally on undeveloped lands (namely, the Cypress Creek and Wellington Estates subdivisions) in the annexation areas that were approved for specific development by the County of Isle of Wight according to its existing zoning ordinance. According to the annexation agreement signed by the Town and Isle of Wight County, the Town must respect the densities and land uses approved by the County prior to annexation. However, prior to the revision of the Zoning Ordinance, the Town had no zoning designation compatible with the zoning granted to these lands by Isle of Wight County. In response to this dilemma, the Town adopted the new Suburban Residential (S-R) zoning district which has been specifically tailored to replace the R-1 district and to guide future development of this density and dwelling type.

**Recommended Zoning Districts for Implementation of Medium Density Residential Land Areas:**

S-R, Suburban Residential district

**3. Attached Residential (Townhouses/Duplexes)**

**6-8 du/net ac.**

Townhouses, innovative cluster housing and duplexes are to be recognized by this planning category at a density in the range of 6 to 8 dwelling units per net developable acre. Design standards must be applied to ensure adequate off-street parking, recreational areas, preservation of open space and compatibility with surrounding land uses, especially existing residential neighborhoods. Apartments and other forms of multifamily dwellings are specifically excluded from this residential category.

The A-R Attached Residential zoning district is consistent with the goals of the Comprehensive Plan and has been tailored specifically to more appropriately regulate the development of townhouses and related residential attached uses (other than apartments) of this density range and dwelling type. This district also incorporates enhanced standards and design criteria for open space and recreation areas.

**Recommended Zoning Districts for Implementation of Attached Residential Land Areas:**

A-R, Attached Residential district

**4. Multi-family Residential/Retirement Housing**

**10-12 du/net ac.**

**20 du/net ac. (retirement housing)**

This land use category is intended to be applied primarily to new retirement housing complexes and to recognize existing multi-family areas. Given the large amount of existing multi-family housing in Smithfield, no new high density residential development (i.e. garden style apartments) is being considered for the Town's 2009 Comprehensive Plan.

In the Town Zoning Ordinance, the MF-R, Multi-family Residential Zoning District is tailored specifically to this density range and dwelling type to ensure that future redevelopment activities are consistent with contemporary multi-family development standards.

For the purposes of the 2009 Plan Update, this planning category is primarily intended to encourage the development of housing for the elderly. In order to promote this type of development in Smithfield, elderly housing proposals may be granted higher densities (up to 20 units per acre) subject to superior design proposals. Recognizing the wide appeal of this particular housing type, special design guidelines and standards should be developed to address the range of retirement and assisted living projects. These guidelines and standards should be compatible with development prototypes existing in the region.

**Recommended Zoning Districts for Implementation of Multi-family Residential Land Areas:**

MF-R, Multi-family Residential district

## **Commercial Planning Categories**

The Comprehensive Plan recognizes a number of opportunities for the expansion of commercial retail, mixed use and residential/office transitional land uses within the Town. To better guide these uses, the Future Land Use Plan has been organized to accommodate four distinct classifications within Smithfield:

- 1. Retail Commercial**
- 2. Downtown Commercial**
- 3. Mixed Use**
- 4. Residential/Office Transitional**

The 2009 Plan Update focuses on a reorganization of commercial, office and economic development land use classifications and the intensity of development related to each. Under the Town's former zoning regulations, there were little or no geometric standards or density criteria for the development of such land uses. The new zoning ordinance which has evolved from this planning process will address this problem by introducing formal landscaping and geometric yard requirements, as well as density criteria for these non-residential uses.

It is recommended that the density of development for future commercial and mixed uses should be governed by their Floor Area Ratio (FAR). The Floor Area Ratio represents the ratio of the total allowable building floor area to the net developable area of the property. As an illustration of how FARs are applied to a one acre site, a proposed commercial use with a maximum FAR = 0.30 would permit a building with 13,068 SF of floor space (obtained by multiplying 0.30 x 43,560 SF/acre.) Under the FAR concept, the 13,068 SF commercial structures could be developed under either a single story or multi-story footprint. Under normal circumstances, a Floor Area Ratio equaling 0.30 provides for sufficient area to accommodate on-site parking requirements while providing adequate setbacks and buffer areas.

Within the four planning categories, the density of uses will vary according to location and surrounding land uses. For general guidance, a density based on a recommended FAR of 0.20 to 0.30 is appropriate in the Residential/Office Transitional land use category. This will provide for commercial and mixed-use development which is consistent with a suburban residential scale and lot coverage. In the Retail Commercial category, higher FARs of 0.25 to 0.50 are acceptable, while FARs of between 1.00 and 2.00 are considered appropriate for Downtown Commercial and Waterfront mixed-used development. Under special circumstances, higher FARs could be conditioned upon the provision of additional landscaping, open space and other



site amenities, with special attention being given to building location and parking lot design and any other urban design guidelines as may be approved by the Town. Density increases for special projects should be subject to special use permitting and could be considered on a case-by-case basis, based on the provision of enhanced site design and amenities by the developer.

The commercial land use categories and their dominant uses and density classifications are summarized in the following section:

## **Commercial Planning Categories**

### **1. Retail Commercial**

**0.20 - 0.50 FAR**

The Retail Commercial land use category will designate land areas on heavily traveled town collectors and arterial streets characterized principally by adjoining commercial and service uses. The category is intended to be applied to existing, stable retail areas, including community and neighborhood shopping centers along the major entry corridors, as well as to future commercial development. Given the nature of the Town's retail marketplace and the limited number of vacant tracts suitable for development outside of the downtown area, the Retail Commercial category will be applied mostly to highway commercial uses, shopping centers, motels, restaurants and other tourism-related retail uses. Residential and industrial uses are not included in this category.

The Retail Commercial category recognizes that remaining highway-oriented land with mixed use potential should be subject to more thorough master planning and design review processes emphasizing transportation and environmental planning, as well as coordinated architecture and urban design standards, particularly for shopping center development. The recommended maximum FAR to guide Retail Commercial uses is 0.40 to 0.50. However, development intensities for motels, which are generally multistory in character, are not adequately regulated by FAR guidelines, but should be subject to a building footprints of roughly 25% of the total site area, with parking and landscaping controlling site geometry.

Historically, the B-1 zoning district currently governed the majority of the Town's corridor frontage land use orientations. In the revised Zoning Ordinance, the B-1 district was replaced by two separate districts, the HR-C, Highway Retail Commercial District and the PS-C, Planned Shopping Center District, which will incorporate new "performance oriented" development criteria. The HR-C District is established to provide suitable locations along Smithfield's heavily traveled collector streets and arterial highways for those commercial and business uses which are oriented to the automobile and which require access characteristics independent of

adjoining uses or pedestrian trade. This district will be applied to those areas of the former ordinance's B-1 District where individual uses can be grouped into planned concentrations which limit the "strip" development effect on newly developing areas, such as in the three annexation areas, as well as on redevelopment areas where commercial development currently exists.

The PS-C District is established to provide locations in the Town for community and neighborhood retail commercial and business service uses within planned shopping districts under unified site design. Application of this district is intended to promote orderly commercial facility development, minimize vehicular traffic within the shopping complex, permit "one-stop" and comparison shopping "under one roof" and facilitate safe pedestrian movement among individual uses within the district. Both of these districts also emphasize density and geometric controls, including the introduction of minimum lot sizes and the revision of building set-back criteria.

**Recommended Zoning Districts for Implementation of Retail Commercial Land Areas:**

HR-C, Highway Retail Commercial district

PS-C, Planned Shopping Center district

**2. Downtown Commercial**

**1.00 - 3.00 FAR**

The Downtown Commercial planning category is consistent with the goals of the 2009 Plan and is intended to promote redevelopment and revitalization activities in Smithfield's historic downtown area. This category is designed to encourage esthetically pleasing and spatially compact downtown land uses with well conceived pedestrian orientations with respect to centralized parking lots and on-street parking. Continued adaptive reuse for mixed-use purposes of residential dwellings and other underutilized structures would be favored in the downtown area, but new, stand alone, residential construction would not be encouraged where this category is to be applied.

Due to its prime central location relative to other non-residential land, the density of the Downtown Commercial category is intended to be much higher than in the other commercial areas in the Town. The recommended maximum FAR to guide Downtown uses is between 1.00 and 2.00. Historically, the B-2 zoning district governed the Town's downtown business area. With the Zoning Ordinance's revision, the B-2 district was replaced by the D, Downtown District. The D district is established to promote harmonious development, redevelopment and

rehabilitation of uses in the existing historic downtown commercial areas of Smithfield. The regulations of the district are intended to promulgate the goals of the Comprehensive Plan for revitalization and historic district development while encouraging mixed uses in and around the downtown business area.

**Recommended Zoning Districts for Implementation of Downtown Commercial Land Areas:**

D, Downtown district

**3. Mixed Use**

**1.00 - 3.00 FAR**

The Mixed Use future land use planning designation expands upon the Town's past notion of focusing the emphasis for encouraging a mix of uses within the same block, property or building beyond the Downtown Waterfront Area. In past years, mixed use recommendations were limited to generally include the downtown waterfront area, commonly known to local residents as Wharf Hill. Roughly circumscribed by North Church Street, Main Street and the Pagan River, Wharf Hill has witnessed a significant amount of redevelopment in recent years. The catalyst in the redevelopment of this area was the development of the new Smithfield Foods Corporate headquarters on the waterfront adjacent to Commerce Street. Most recently, the Town acquired the old Smithfield Shopping Center and demolished it in order to make way for the Smithfield Center and new Little Theater buildings. The balance of the Waterfront Mixed Use Area, as envisioned by the Future Land Use Plan, would allow for a continuation of these redevelopment efforts by means of an appropriate mix of residential, commercial and recreational/public uses. In the updated Comprehensive Plan, the Town also seeks to encourage mixed use greenfield and infill development, as well as redevelopment in suitable locations elsewhere in the Town.

Borrowing from the PUD concept, flexibility and creativity would be promoted in the continued mixed use redevelopment of the Downtown Waterfront area, as well in new mixed use development elsewhere in the Town. Great care should be taken to ensure that future development projects respond sensitively in their design to both the high standards established by recent redevelopment projects and to the valuable natural resources in the area. Flexible provisions would involve allowing a private developer greater freedom in terms of densities, setbacks and height restrictions if a more creative arrangement of land uses is proposed, and provided there is a significant dedication of open space incorporated into the site plan of the development. The Future Land Use Plan encourages limited recreational use and development along other waterfront areas throughout the Town. Elevated marsh trails, low-impact marina

facilities and open space/park land would bring greater appreciation for these natural areas, and would enhance the marketability of the area as a destination for tourism.

Elsewhere in the Town, this Comprehensive Plan Update seeks to emphasize the need for and indeed, encourage new development of traditional neighborhood development and “smart growth in Smithfield. This approach to land development represents a departure from the traditional suburban interpretation of zoning practices in that it promotes compact, mixed-use development with an urban scale, massing, density and infrastructure configuration. Such projects should integrate diversified uses within close proximity to one another as well as within the same buildings, where appropriate. The dominant goal for this new initiative is to provide the urban infrastructure and amenities which are essential to establishing a community which provides economic opportunity within the context of social, physical and environmental sustainability. Key to the successful implementation of these types of neighborhoods are the encouragement of pedestrian movement and inviting public open spaces which so often enable the civic interaction deemed critical to vibrant neighborhoods.

New mixed use development should be designed in a scale compatible with adjacent development and street systems. Residential development densities and non-residential development intensities should be performance-oriented, with total land use yields based on the "net developable area" concept; site planning should be preceded by extensive environmental analysis.

A mix of uses shall be encouraged within blocks in the community and within individual buildings located within the block. However, a vertical integration of uses within a building shall not be the sole determination of a true mix of uses within a block or neighborhood.

In addition to a commercial and service component, other appropriate urban uses shall be integrated into the town center. A mix of offices, lodging, restaurants, recreation, freestanding residential dwellings, upper level residential uses in commercial structures, institutional buildings and public uses should be considered and tested for site accommodation and market feasibility.

The Town should seek to introduce and adopt a new "Traditional Neighborhood Overlay Option" zoning district to implement this significant urban design objective. This overlay district would enable applicable projects to be submitted and considered for approval as a land use option within any of the Town zoning district pursuant to the additional regulations and enhanced design criteria established in the proposed Ordinance. Each proposed "Traditional Neighborhood Overlay Option" project shall be guided by the appropriate land use planning

designation included in this Comprehensive Plan, and shall be governed by the overlay requirements included in the proposed overlay district, the underlying zoning districts, a submitted Master or General Development Plan, a submitted Code of Development, and the applicant's proffers which may be attached thereto.

Projects to be considered as a "Traditional Neighborhood Overlay Option" shall promote compact, mixed-use development with an efficient town or village scale, massing, density and infrastructure configuration which integrates diversified uses both within close proximity to each other and within individual buildings, where appropriate. The dominant goal for the "Traditional Neighborhood Overlay Option" is to clearly define and establish the foundational infrastructure and urban design elements within the context of social, civic, economic, and environmental sustainability.

The incorporation of a mix of residential uses compatible with the "Smithfield style" is encouraged within each "Traditional Neighborhood Overlay Option" district. In addition to single family residences, multi-family dwellings, upper level residential "flats" above commercial structures and garages, and other forms of innovative urban residential dwellings should be considered. A proliferation of repetitive, similarly sized and decorated "McMansions" are not the "vision" for these projects. Appropriate levels of affordable workforce housing should be considered.

Given the historic nature of Wharf Hill and the remaining historic structures found within the area, it was recommended that the D district be extended to the waterfront area in order to promulgate the goals of the Comprehensive Plan for further revitalization and historic area development while encouraging mixed uses in and around the Downtown Area. Higher density mixed use development is permitted within this district by special use permit to encourage the location of residences convenient to places of shopping and employment.

**Recommended Zoning Districts for Implementation of Waterfront Mixed Use Land Areas:**

D, Downtown district

MU, Mixed Use district (proposed)

TND, Traditional Neighborhood Overlay district (proposed)

#### **4. Residential/Office Transitional**

**0.20 - 0.30 FAR**

The Residential/Office Transitional planning category is intended to accommodate low density transitional uses between residential neighborhoods and existing higher intensity commercial and retail uses. However, this category is intended not to primarily focus upon and designate existing residential uses, but rather, to designate those areas where transitional, residential-to-office services and uses are to be seriously encouraged. As such, the new Residential/Office Transitional category replaces the Residential/Office future land use category in the last Plan and can be applied to vacant properties, as well as to existing stable office and service establishment areas in Smithfield. While residential uses may be permitted within the R-O District, it is recognized that it is not intended to masquerade as a residential zone. This purpose is fulfilled by one or more of the recommended new residential categories. The basic uses permitted by right would be for professional and general offices, as well as financial institutions. Only a limited range of low intensity retail uses would be allowed by special use permit.

#### **Recommended Zoning Districts for Implementation of Residential/Office Transitional Land**

##### **Areas:**

R-O, Residential/Office district

#### **Economic Development Planning Categories**

The 2009 Comprehensive Plan recognizes a number of opportunities for the expansion of employment-related, economic development land uses within the Town. To better guide these land uses, the Future Land Use Plan has been organized to accommodate three distinct economic development classifications within Smithfield:

- 1. Corporate Office and Research**
- 2. Light Industry**
- 3. Heavy Industry**

Under the new Comprehensive Plan, it is recommended that the density of development for future job-producing economic development uses should also be governed by their Floor Area Ratio (FAR). As explained in the preceding section on commercial and Residential/Office Transitional land uses, the Floor Area Ratio represents the ratio of the total allowable building floor area to the net developable area of the property. The same density criteria development

procedure provided for commercial land uses will be applied to economic development uses in order to adequately regulate future development in this land use category.

The future development of Light Industry lands in the Town of Smithfield should be limited to FARs in the range of 0.20 to 0.30. Lands identified as being suitable for Corporate Office and Research and Heavy Industry should be able to support a greater intensity of development, and therefore, FARs for these lands should be extended to a range of 0.30 to 0.50. Under special circumstances, higher FARs should be conditioned upon the provision of additional landscaping, open space and other site amenities, with special attention being given to building location and parking lot design and any other urban design guidelines as may be adopted by the Town. Density increases for special projects should be subject to special use permitting and could be considered on a case-by-case basis, based on enhanced site design and amenities.

The Economic Development land use categories and their dominant use and density classifications are summarized in the following section:

### **Economic Development Planning Categories**

#### **1. Corporate Office and Research**

**0.30 - 0.50 FAR**

The Corporate Office and Research land use category is intended to identify appropriate locations within the Town suitable for the development of planned employment centers operating within a park like center. Acceptable economic development uses to be included in the Planned Corporate Office and Research planning category generally includes corporate headquarters, high-technology offices, research and development facilities, banks and financial institutions, conference centers and private training centers. Hospitality and restaurant uses are also encouraged as supporting land uses. The goal of this land use category is to encourage the development of highly attractive and well landscaped corporate office parks emphasizing coordinated development activities within key gateway locations within the Town. Development of vacant parcels within this land use classification shall be architecturally and environmentally compatible with adjoining existing land uses, including residential neighborhoods, and shall afford maximum protection to surrounding properties.

#### **Recommended Zoning Districts for Implementation of Light Industry Land Areas:**

P-COR, Planned Corporate Office and Research district

## **2. Light Industry**

**0.20 - 0.30 FAR**

The acceptable economic development uses to be included in the Light Industry planning category generally includes light assembly and manufacturing centers and distribution and warehousing facilities. The intent of this category is to accommodate limited industrial uses in a well-planned setting where primary functions are to be conducted within completely enclosed buildings and where exterior storage operations are highly regulated. Site planning should emphasize high quality design standards. No use should be permitted within those land areas which might be harmful to the adjoining land uses and the residential ambience of the adjacent neighborhoods.

### **Recommended Zoning Districts for Implementation of Light Industry Land Areas:**

I-1, Light Industrial district

## **3. Heavy Industry**

**0.30 - 0.50 FAR**

The Heavy Industry category is primarily intended to address those existing industries which have potentially hazardous impacts on the community, and to provide enhanced guidelines for the continuation and/or expansion of such uses. The Plan Update does not envision a significant increase in the allocation of geographical areas in the Town for Heavy Industry. Rather, Smithfield's goals and objectives for future non-retail employment focus primarily upon well-planned light manufacturing, assembly and warehousing activities which meet the criteria of the Light Industry category. However, limited opportunities for heavy industrial expansion exist within the Pinewood Heights subdivision provided that a suitable relocation agreement can be reached with existing residents and relocation and redevelopment costs are not prohibitive.

### **Recommended Zoning Districts for Implementation of Heavy Industry Land Areas:**

I-2, Heavy Industrial district

## **Public and Conservation Land Use Categories**

The following land use designations are to be applied to four planning categories which warrant special attention and regulatory oversight: Public and Semi-Public Areas, Parks and Recreation Areas, Community Conservation Areas and Environmental Conservation Areas. These areas must be carefully managed to maintain public and environmentally sensitive resources for future generations.



## **Public and Conservation Land Use Categories**

### **1. Public and Semi-Public Areas**

Public and Semi-Public uses are generally institutional and municipal buildings and lands. These uses include the Town buildings, post office, state and federal facilities, public and private schools, churches and cemeteries. These uses are allowed by-right in three commercial zoning districts: HR-C, PS-C and D.

#### **Recommended Zoning Districts for Implementation of Public and Semi-Public Land Areas:**

HR-C, Highway Retail Commercial district

PS-C, Planned Shopping Center district

D, Downtown district

### **2. Parks and Recreation Areas**

This category encompasses historic properties, open spaces, parks and recreation facilities which are owned and maintained by the Town, State or Federal government. Such uses are allowed by-right or special use permit in both residential and commercial zoning districts. Thus, for planning purposes, the uses described in this category are implemented via the underlying zoning district.

#### **Recommended Zoning Districts for Implementation of Parks and Recreation Land Areas:**

Underlying Zoning District Designation

### **3. Community Conservation Areas**

Community Conservation areas include agricultural, forestry, open space and other lands of rural character within the Town that should be maintained in their current use on an interim basis until such point in time when development consistent with the adopted Future Land Use Plan may be pursued. It is the intent of this land use area designation to preserve existing natural features and vegetation, promote interim agricultural and forestry activities and production and encourage the conservation and maintenance of sensitive environmental areas. Special attention is given to the newly annexed land areas which came into the Town under zoning designations compatible with those of Isle of Wight County. Since the Future Land Use Plan is intended to define the "highest and best uses" for Smithfield at full development, a separate category for agricultural-oriented land uses is not included in this Plan. Because Smithfield's future land uses are intended to be served by public utilities and infrastructure, the low-density, agriculture/residential zoning designations for the recently annexed properties are to be considered a "holding pattern" to be maintained until such point in time when the Plan's designated future use is achieved through amendment to the Official Zoning Map.

In the Town's old zoning framework, the RR district was used to regulate activity in such land areas. However, the RR district was deemed no longer appropriate as a "holding zone" for future planning and was replaced by the recently adopted C-C Community Conservation zoning district to govern open space and agricultural land. This district was originally tailored to meet the specific needs of agricultural land and open space areas which were annexed into the Town on January 1, 1998, and will serve as a superior planning "holding zone" for these conservation areas.

### **Recommended Zoning Districts for Implementation of Community Conservation Land**

#### **Areas:**

C-C, Community Conservation

#### **4. Environmentally Sensitive Areas**

Environmentally Sensitive Areas have characteristics critical to the environmental enhancement, ecological stability and water quality of the region. Development within these areas is to be strictly limited and strongly discouraged. The Future Land Use Plan provides a generalized mapping of the Town's marshes and other sensitive environmental areas. This category includes resource protection areas as recognized by the Chesapeake Bay Preservation Act.

The Environmentally Sensitive Areas include the following land features which constitute the areas subject to environmental vulnerability that fragment the Town into distinct geophysical areas: (a) major stream valleys and drainage ways, (b) 100-Year floodplains, (c) tidal and non-tidal marshes and wetlands, (d) steep slopes (>20%) adjacent to drainageways, floodplains and wetlands and (e) designated Resource Protection Areas.

Smaller pockets of sensitive environmental areas internal to properties which are otherwise suitable for development may be located outside of the areas specifically mapped for Environmentally Sensitive Areas and floodplain. The future development of these properties will be subject to performance standards which are designed to minimize the impact on sensitive areas. The concept of "net developable areas" has been introduced in the Comprehensive Plan and the new ordinance to provide a mathematical approach to the assessment of the appropriate levels of development, placement and scale of land uses, and intensity of uses on properties with sensitive features. The evaluation of environmental resources and, in particular, net developable area analysis will be required of all development within Smithfield, irrespective of the underlying zoning district.

## Recommended Zoning Districts for Implementation of Environmentally Sensitive Land

### Areas:

E-C, Environmental Conservation district

FP-O, Floodplain Overlay district

CB-O, Chesapeake Bay Resource Protection Overlay district

## LAND USE PLAN RECOMMENDATIONS

The Land Use Plan incorporates an approach to town planning which emphasizes the critical importance of both (1) conserving the Town's vulnerable environmental areas and (2) providing well-situated development areas to absorb the projected growth demands into the next century. From the initiation of this urban planning process, the Planning Commission, Town Staff and Consultants have strongly felt that these two goals should not be mutually exclusive. This Land Use Plan is presented with the belief that the Town can achieve both its conservation and open space objectives while allowing managed growth to occur.

As previously indicated, this process has organized the Town's land area into ten individual Planning Areas and five Corridors, each having a set of unique geographic and physiographic characteristics which define it as a discrete land planning unit or corridor zone. Recommended land uses for stable, infill and redevelopment areas within the Town's substantially developed sectors are separately addressed in this document. In reaching the recommendations cited herein, detailed environmental analysis was prepared for each Planning Area and Corridor to determine both its (a) overall physical development attributes and (b) environmental limitations for urban land uses. Based on the environmental assessments and "development potential analysis", each Planning Area was defined pursuant to extensive ecological synthesis and development potential analysis. Further, each Planning Area was divided into three basic physical components:

- (1) **Planning Sub-Areas**, geographical sub-units comprising the most developable land areas within the total Planning Area;
- (2) **Environmentally Sensitive Areas**, including both primary environmentally sensitive areas and secondary environmentally sensitive areas. The primary areas are geographical sub-units located outside of the Planning Sub-Area boundaries which meet the definition of "environmentally sensitive area" and which, in the aggregate, comprise areas which have major shortcomings for any urban development activities. Secondary areas are smaller geographical sub-units which qualify as environmentally sensitive areas and which, on an isolated

basis, have shortcomings for urban development within that portion of the Planning Sub-Area; and

- (3) **Existing Urban Development Areas**, representing the currently utilized portions and balance of the Planning Areas. These areas include public rights-of-way, dedicated easements, parking areas, sidewalks and buildings.

It is important to keep in mind that the Sub-Area acreages have been identified to circumscribe the predominantly prime developable land within the overall Planning Area; thereby excluding the less developable or the Primary Environmentally Sensitive Areas (comprising large contiguous areas of sensitive soils, steep slopes, wetlands and floodplain areas) from the individual Sub-Area totals. Secondary Environmentally Sensitive Areas, which represent smaller pockets of less developable areas internal to the Sub-Area boundaries, are recognized to statistically categorize those areas of environmental vulnerability with the Sub-Areas. By emphasizing the planning strategy of assigning future land uses to only the prime developable areas, the Future Land Use Plan is able to maintain essential compatibility with its adopted goal of protecting the Town's critical environmental resources while allocating growth to land possessing attributes most conducive to urban use.

Prior to the adoption of the revised Zoning Ordinance in 1998, environmental performance standards (via the site plan and subdivision ordinance) were not available to the Town in pursuit of this objective. By linking this Future Land Use Plan to the updated zoning ordinance and other innovative growth management tools recommended by the Comprehensive Plan, the Town will have an array of control mechanisms to legally allocate Planning Area land uses and densities based on the concept of net developable areas tied to the actual physical carrying capacities of the land. Based on the Plan's updated environmental analysis of the Town, 1,175 acres out of a total of 3,495 acres in the ten Planning Areas are considered as prime developable land and have been assigned Sub- Area status.

### **Residential Land Use**

The table on the following page presents a summary of the recommended land uses for the Town's Planning Areas and Sub-Areas. Future residential uses comprise approximately sixty-nine (69%) percent of these prime developable Sub-Area properties. The recommended Future Land Use Plan provides for a potential range of between 1,296 and 3,017 additional housing units, of which eighty-seven (87%) percent would be single-family dwellings, with the balance in townhouse units and retirement units.

These residential assignments to the ten Planning Areas appear well-prepared to satisfy the Town's future demand for housing relative to demand-based projections of new households, which is estimated to total approximately 1,333 additional units by 2030 (see the Projections Chapter--Chapter V. for more details related to housing demand and marketplace impacts). The land area allocated to residential housing allows for a negligible "free market multiplier."

#### **Retail and Residential/Office Transitional Development Land Uses**

As is presented in the summary table found on the following page, approximately 131 acres within the Planning Areas have been assigned to retail commercial land uses. Based on an FAR range of 0.20 to 0.50, these assigned areas could absorb a net increase in commercial building space of 932,925 to 2,332,312 square feet of gross leasable area. This reflects a dramatic increase over the allocation of retail/commercial land in the 1999 Plan. An additional 7.1 acres have been allocated for redevelopment into residential/office transitional uses in strategic locations within the Town.

#### **Economic Development Land Uses**

Economic development uses are defined as those accommodating corporate headquarters, high technology offices, research and/or light-assembly centers and master planned mixed use employment centers with offices as the dominant land use. These uses have been allocated

across three major categories: Corporate Office and Research, Light Industry and Heavy Industry. Approximately 175 acres have been depicted on the Land Use Plan for such economic development uses. This reflects approximately one-third the amount devoted to such uses in the 1999 Plan. Applying a conservative floor area ratio to these planned uses, the land allocated for economic development uses would translate into an additional 226,076 to 376,794 square feet of potential leasable space. The Comprehensive Plan's economic development goals specifically address creating additional segments of the local economic base which are not totally reliant on tourism and existing institutions. Thus, it is obvious that the Town should continue to work cooperatively and energetically with these institutions to ensure that the Plan's recommended economic development land areas will be reserved, marketed and managed for the desired purpose. For the implementation of this goal to be successful, the Town should further pursue joint planning and development opportunities with Isle of Wight County, Smithfield Foods and other existing businesses in Town.

### **Planning Sub-Area Land Use Summaries**

Planning for future land uses in the context of providing adequate public facilities at a pace compatible with good municipal stewardship is an underlying precept of this Plan. During the planning process, technical studies were undertaken to determine the levels of required services and utilities, while attempting to adjust the land use recommendations to best respond to a logical approach to future capital improvements programming. A summary outlining the final allocation of future land uses across the ten identified Planning Areas is provided on the following page.





## **Planning Area Recommendations**

In the following section, a summary of the final analysis, including specific land use recommendations and implementation strategies for each of the ten Planning Areas is presented. Statistical and graphic documentation is provided therein. The example outline below depicts the general range of issues addressed in the development of each Planning Area summary:

- I. General, Historical and Background Support
  - A. Location
  - B. Planning analysis related to subject Planning Area
  - C. History of previous Comprehensive Plans
  - D. Applicable key planning concepts for Planning Area
  
- II. Planning Area Profile
  - A. Existing land use analysis
  - B. Existing transportation analysis
  - C. Environmental baseline
  - D. Utility and infrastructure conditions
  
- III. Land Use Approach for Planning Areas
  
- IV. Planning Area Land Use Plan
  - A. Sub-Area recommendations
  - B. Sensitive environmental area recommendations
  - C. Future land use summary

## **Planning Analysis: Planning Areas and Sub-Areas**

Planning Sub-Areas designate the sections of each Planning Area which have future development potential or have been designated for special planning attention. Each Sub-Area has distinctive environmental, locational and ownership attributes which dictate that they be analyzed individually. The analysis provided for Planning Sub-Areas is not meant to delineate the characteristics of a particular parcel, and as such, the analysis may not offer all the information required to review a specific land use application.

In several Planning Areas, existing “underdeveloped” properties have been identified as being suitable for redevelopment. In most cases, these areas are located along major entrance corridors within the Town and are relatively small in terms of their net developable acreage compared to most Planning Areas. Therefore, these areas have been organized into separate sub-categories entitled “Redevelopment Areas” in the land use analysis for this Plan. The Redevelopment Areas will not receive the same level of study attention in terms of detailed analysis as will the Planning Sub-Areas; instead, they will be grouped together and analyzed as one large area. Nevertheless, the Planning Sub-Areas and Redevelopment Areas provide a useful way to present generalized information for distinct areas in order to provide adequate guidance for the Future Land Use Plan and zoning decisions related thereto. A summary of the development concentration and potential net yields of the identified redevelopment areas is provided below.

A thorough examination of each Planning Area has been performed to determine the Area's development potential. This analysis is graphically summarized in a land use summary table provided for each Planning Area in the profile summary discussion that follows.

*Chapter VI: A*

**LAND USE:  
BATTERY PARK NORTH PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

*Chapter VI: A*  
**BATTERY PARK NORTH PLANNING AREA**

**PLANNING AREA PROFILE:**

**Location**

The Battery Park North Planning Area is located in the eastern portion of the Town of Smithfield. It is bounded on the north and west by Moone Creek and its adjacent marsh, on the south by Battery Park Road and on the east by Battery Park Road and the Town's corporate limits. The Planning Area consists of approximately 417 total acres.

**Eastern Land Use and Transportation System**

The Battery Park North Planning Area is a largely undeveloped area which includes the Rising Star neighborhood, several scattered single family detached residences and two light industrial uses located along Battery Park Road, as well as dozens of acres of farmland. The Rising Star neighborhood is a small collection of older single family residences served by Greenbriar Lane. Since the adoption of the 1999 Comprehensive Plan, this community has undergone several significant grant-funded community development and infrastructure, including the improvement of Greenbriar Lane into a paved neighborhood street, the design and construction of a water main, storm drainage and sanitary sewer improvements along Battery Park Road, and the rehabilitation of several existing homes. Together, these grant-funded improvements have improved living conditions in the neighborhood substantially.

The Planning Area incorporates the northern half of the Eastern Annexation Area, one of three Isle of Wight County territories annexed by the Town of Smithfield on January 1, 1998. The vast majority of this land is vacant and maintained as woodlands, wetlands and open fields, supporting little active agricultural activities. Little development or agricultural activities have taken place here over the years due to the poor soil conditions that characterize the majority of the property. Soils in the vast majority of the Planning Area drain poorly and are highly susceptible to high shrink-swell soil conditions.

Battery Park Road provides the sole means of vehicular access to properties located within the Planning Area. In recent years, Battery Park Road has been transformed into a significant entrance corridor into Smithfield as an increasing number of Town and Isle of Wight County business persons and residents have been traveling to and from the Peninsula via the linking Nike Park Road, Titus Creek Road, Smith's Neck Road, Carrollton Boulevard and ultimately, the James River Bridge. Battery Park Road forms the principal access point into and out of Smithfield along this "cut through" corridor. As such, the road serves two primary purposes: it serves local trips by area residents and it provides the integral access way to the shortest route for travelers moving between Smithfield and the James River Bridge to the east and the Peninsula beyond. In 2006, VDOT recorded approximately 10,000 average daily vehicle trips along the Battery Park Road corridor. This represents a dramatic increase over the 6,238 daily trips recorded by VDOT in 1994. The traffic numbers along the corridor reflect a continuing trend for the eastern portion of the Town. Clearly, these traffic increases pose significant consequences for the future of the Planning Area as the corridor continues its transformation from a two-lane rural highway into a four-lane urban connector road and primary entrance corridor. Ultimately, development pressures will increase within the Planning Area as daily traffic volume increases along Battery Park Road.

In response to these traffic-related pressures, the Town commissioned a study of the Battery Park Road corridor. The study, which was completed in 2003, included a roadway alignment analysis for the entire length of the corridor within the Town boundaries. The study utilized base mapping provided by the Town to generate a proposed horizontal alignment, intersection layouts, a cursory review of impacted utility systems, a summary of right-of-way information, and a preliminary cost projections for all recommended improvements. The study found the existing roadway to be in generally good condition, but lacking in terms of necessary capacity to serve the Town's expected future growth. In order to alleviate the capacity concerns, the study recommends a widening of Battery Park Road to include a minimum of four lanes, with turn lanes in strategic locations. In order to achieve this improvement, the study concluded that the Town should attempt to provide a minimum of 100 feet of right-of-way along the full extent of the corridor. An executive summary of the study is provided in Appendix III of this Comprehensive Plan.

### **Existing Environmental Considerations**

The Planning Area's development potential is constrained severely by its poor soil characteristics and the presence of Moone Creek and its associated marshlands along its

northern and western boundaries. The vast majority of the soil in the Planning Area drains poorly and is highly susceptible to shrink-swell conditions. The scenic marshlands and inland waterways surround and penetrate the Planning Area to create barriers to construction for a significant portion of the land. Slightly over twenty-five percent of the total Planning Area have topographic and wetland characteristics which make them unsuitable for urban development. While these tidal waterways limit the total buildable area, they provide dramatic siting opportunities from the adjacent ridges. Of the Planning Area's 417 total acres, approximately 121 (29%) have been identified as having prime developmental potential. However, these prime developable lands will not support dense development due to its poor soil compatibility.

### **BATTERY PARK NORTH LAND USE PLAN**

The Battery Park North Planning Area is planned as a low density residential area, allowing only neighborhoods of single family detached homes to complement the existing residential neighborhood and scattered single family residences and light industrial uses that line its sole corridor, Battery Park Road. The future development of the Area should occur under the guidance of a master plan for the lone Sub-Area identified within the Planning Area, as opposed to the parcel-by-parcel approach that has historically dominated Town development along its major corridors. This parcel-by-parcel development pattern has contributed to the proliferation of a hodgepodge of uses along Smithfield's principle corridors that fail to link together in any sound urban context. By creating a long range plan, the owners of the various properties lining Battery Park Road would be able to produce a better product that would appropriately respond to the road's emerging role as a primary gateway and entrance corridor into Smithfield. A thoughtful master planning effort in this Planning Area would also allow the Town to better prepare its efforts to provide the necessary public services to serve future development in the area. No intensive development should take place in the vast amount of vacant land in this Planning Area until the water and sewer distribution systems are significantly upgraded to adequately serve the planned ones.

In the following section, a specific land use recommendation is presented for the Planning Area's lone identified Sub-Area.

#### **Sub-Area 1 Recommendations**

Sub-Area 1 incorporates the entirety of the Battery Park North Planning Area, excluding the existing Rising Star community. It is bounded on the north by Moone Creek and its adjacent marsh, on the west by the Moone Plantation residential subdivision (Phase IV), on the south by Battery Park Road and on the east by Battery Park Road and the Town's corporate boundary. Encompassing approximately 369 acres, Sub-Area 1 constitutes one of the largest undeveloped

areas in the entire Town. It is planned for low density residential development. This land use designation would allow single family detached residential development at a density of between one and three dwelling units per acre. At this density, between 126 and 378 new housing units could potentially be located within the Sub-Area's 121.0 net developable acres. However, it is highly unlikely that the upper reaches of this probable range will ever be achieved due to the poor soil conditions found in the Sub-Area.

The major issues involved with the potential development of this Sub-Area are (1) the necessary rezoning of the properties, (2) the provision of public utilities, (3) vehicular access, (4) the improvement of Battery Park Road, (5) buffering of the ultimate development from Battery Park Road, (6) sensitive environmental areas, and (7) encouraging the development of affordable workforce housing within new neighborhoods.

The owner of a large, undeveloped component of the Sub-Area (part of Mallory Pointe) has successfully rezoned approximately 230 acres of the Sub-Area to N-R, Neighborhood Residential. As part of this rezoning, cash proffers were submitted towards the improvement of Battery Park Road into a four-lane section as called for in the Battery Park Corridor analysis. Also, plans associated with this rezoning include the incorporation of a roundabout at the intersection of Battery Park Road and Nike Park Road. Additional right-of-way has also been proffered to aid in the ultimate improvement of the corridor. All of these improvements are much needed to serve the anticipated traffic associated with the future development of the Sub-Area in the context of continuing background traffic growth along the corridor.

Although the future land use designation for the entire Sub-Area promotes a density range that would support up to three residential dwelling units per acre, the balance of the Sub-Area acreage is still zoned C-C, Community Conservation. Within the C-C district, new residential subdivisions shall only be permitted in the district via special permit and that each such subdivision shall not exceed five lots. Thus, any future subdivisions proposed for higher density residential purposes for the remaining acreage must be individually rezoned to a residential zoning district compatible with the Comprehensive Plan and pursuant to the provisions of the Zoning Ordinance, such as was achieved for the 230 acre parcel.

Before any rezoning of this nature would be approved by the Town, adequate public water and sewer service would need to be provided for all planned uses as no lots shall be permitted with private domestic well and septic utilities except by special permit for temporary service. Future low density residential development in the Sub-Area should be able to extend lines from the recent upgrades made along Battery Park Road in order to serve residences. It shall be the primary responsibility of the developer(s) of the project to extend the necessary utility lines to



adequately serve the planned uses in the Sub-Area. No future development should take place in the vast amount of vacant land in this Sub-Area until these improvements area made.

A thoughtful master plan should be created for the entire Sub-Area which provides for the bare minimum of new vehicular entrances off Battery Park Road and efficient internal street systems, as well as protection of the Area's social surroundings, sensitive ecology and Moone Creek which parallels the northern border of the Planning Area. Access points into and out of the Sub-Area should be limited along Battery Park Road in order to exhibit the further proliferation of curb cuts and vehicular entrances along this roadway. Access to the western half of the Sub-Area should be provided via a sole, shared entrance which should be aligned at Battery Park Road with the main entrance to Wellington Estates, creating a single, additional four-way intersection associated with the full development of the Sub-Area.

The master plan for the Sub-Area should also complement the improvements planned for Battery Park Road. As mentioned earlier in this Planning Area profile, the Town plans for the road to be widened to include two additional lanes in order to accommodate anticipated future increases in daily traffic demand. This widening would require the acquisition of additional right-of-way along Battery Park Road, ultimately enabling a 100-foot right-of-way for the corridor. Further, the Town recommends that beyond this setback allowance, future development maintain a minimum 100' landscape buffer along the corridor, incorporating a desired 5'-7' berm with a landscaped treatment on top. Also, pro rata share funding of the planned improvement of Battery Park Road according to projected traffic impacts associated with any future development of the Sub-Area should also be incorporated into any application. Beyond this landscaped berm and buffer, future residences should be sited within the areas which are most conducive for urban land uses, while the fragile environmental areas along the Sub-Area's northern boundary are to be maintained as permanent open space. Any urban use of "sensitive environmental areas" (situated outside the Sub-Area) should be avoided.

The topography and soil conditions of the Sub-Area are not suitable for massive buildings and expansive parking; therefore, low density single family attached residential development would be most efficient use of the property. The siting of new homes should be gently placed within the angular terrain, employing extensive landscaping and minimal earthwork. Clustering of single family detached units is preferred, and bonus densities would be supported by the Town in review of appropriate cluster pattern designs that meet the expectations of the Town's Zoning Ordinance. The Town should also encourage the use of zero lot line development within the Sub-Area by means of special use permit.

Before any subdivision or lot located on soils found to be susceptible to shrink-swell conditions is approved for development, a geotechnical report shall be submitted with a preliminary plat and plans as required by the revised Zoning Ordinance. The report shall be prepared by a registered professional engineer and shall address the feasibility of development on the subject soils. The proposed master plan should also protect as many existing trees as physically possible within the future development plan. Such a master plan approach is critical to insuring that each of these issues is given thoughtful treatment in the proper development of the Planning Area. The Plan also promotes the integration of affordable workforce housing into the future development of this Sub-Area per the goals, objectives, and implementation recommendations outlined in the Housing Chapter (Chapter XI of this document).

### **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the Battery Park North Planning Area as a low density residential community planned for the provision of a suitable transition from its mix of light industrial and single family residential uses along the Battery Park Road corridor to the expanse of undeveloped land and sensitive environmental areas bordering Moone Creek. Existing development within the Planning Area, especially the Rising Star neighborhood, will be stabilized and preserved, and the integrity of the emerging Battery Park entrance corridor will be protected as traffic demands and development pressures increase. The Battery Park North Planning Area has the potential to accommodate between approximately 126 and 378 new households. While it is unlikely that the upper level of this projected density range will ever be realized due to the poor soil conditions that characterize the Planning Area, the future development of this Planning Area should provide significant additional single family detached residential development opportunities, including affordable workforce housing. The Town should encourage the creation of a master plan for the undeveloped land which respects both the existing adjacent residences and the natural environment and outlines specific opportunities to support Town planning objectives, especially with respect to the recently adopted entrance corridor guidelines. The Town should encourage Traditional Neighborhood Development-style development within the Sub-Area. Further, the Town should encourage any future development of the Planning Area to incorporate affordable work force housing opportunities within its neighborhoods. No future development should take place until the required public utility improvements necessary to support future development are completed and each of the critical issues outlined above are resolved to the Town's satisfaction.

The following table summarizes the development potential of the sole Sub-Area as recognized in the Plan.



*Chapter VI: B*

**LAND USE:  
BATTERY PARK SOUTH PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter VI: B*

### **BATTERY PARK SOUTH PLANNING AREA**

#### **PLANNING AREA PROFILE:**

##### **Location**

The Battery Park South Planning Area is located in the eastern portion of the Town of Smithfield. It is bounded on the north by Battery Park Road, on the west by South Church Street, on the south by Gumwood Drive and the Waterford Oaks community and on the east by the Town's corporate limits. The Planning Area consists of approximately 560 acres.

##### **Existing Land Use and Transportation System**

The Battery Park South Planning Area is a mixed use area incorporating a wide range of residential uses bordered by a mix of corridor-based commercial, light industrial and service uses interspersed with several well-located undeveloped properties. The most notable existing uses in the Planning Area include a major community shopping center anchored by a regional chain grocery store, the Bradford Mews Apartment community and the Wellington Estates, Willow Oaks, Aspen Woods, and Scot's Landing residential subdivisions. The Planning Area incorporates the lower half of the Eastern Annexation Area, one of three Isle of Wight County territories annexed by the Town of Smithfield on January 1, 1998. Included within this Annexation Area is Wellington Estates, a planned residential community approved by the County prior to annexation for the development of approximately 250 single family detached residences. As part of the annexation agreement between the Town and Isle of Wight County, any property approved for development prior to annexation must maintain its granted development rights once it is brought into the Town's jurisdiction. Thus, the Wellington Estates community, formerly referred to as London Park in the 1999 Comp. Plan, reserves its potential to construct 250 additional dwelling units within the Town, and therefore, for the purposes of this planning exercise, is not considered as an undeveloped property suitable for a Sub-Area designation.

A significant amount of development has taken place within the Planning Area since the 1999 Comprehensive Plan was adopted. These developments include:

- *The Royal Farm Gas and Convenience Market at the corner of South Church Street and Battery Park Road;*
- *Villas of Smithfield, a retirement community located off Battery Park Road;*
- *Smithfield Manor, an attached residential community located adjacent to Battery Park Road;*

- *Smithfield Commons, a village-scaled retail and professional office center constructed adjacent to South Church Street;*
- *Rite Aid built a new drug store along South Church Street;*
- *A new Hampton Inn hotel is currently under construction just off South Church Street;*
- *Bradford Mews Apartments, a later phase of the Bradford Mews apartment community, located to the east of South Church Street; and*
- *The Harvest Fellowship Church has constructed a fellowship hall just south of Battery Park Road to the east of Wellington Estates, and is planning to add a day care facility, school, and ball fields on the southern portion of the site.*

The major roads serving the Planning Area include Battery Park Road, South Church Street and Smithfield Boulevard. Each of the major undeveloped properties located within the Planning Area are accessed either directly or indirectly by one of these streets. The numerous recent developments taking place in the Planning Area as listed above have added significantly to the daily trip demands of these major roads. Battery Park Road and South Church Street have borne the brunt of these new demands. As summarized in the Battery Park North Planning Area profile, the widening of Battery Park Road is recommended in order to ensure that a satisfactory level of service is maintained along this important entrance corridor as daily vehicular trip demand increases (see Appendix III for a more detailed explanation of the recommended improvements). The projected increase in daily vehicle trips along this corridor and the recommended roadway improvements will play a major role in shaping the future development of this Planning Area.

### **Existing Environmental Considerations**

The Battery Park South Planning Area is unique from other planning areas in the Town in that sensitive environmental areas do not constitute a significant portion of its acreage. Only approximately six percent of the total Planning Area, approximately 35 acres, have topographic and wetland characteristics which make them unsuitable for urban development. However, the Planning Area's future development potential is impacted by poor soil conditions consistent with those found throughout the Eastern Annexation Area. The soils in this Planning Area drain poorly and are highly susceptible to high shrink-swell conditions. These poor soil conditions will threaten the full development potential of the remaining vacant parcels within the Planning Area. Of the Planning Area's 559.2 total acres, approximately 42.1 (8%) have been identified as having prime development potential.

### **BATTERY PARK SOUTH LAND USE PLAN**

The Battery Park South Planning Area is planned as a mixed-use community incorporating a wide array of housing options, a critical mass of retail commercial uses and an existing light industrial use along its principal commercial corridor, South Church Street. The future development of the Area should occur under the guidance of a master plan for each Sub-Area, as opposed to the parcel-by-parcel approach that has historically dominated Town development

along its major corridors. Several well-located undeveloped properties within the Planning Area afford the Town the opportunity to augment its existing retail commercial base, provide for additional, affordable workforce residential housing opportunities and implement its planning goals and objectives with respect to economic development and urban corridor design and development. Additionally, there are four small parcels (less than 1-2 acres in size) which afford some nice infill opportunities for small commercial enterprises. These parcels do not contain sufficient land area for Sub-Area status and discussion below, but they too offer some potential for new small-scale development which would accent the existing uses and could further development objectives for the important South Church Street commercial corridor.

In the following sections, specific land use recommendations are presented for both of the Sub-Areas identified in the Battery Park South Planning Area.

### **Sub-Area 1 Recommendations**

Sub-Area 1 is located in the northwestern portion of the Battery Park South Planning Area. It is bounded on the west by the Royal Farm gas and convenience center and South Church Street, on the south by a commercial use and the Colonial Avenue and Willow Oaks subdivisions, on the east by the Villas of Smithfield community and on the north by Battery Park Road. The 21.9-acre site consists of an expanse of flat, vacant property offering direct access to both South Church Street and Battery Park Road. The Sub-Area is planned for retail commercial use at a floor area ratio of 0.20 to 0.50 square feet per net developable acre per acre. At this density, the Sub-Area's 18.8 net developable acres could support between approximately 163,786 and 409,464 square feet of retail commercial space.

The major issues involved with the potential development of this Sub-Area are (1) maximizing the development potential associated with the prime location of the vacant parcel, (2) protecting the integrity of the future of the Battery Park Road entrance corridor, (3) vehicular access, (4) implementing the Battery Park Road improvements and (5) buffering the adjacent residential uses. This Sub-Area is widely recognized within the community as an extremely valuable piece of property in terms of its visibility, location, accessibility, topography and size. As such, the Town should make every effort to proactively target suitable regional retail commercial end-users for the site that would expand the Town's existing commercial base, support its ongoing efforts to boost local tourism and/or provide additional products and services not currently available to Town residents. The future use of the site should also serve as a "secondary gateway" along the Battery Park Road Corridor that visually welcomes travelers to the urban core of Smithfield.

A thoughtful master plan should be created for the Sub-Area which provides for shared vehicular entrances and efficient internal street systems, protects the integrity of the Battery Park Road Entrance Corridor and improves the visual quality and functionality of the South Church Street Corridor. Access points into and out of the Sub-Area should be limited along both South Church Street and Battery Park Road in order to prohibit the further proliferation of curb cuts along these roadways, while still providing the necessary access needed to adequately

serve the individual businesses within the development. The master plan should include the reservation of the right-of-way necessary to implement the recommended Battery Park Road improvements (i.e. widening the road to include two additional lanes). The plan should also implement sufficient landscaping to effectively buffer the adjacent residential communities to the east (including the Villas of Smithfield) and the south (along Colonial Avenue and the Willow Oaks subdivision). The future uses on the site should also implement sufficient lighting standards to ensure that no spillover lighting adversely impacts the adjoining residential communities.

### **Sub-Area 2 Recommendations**

Sub-Area 2 covers 34.8 acres and is located in the northeastern portion of the Battery Park South Planning Area. It is bounded on the west by a vacant, industrially-zoned parcel and Wellington Estates, on the south by the Scot's Landing subdivision and the Town's corporate boundary, on the east by the Town's corporate boundary and on the north by the Harvest Fellowship Church facility and Battery Park Road. The entirety of the Sub-Area is undeveloped. The Sub-Area is planned for low density residential use with a supportable density of 1-3 dwelling units per net developable acre. At this proposed density, Sub-Area 2's 23.3 net developable acres could support approximately 23 to 70 new dwelling units.

The major issues involved with the potential development of this Sub-Area are (1) the siting of future residences, (2) vehicular access, (3) provision of public utilities, (4) protecting sensitive environmental areas, and (5) buffering from adjacent uses. The property is currently zoned C-C, Community Conservation. In this instance, the C-C zoning classification serves as a "holding zone" for property which allows for the continuation of the present use of the land until market considerations dictate a clear highest and best ultimate use for the property. In this case the property has long been conserved as vacant property, including a substantial area of wooded land. The Town has identified Sub-Area 2 as a suitable site for low density residential development. In order to develop the Sub-Area for such purposes, the property would first have to be rezoned to a suitable residential zoning designation. The Town encourages the implementation of traditional neighborhood residential development (TND) within this Sub-Area, and as such, recommends that any future rezoning seek the proposed TND overlay zoning designation which would enable the Town and property owner to work together to plan such a project.

Access is the most critical issue impacting the future land use plan for this Sub-Area. Battery Park Road will provide the primary vehicular access to the Sub-Area via a pipe stem lot design. Battery Park Road presently offers only two lanes that are becoming increasingly taxed to full capacity. As mentioned elsewhere in the Plan, the Town has recommended that Battery Park Road be widened in order to support anticipated increases in traffic demand along the road in the next fifteen years. In its acceptance of a rezoning request for the nearby Mallory Point subdivision, the Town has also negotiated the proffer and plans for the construction of a roundabout at the intersection of Battery Park Road and Nike Park Road. The future



development of the Sub-Area for residential use would place additional demands on this emerging entrance corridor and should only be supported in conjunction with the recommended road improvements. Furthermore, in order to adequately support future potential traffic demands imposed by the future residents of the community, it is recommended that the future development of the Sub-Area also consider the construction of a center turn lane and a right-hand turn lane on the eastbound side of Battery Park Road to serve a single entrance into the facility. These turn lane improvements should be paid for by the eventual developer of the property should future traffic studies associated with the rezoning of the property indicate they would be necessary to maintain a sufficient level of service along Battery Park Road. The future plan for the site should also explore the potential for providing access to Nike Park Road via the adjacent undeveloped County properties owned by the Edwards family lying to the east of the site. An integrated master plan for both parcels could add value to both property owners in the ultimate build-out of their sites.

The future use of the site should also serve as a “secondary gateway” along the Battery Park Road corridor that visually welcomes travelers to the urban core of Smithfield. As such, a thoughtful master plan should be created for the Sub-Area which provides for shared vehicular entrances and efficient internal street systems in order to protect the integrity of the Battery Park Road Entrance Corridor. Access points into and out of the Sub-Area should be limited along Battery Park Road to a single, shared entrance in order to prohibit the further proliferation of curb cuts along these roadways, while still providing the necessary access needed to adequately serve the individual businesses within the development. The master plan should reserve the right-of-way necessary to implement the recommended Battery Park Road improvements (i.e. widening the road to include two additional lanes and associated turn lanes necessary to serve site-related traffic).

The provision of public utilities to the site will also play an important role in the future development of the Sub-Area. Currently, an 8-inch water line runs the full length of Battery Park Road, as does a 16-inch force main providing sanitary sewer service. The Town would require that the future developer of the site extend the necessary water and sanitary sewer lines from these existing lines into the Sub-Area to serve the recommended light industrial use.

Another important consideration for the future development of this Sub-Area is the future stability of adjacent uses and buffering of planned residences from potential adjacent light industrial uses. Specifically, the planned residences should be buffered from any future light industrial development which could take place on the industrial zoned property lying to the west. The master plan for the recommended light industrial park should include sufficient setbacks and landscape buffers, as provided for in the revised Zoning Ordinance, to minimize the impact of light, noise, dust, smoke or any other externality on these important adjacent uses. Further, the master plan for Sub-Area 2 should integrate sufficient landscape and open space buffers and a minimum 50' setback along the western edge of the property to effectively mitigate any future externalities associated with potential industrial uses.

## **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the Battery Park South Planning Area as an integrated, mixed-use community which will provide several opportunities to meet the Town's economic development objectives with respect to expanding its existing retail commercial core, providing additional motel facilities to support new tourism and conference visitors and attracting additional light industrial development. The Plan also calls for future development along the Town's important entrance corridors to avoid duplicating the mistakes of past parcel-by-parcel sprawl development by implementing a master planning approach to vacant parcels that respects the integrity of these corridors and follows the spirit of the new corridor design guidelines. The plan for the Area also provides for a suitable transition from its mix of highway related commercial, industrial uses along these corridors to the mix of residential uses beyond.

The Battery Park South Planning Area has the potential to accommodate between approximately 163,786 and 409,464 square feet of new retail commercial space and between approximately 23 and 70 new residences. The development of this Planning Area should provide significant non-tourist related employment and revenues to the Town. The Town should encourage the creation of a master plan for both Sub-Areas designated above which respects the natural environment and efficiently provides suitable building sites to meet Town planning objectives. No development should take place until the required and extensive utility improvements are completed by the developer(s) of each particular site.

The table on the following page summarizes the development potential of each of the Sub-Areas as recognized in the Plan.



*Chapter VI: C*

**LAND USE:  
CYPRESS CREEK PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

*Chapter VI: C*  
**CYPRESS CREEK PLANNING AREA**

**PLANNING AREA PROFILE:**

**Location**

The Cypress Creek Planning Area is located in the southwestern portion of the Town of Smithfield. It is bounded on the north by the Route 10 Bypass, on the west by Great Springs Road and the Town's corporate boundary, on the south by the Town's corporate boundary and on the east by Cypress Creek. The Planning Area constitutes the western half of the Southern Annexation Area annexed by the Town from Isle of Wight County in January of 1998, and covers approximately 677 acres.

**Existing Land Use and Transportation System**

The Cypress Creek Planning Area is a rapidly developing area that is home to the Town's first golf-related community, the Cypress Creek subdivision. The planned residential community is anchored by a 7,072 yard eighteen hole, championship golf course and associated club that includes tennis courts and pool facilities. The master plan for the community includes over 430 total residential lots. The lots vary in size from approximately 15,000 square feet to well over an acre and are planned for single family detached residential development, although the developer would like to reserve the right to incorporate some townhouse development into the community depending upon future market considerations. The first five residential phases of the development, which consist of approximately two hundred and sixty-nine total lots, have been subdivided and approved for development. This represents approximately 60% of the total projected build-out of the project. As of December, 2008, the Town had processed 190 zoning permits for new residences in the subdivision. This represents approximately 44% of the total density approved for the project. It is anticipated that the balance of the project will be completed within the next five-to-eight years. Besides the golf course and its associated club and support uses, a handful of scattered, single family detached residences are located along Great Spring Road. Considered together, existing development accounts for slightly over one hundred and twenty-two acres, or approximately 18% of the total land area in the Planning Area.

The Cypress Creek community may be accessed directly from the Route 10 Bypass via State Route 710. As a part of the official Isle of Wight County approval of the original master plan for the community, VDOT agreed to allow an interchange off the limited access bypass road to be constructed specifically for the use of residents and visitors of the Cypress Creek community. Due to Town concerns about cut-through traffic impacting the Jericho Sub-Area, specifically Windsor Castle and South Church Street, VDOT allowed the interchange on the condition that no access be provided north of the Bypass. In order to complete the new interchange project, the developer agreed to finance the relocation of Cedar Street north of the Bypass to make room for the west bound ramp and to construct Route 710 to connect the interchange with the Cypress Creek community and Great Spring Road to the southwest. Great Spring Road provides an additional minor transportation link to the Planning Area from the west side of Town as it intersects Route 258 just west of the Bypass/Route 258 intersection. This road is extremely narrow; however, and should be widened in order to provide sufficient right-of-way to absorb some of the future traffic demands associated with the build-out of the Cypress Creek community.

### **Existing Environmental Considerations**

The Planning Area's development potential is constrained somewhat by the presence of Cypress Creek and its tributaries. The scenic marshlands surrounding the Creek from the eastern boundary of the Planning Area and a significant tributary of the Creek effectively splits the Cypress Creek community in half. These waterways and their adjacent marshes create barriers to construction for a significant portion of the remaining undeveloped land. Nearly 7% of the total Planning Area, approximately 46 acres, have topographic and wetland characteristics which make them unsuitable for urban development. While these tidal waterways limit the total buildable area within the Planning Area, they provide dramatic siting opportunities from the adjacent ridges for both the golf course and surrounding residential sites. The golf course takes full advantage of these opportunities by incorporating the existing water features into seven of its eighteen holes, thereby providing both a magnificent backdrop and a challenging test for golfers. The golf course, club and their associated support uses cover approximately 183 acres, which represents approximately 27% of the total land area within the Planning Area. The master plan for the Cypress Creek community also calls for the development to maximize these scenic opportunities in its residential lot siting strategy. Of the Planning Area's 677 total acres, approximately 163 have been identified as having prime development potential remaining.

## CYPRESS CREEK LAND USE PLAN

The Cypress Creek Planning Area is planned for the continuation of the ongoing development of the Cypress Creek residential community, as well as the conservation of identified environmentally sensitive areas adjacent to Cypress Creek. In the following sections, specific land use recommendations are presented for the three Sub-Areas identified in the Cypress Creek Planning Area.

### **Sub-Areas 1, 2 and 3 Recommendations**

Sub-Area 1 is located in the northwestern portion of the Cypress Creek Planning Area. It is bounded on the north and the east by the State Route 10 Bypass, on the west by Great Springs Road and the Town's corporate boundary and on the south by Sub-Area 2 (the Cypress Creek community). The 47.9 acre Sub-Area is planned for suburban residential use at three to five dwelling units per acre. At this density, between 49 and 82 new single family detached dwelling units could be located in the Sub-Area's 16.3 net developable acres.

Sub-Area 2 is located in the central portion of the Cypress Creek Planning Area. It is bounded on the north by Sub-Area 1 and the State Route 10 Bypass, on the west by Great Springs Road and the Town's corporate boundary and on the south and east by a tributary of Cypress Creek. Sub-Area 2 represents the western half of the Cypress Creek golf community (it includes all of the community's land west of the tributary that effectively divides the property in half) and consists of over 170 acres, nearly 24 of which have been identified as developable. The Sub-Area is planned for suburban residential use at three to five dwelling units per acre. The master plan community as approved by the Town allows for approximately 36 additional single family detached dwelling units per the existing plats recorded within the Sub-Area.

Sub-Area 3 is located in the southeastern portion of the Cypress Creek Planning Area. It is bounded on the north by the State Route 10 Bypass, on the west by a tributary of Cypress Creek, Great Springs Road and the Town's corporate boundary, on the south by the Town's corporate boundary and Cypress Creek and on the east by Cypress Creek. Sub-Area 3 includes over 442 total acres and is planned for suburban residential uses at three to five dwelling units per acre. At this density, between 258 and 367 new single family detached dwelling units could be located within the Sub-Area's 122 identified net developable acres. However, the master plan submitted to and approved by the Town incorporates approximately 307 total single family dwelling units within this Sub-Area. This represents a density of 1.82 dwellings per net developable acre. Currently, there exists the potential for approximately 258 additional single family dwellings per the existing plats recorded within the Sub-Area.

The major issues involved with the potential development of these Sub-Areas area (1) the pace, density and final use allocation of the Cypress Creek development, (2) transportation improvements, (3) the provision of public utilities and (4) sensitive environmental areas.

The Cypress Creek property was included in the larger Southern Annexation Area annexed into the Town from Isle of Wight County in January of 1988. As part of the annexation agreement, the Town was bound to accept any approved site plans and conditional zoning applications previously approved by the County. Thus, the Town was required to permit the conditional zoning of the Cypress Creek property as well as the development approval for the golf course, club and first two phases of the planned residential community. The Town was also required to apply a zoning designation for the property that effectively mirrored the zoning requirements previously applied by the County. In the absence of an existing zoning district that provided similar requirements to the County's NC-CR-2 (Neighborhood Conservation) district that was applied to the Cypress Creek parcel, the Town developed a new zoning district, Suburban Residential (S-R), specifically designed to be applied to the land formerly zoning NC-CR-2 and NC-CR-3 in Isle of Wight County (i.e. Sub-Areas 2 and 3). Thus, in the spirit of this annexation agreement, the Town shall continue to work with the developer of the community to ensure that the original master plan for the community is followed in the remaining undeveloped land areas in these Sub-Areas to the extent that it is consistent with previously approved concepts and the goals and objectives of this Plan.

The Town and the developer have already established a sound framework for the future regulation of the development of these Sub-Areas. As part of this framework, the Town should recognize that dynamic market conditions over the life of the project will dictate the need for the developer to make slight modifications to the original master plan, and therefore, the Town should be prepared to offer flexibility in the regulation of the future phases of the project with respect to design, density and residential use allocation. Given the relatively low residential density achieved to date in the project, the Town should consider the incorporation of attached single family attached building products integrated into the community if so desired by the landowner. If this housing type is deemed by the property owner as a suitable response to market needs, the Town should be willing to hear a rezoning request allowing the thoughtful integration of such units within the master plan. However, this flexibility and the Town's consideration of the attached units should not be seen as a willingness to sacrifice the high design standards established in the initial phases of the project. Much as was the original intent of the S-R, Suburban Residential zoning district, the Plan calls for the Town to provide suitable design and planning flexibility without sacrificing design quality. Consistent with the intent of the zoning district, the Plan for this Area focuses attention on preserving existing natural features and vegetation, promoting excellence in site planning and landscape design, facilitating



the efficient layout and orientation of public utilities and community infrastructure, and encouraging housing with compatible scale and character of architecture. Also, cluster provisions are available within the S-R zoning designation through the special use permit process. The landowner is encouraged to consider such provisions in the final platting and design process as a means of achieving appropriate density while preserving additional open space. Through the implementation of this zoning designation or the conditional rezoning process, the spirit and general intent of the original master plan for the community should be protected regardless of future market conditions.

Sub-Area 1 represents a logical location for a future expansion of the Cypress Creek development if market considerations warrant such a need. While the size of the Sub-Area is clearly insufficient to support an additional nine holes for a future golf facility expansion, it could be incorporated into a larger master plan of development with the vacant land lying across Great Spring Road in Isle of Wight County. Regardless of whether the Cypress Creek development expands into this Sub-Area or not, it is hoped that the type of housing product developed in the Sub-Area would mirror the density range and quality in design and building material witnessed in the adjacent golf community.

Future development in Sub-Area 1 would necessitate the extension of water and sewer lines from the adjacent Cypress Creek subdivision. Cypress Creek tapped into the 30" HRSD sanitary sewer line that runs adjacent to the Route 10 Bypass to provide its internal sewer system and developed its water line system by constructing an extension from the 12" line that runs along Cedar Street. Future development in Sub-Area 1 would require the extension of the existing 8" sanitary sewer line that presently stops at the intersection of Dunhill Court and Cypress Creek Boulevard and extension of the 8" water line that currently stops at the Fairway Drive (Route 710)/Cypress Creek Boulevard. Consistent with the Town-stated goal that future development "pay its own way," the developer of Sub-Area 1 would be expected to finance these necessary utility extensions. Furthermore, the developer of the Cypress Creek community will be required to expand the existing utility system to adequately serve future development planned for Sub-Areas 2 and 3.

Sub-Area 1 would also need to be rezoned to allow the density level prescribed in the Suburban Residential land use designation. The land in Sub-Area 1 was zoned Rural Area Conservation (RAC) by the County prior to annexation, and therefore, has been designated as C-C, Community Conservation (the Town-equivalent district) for zoning purposes. This zoning district allows residential subdivision only via special use permit, and even if the permit is granted, a maximum of five residential lots is allowed.

An additional consideration impacting the future development of the three Sub-Areas is the status of Great Springs Road. Presently this road is extremely narrow and is unable to safely support two lane traffic per VDOT standards. The improvement of this road, to include right-of-way acquisition, road widening and striping will be necessary to better serve the anticipated increased traffic demands posed by future development in the Planning Area. While the intent of providing access to the community via the Bypass was to handle the majority of the traffic demands associated with the project, Great Springs Road holds the potential to provide valuable secondary access to the western portion of Town. Future planning efforts for Sub-Areas 1 and 3 should consider the merits of providing an additional point of access directly from Great Springs Road. The master plan for Sub-Area 1 should also incorporate an extension of Cypress Creek Parkway as its primary entrance from State Route 710. This road extension should serve as the primary collector road within the Sub-Area's internal street network.

Future development in the three Sub-Areas should also respect the numerous sensitive environmental areas found in the Planning Area within which development shall be prohibited. Special attention should be placed upon preserving the wetlands and marsh surrounding Cypress Creek and its tributaries. The master plan for the future development of these sub-areas should include modern stormwater management practices and sufficient erosion and sedimentation control measures to minimize the impact of development on the valuable environmental resources surrounding Cypress Creek.

#### **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the Cypress Creek Planning Area as an integrated, master planned residential community employing modern design and site planning practices that shall help to preserve the sensitive environmental areas that border Cypress Creek. The Planning Area has the potential to accommodate between approximately 343 and 485 new households at full build-out. The actual development of the Planning Area will span across several phases, and the pace of future development will be a function of the absorption rate of the residential lots planned and other market conditions in the region. Thus, full build-out may not be achieved for several years. In the interim, the Town should encourage the creation of a master plan for the various Sub-Areas designated above which represents the natural environment and efficiently provides suitable building sites to meet Town planning goals and objectives. No additional development should take place until the required utility improvements are completed.

The table on the following page summarizes the development potential of each of the Sub-Areas as recognized in the Plan.



*Chapter VI: D*

**LAND USE:  
JERICHO PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter VI: D*

### **JERICHO PLANNING AREA**

#### **PLANNING AREA PROFILE:**

##### **Location**

The Jericho Planning area is located in the central portion of the Town of Smithfield, just southeast of the Downtown Area. It is bounded on the north by the Downtown Area and Little Creek, on the south and west by the Route 10 Bypass and on the east by Cypress Creek. The Planning Area consists of approximately 425 acres.

##### **Existing Land Use and Transportation System**

The Jericho Planning Area is a largely undeveloped area marked by the presence of valuable environmental and historic resources. It is the home of Windsor Castle, a farm estate overlooking Cypress Creek which has been preserved in its pristine state and serves as one of the most cherished historic resources in the Town. The only densely developed area within the Planning Area is the residential area adjacent to Cedar Street which fronts Little Creek. The other populated area in the Planning Area is Jericho Estates, a subdivision containing twenty-one estate lots planned for low density single family detached residences. Considered together, existing development accounts for approximately 32 total acres in the Planning Area, or roughly 8% of the total land area. The balance of the Planning Area consists of vacant farmland, passive open space and sensitive environmental areas.

Cedar Street and Jericho Road provide the principal means of access in and out of the Planning Area. Both of these roads function as rural parkways connecting the low density development and historic resources with the nearby urban center of the Town. Neither of these roads is designed to handle high volumes of vehicular traffic; in fact, neither have marked pavement. The Planning Area enjoys no access from the adjacent State Route 10 Bypass, which is a limited access state highway. Access was granted to the neighboring Cypress Creek subdivision on the condition that no access is provided to the north into the Planning Area. The Town feared that access into the area would threaten the stability of the preserved Windsor Castle property and the valuable farmland that surrounds it. The Town still supports this strategy today, and no access is likely to be made available to the Planning Area in the foreseeable future.

### **Existing Environmental Considerations**

The Planning Area's development potential is seriously constrained by the presence of Little Creek and Cypress Creek along its northern and eastern boundaries, respectively. Little Creek bisects the northwestern portion of the Planning Area and forms a natural transitional boundary between the residential development along Cedar Street and the adjacent Downtown Area and Windsor Castle and the surrounding farmland. Although only 10% of the total Planning Area, approximately 41 acres, have topographic and wetland characteristics which make them unsuitable for urban development, these marshlands and tidal waterways would be seriously impacted by development on adjacent ridges and should be protected. Of the Planning Area's 425 total acres, approximately 72 (17%) have been identified as having prime development potential. However, the entire Planning Area drains directly into these two major waterways; thus, any future development of the land suitable for development in the area must incorporate appropriate stormwater management principles in its design in order to sufficiently protect these valuable water resources.

### **JERICHO LAND USE PLAN**

The Jericho Planning Area is planned for the preservation of its valuable historic and environmental resources, the conservation of its vast amount of undeveloped farmland, and the gradual expansion of the residential area between Cedar Street and Little Creek. Primary emphasis is placed upon the Town being proactive with respect to protecting one of its most cherished historic resources, the Windsor Castle estate, as well as the surrounding farmland which overlooks both Cypress Creek and Little Creek. In the following sections, specific land use recommendations are presented for the three Sub-Areas identified in the Jericho Planning Area.

#### **Sub-Area 1 Recommendations**

Sub-Area 1 is located in the northwestern portion of the Jericho Planning Area. It is bounded on the north and east by the residential and public uses adjacent to Cedar, Hill and West Main streets, on the west by the Route 10 Bypass and on the south by Little Creek. Sub-Area 1 is heavily wooded and overlooks Little Creek. It covers approximately 15 acres and is planned for attached residential development, at a density of 6-8 dwelling units per acre. At this proposed density, Sub-Area 1 could support between 68 and 90 new dwelling units within its 11.3 net developable acres.

The major issues involved with the potential development of this Sub-Area are (1) the appropriate density of future development and (2) sensitive environmental issues. The Attached Residential land use designation complements the previously stated vision expressed for the property in past Comprehensive Planning efforts. Past discussions of the site have included the potential for adding an assisted living facility to the site, a use which could be supported under existing zoning via a special use permit.

The assisted living facility would fulfill a need expressed several times by citizens in the survey distributed as part of the Comprehensive Planning process. Furthermore, the ridges overlooking the banks of Little Creek offer dramatic views for the development of well-sited, low density single family homes. It will be imperative that the Town ensure that these planned single family homes are thoughtfully sited and incorporate suitable stormwater management practices that will minimize the impact of future development on the creek and downstream waters.

### **Sub-Area 2 Recommendations**

Sub-Area 2 is located in the southwestern portion of the Jericho Planning Area. It is bounded on the west by Cedar Street, on the north by a portion of Little Creek and Sub-Area 3, on the south by Cedar Street and the Route 10 Bypass and on the east by Sub-Area 3. The 46.9 acre Sub-Area is planned for low density residential. This land use designation allows low density residential development at a ratio of between 1 and 3 dwelling unit per acre. At this density, between approximately 44 and 133 single family detached dwelling units could be located within the Sub-Area's 44.2 net developable acres.

The major issues involved with the potential development of this Sub-Area are (1) vehicular access, (2) provision of public utilities and (3) sensitive environmental areas. Presently, the only vehicular access into the Sub-Area is provided by the extension of Cedar Street extending along the Sub-Area's southern boundary to its intersection with Jericho Road, running parallel to the Route 10 Bypass. It is likely that this road will need to be improved to meet VDOT's public street standards in order to serve the residential development planned for this Sub-Area. However, a TIA in accord with the Commonwealth's 527 guidelines should be prepared in order to quantify the ultimate impact on this road and appropriateness and phasing of future improvements.

The Sub-Area also currently lacks access to sufficient public utilities to develop the land as is recommended. An 8" water line terminates at the end of Trumpet Road in the Jericho Estates subdivision and would need to be extended to provide public water to the Sub-Area. Any future development in the Sub-Area would have to include provisions for running a sewer line from the 30" HRSD pipe that runs parallel to the Route 10 Bypass to allow each residence to tap into the line.

Consideration of sensitive environmental areas will also play an important role in the future development of the Sub-Area. The home sites should be sited well away from the wooded areas that offer a natural buffer from the marshlands surrounding Little Creek. A setback of at least 75 feet should be maintained from Cedar Street. A landscape buffer consisting of trees and hedging should be planted within the setback in order to adequately buffer the future residences from the light and sound associated with traffic on the adjacent Route 10 Bypass. The Town should encourage the future landscape buffer to be supplemented by an appropriate wooden fencing running along the boundary of the property as part of any future development.

The Town should encourage the use of clustering in the ultimate home siting in order to maximize the future preservation and possible conservation of open space within the Sub-Area. The residences should also incorporate stormwater management practices and erosion and sedimentation control measures sufficient to protect and preserve these marshlands and waterways, as well as downstream ecosystems.

### **Sub-Area 3 Recommendations**

Sub-Area 3 is located in the central portion of the Jericho Planning Area. It is bounded on the north by Little Creek and the residential neighborhood adjacent to South Church Street, on the west by the Route 10 Bypass, on the south by the existing Jericho Estates residential development and the Route 10 Bypass and on the east by Cypress Creek. The entire 208.8 acre sub-area is planned for parks and recreation.

In 2007 the Town announced its intentions to acquire the historic Windsor Castle farm, located within Sub-Area 3. In 2007, the Town approved an amendment to the Comprehensive Plan changing the recommended land use designation for the Sub-Area to provide for the use of the Windsor Castle farm property as a Public Park. The Town also amended its Capital Improvement Program to include this property acquisition and future public park construction. These moves were made in direct response to the Citizen Survey feedback received during solicitation of public opinion during the 2009 Comprehensive Plan Update. In the survey, respondents expressed a strong desire to conserve the land adjacent to the two creeks, as well as the adjacent Windsor Castle property. Respondents also expressed a need for additional public parks and recreational opportunities. In 2008, the Town commissioned LandMark Design Group to prepare formal plans for a proposed park on the property. Input and design concepts received this past year from consultants hired by the current property owner were also taken into consideration in developing this plan

One year after the Smithfield Town Council announced its intentions to acquire the historic Windsor Castle farm, during which the Town held many productive discussions with the property owner, the council voted unanimously at its meeting on February 5, 2008 to adopt the Windsor Castle Park Master Plan prepared by LandMark Design Group. The town's adopted master plan provides for passive recreational use on the site, being sensitive to the state historic conservation easement which has presently been placed on 42 acres of the overall property including the private home and outbuildings. A copy of the approved plan is provided on the following page. Extensive trails will encompass the property affording the public the opportunity to experience the diversity of the site from woodlands, agricultural fields and marsh. The trail system also includes proposed pedestrian boardwalk connections to other areas within the historic district. A kayak and canoe launch is planned along Cypress Creek and equestrian trails are included as well on a portion of the park. Greater details regarding the proposed design, cost estimates and phasing of improvements will be forthcoming and will be done in close coordination with the Virginia Department of Historic Resources, Virginia Marine Resources Commission, US Army Corps of Engineers, Isle of Wight County Wetlands Board and the town's appointed boards and citizens.





In 2008, the Town passed a resolution approving a park for public use on the property contained in the Sub-Area. The resolution directed the acquisition of the property in order that it be used as a public park. The property, which consists of open fields and wooded areas adjoining Cypress Creek, is located entirely within the Town. The portion of the Windsor Castle property to be acquired by the Town in fee simple is adjacent to approximately 42.09 acres of land on which is situated an historic manor house known as Windsor Castle. The property on which the manor house is located is subject to an easement granted to the Commonwealth of Virginia, Board of Historic Resources pursuant to the Virginia Open Space Land Act, for the purposes of the preservation of Windsor Castle and the protection of its historic and architectural features, and the protection of the water quality within the Chesapeake Bay watershed.

The major issues involved with the potential development of this sub-area are (1) preservation of the existing historic resources and sensitive environmental areas, (2) fulfilling the expressed public need for open space, passive recreation areas, and water access within the Town for use by the Town's citizens, tourists, and the public at large, (3) promoting pedestrian linkages to South Church Street and the Downtown Area, and (4) linking tourism to recreation and open space opportunities via pedestrian connections and formal interpretation exhibits within the Planning Area and the adjacent Downtown Area.

As has been expressed in the Citizen's Attitudinal Survey and countless other public input sessions, there is a public need for open space, passive recreational areas, and water access within the Town of Smithfield for use by the Town's citizens, tourists, and the public at large. Sub-Area 3 is ideally situated for use as a public park. Portions of the property are wooded and portions are open land, which will provide a variety of types of hiking trails. It is close to heavily populated neighborhoods, providing for easy access by residents, and it can be accessed from public roads and by a proposed raised walkway over the water, as reflected in the master plan for the park. Scenic vistas overlooking Cypress Creek will be preserved within the Park. Further, direct public access to Cypress Creek will be provided for canoeing and kayaking. This will fill a need expressed as far back as the 1999 Comprehensive Plan Update. Preserving the open space and the scenic vistas in the Sub-Area, and establishing the property as a public park is consistent with the purposes of the Preservation Easement. The trail and park entrance easements which the Town seeks to acquire will remain subject to the Preservation Easement.

The entire Windsor Castle estate is included in the Town's Historic District and includes the main farm house and an extensive collection of outbuildings sited next to open fields. The sub-area incorporates each of these main structures and the surrounding fields between Jericho Road and Cypress Creek. The preservation of Windsor Castle could provide a significant impetus towards meeting the Town's established goals of boosting tourism in the area and providing more public open space for its citizens. However, in order to ensure that the project achieves its full potential, the Town should incorporate the historic site into its tourism

marketing strategy and should provide the necessary physical improvements to increase pedestrian accessibility to the estate. In order to achieve this, the Town should promote pedestrian linkages to the site from South Church Street and the Downtown Area. Windsor Castle is currently connected to South Church Street and the Downtown Area by Jericho Road, a partially cobbled brick street which has been preserved, offering a charming walk for residents and visitors exploring beyond the Victorian homes that line South Church Street. The Town should explore the feasibility of increasing its promotion of this walkway as part of historic walking tours, thereby strengthening the connection between the estate and the balance of the Historic Area. The Town should also continue its policy of discouraging the use of Jericho Road as a means of vehicular movement between Jericho Estates and Windsor Castle to South Church Street and vice-versa, however, due to the limited capacity of the Jericho Road/South Church Street intersection.

#### **Sub-Area 4 Recommendations**

Sub-Area 4 is located in the southeastern portion of the Jericho Planning Area. It is bounded on the north and west by a tributary of Cypress Creek, on the south by the Route 10 Bypass and on the east by Cypress Creek. The 80 acre Sub-Area is planned for community conservation. This land use designation allows extremely low density residential development at a ratio of up to 1 dwelling unit per acre. At this density, approximately sixteen single family detached dwelling units could be located within the Sub-Area's 16.4 net developable acres, assuming that a special use permit could be obtained for the site.

The major issues involved with the potential development of this Sub-Area are (1) vehicular access, (2) provision of public utilities and (3) sensitive environmental areas. This Sub-Area has been rendered an effectively isolated land area within the Jericho Planning Area due to the routing of the limited access Route 10 Bypass to the south and the encroachment of sensitive environmental areas which define its western boundary. Presently, the only vehicular access into the Sub-Area is provided by a dirt road extension of Cedar Street beginning at its intersection with Jericho Road and running parallel to the Route 10 Bypass. This road will need to be improved to meet VDOT's private, rural street standards in order to serve the residential development planned for this Sub-Area. Given the limited development potential of the site and the future land use recommendation, it would probably be most practical for the access road to be maintained as a private road. In order to achieve this, the landowner would need to seek a waiver of public road maintenance and approval and a conditional use permit as part of ultimate land development and road construction.

The Sub-Area also currently lacks access to sufficient public utilities to develop the land as is recommended. An 8" water line terminates at the end of Trumpet Road in the Jericho Estates subdivision and would need to be extended to provide public water to the Sub-Area. Any future development in the Sub-Area would have to include provisions for running a sewer line from the 30" HRSD pipe that runs parallel to the Route 10 Bypass to allow each residence to tap into the line.

Consideration of sensitive environmental areas will also play an important role in the future development of the Sub-Area. The home sites should be sited well away from the wooded areas that offer a natural buffer from the marshlands surrounding Cypress Creek and its tributaries. The Town should encourage the use of clustering in the ultimate home siting in order to maximize the future preservation and possible conservation of open space within the Sub-Area. The residences should be located such that vistas from the Bypass and Sub-Area 2 across Cypress Creek are not overtly compromised. The residences should also incorporate stormwater management practices and erosion and sedimentation control measures sufficient to protect and preserve these marshlands and waterways, as well as downstream ecosystems.

### **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the Jericho Planning Area as a largely undeveloped area devoted to the preservation of valuable historic and environmental resources, the conservation of open space and the provision of much-needed public park space. Intermingled within these historic resources and protected open spaces, the Planning Area maintains the capability to develop scattered low density single family residential development that would complement the existing single family subdivisions that exist in the Area, as well as reserving the right to develop an assisted living facility targeting local retirees near Cedar Street.

The Jericho Planning Area has the potential to accommodate between approximately 128 and 239 new households at full build-out. However, it is highly unlikely that this density will actually be met within the Planning Area, at least in the near planning term, given the dominance of C-C, Community Conservation zoning ascribed to parcels within the Area. The C-C zoning district was created to provide a vehicle by which agricultural, forestry, open space and other lands of rural character within the Town may be maintained in their current use on an interim basis until such point in time when development consistent with the adopted Future Land Use Plan may be pursued through a zoning amendment. New residential subdivisions are not permitted in this district, except by special use permit for subdivisions with not more than five lots. All proposed subdivisions for residential purposes must be individually rezoned to a residential zoning district compatible with the Comprehensive Plan and pursuant to provisions of the Zoning Ordinance. Thus, a substantial change to the future land use plan designation for the property and a rezoning of the property would be necessary to reach the range of total new dwelling units projected above.

This Planning Area is particularly important because it affords the Town an opportunity to exhibit its firm commitment to meeting two of its primary strategic goals: preserving the Windsor Castle property and providing more public park space for its residents and visitors. No future development should take place in the Planning Area until the required, extensive utility and transportation improvements are completed. The table on the following page summarizes the development potential of each of the Sub-Areas as recognized in the Plan.



*Chapter VI: E*

**LAND USE:  
JOHN ROLFE PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter VI: E*

### **JOHN ROLFE PLANNING AREA**

#### **PLANNING AREA PROFILE:**

##### **Location**

The John Rolfe Planning Area is located in the northeastern portion of the Town of Smithfield. It is bounded on the north by the River Residential Planning Area and its three stable neighborhoods: Red Point Heights, Pagan Point and the northern half of the Moonefield subdivision, on the west by South Church Street, on the south by Battery Park Road and on the east by Moone Creek. The Planning Area consists of approximately 318 acres.

##### **Existing Land Use and Transportation System**

The John Rolfe Planning Area has experienced rapid development since the adoption of the 1998 Comprehensive Plan. The Planning Area, which includes an array of residential uses bordered by a mix of corridor-based commercial, industrial and office/service uses, has witnessed the addition of over 300 dwelling units since the 1999 Comprehensive Plan was adopted. Most notable among these are the construction of the Mallory Pointe subdivision, the Church Square assisted living community and the Lakeview Cove condominium/townhouse community. The southern half of the Moone Plantation subdivision has also completed its development potential since the last Plan was adopted. Other notable existing uses in the Planning Area include the Riverside Convalescence Center, the Croatan Landing single family residential subdivisions and the Smithfield Baptist Church.

The major roads serving the Planning Area are John Rolfe Drive, South Church Street and Battery Park Road. The majority of residential uses in the Planning Area rely principally upon John Rolfe Drive for primary access into and out of their communities. As a result of the significant growth witnessed in these Sub-Areas, traffic along John Rolfe Drive, Moonefield Drive and traveling through the John Rolfe/Battery Park Road intersection has increased dramatically over the past decade. The traffic impacts associated with the recent development in the Planning Area underscore the importance of the transportation improvements recommended for John Rolfe Drive and the impacted intersections in the Planning Area. These recommended improvements are outlined in more detail in the Transportation Plan (see Chapter XI).

### **Existing Environmental Considerations**

The Planning Area's remaining development potential is constrained by the presence of Moone Creek along its eastern boundary. The scenic marshlands and associated wetlands of the creek penetrate the Planning Area just north of the Moone Plantation subdivision and effectively prohibit the development of a substantial portion of the undeveloped land in the area. Nearly 34 percent of the total Planning Area, approximately 105 acres, have topographic and wetland characteristics which make them unsuitable for urban development.

### **JOHN ROLFE LAND USE PLAN**

The John Rolfe Planning Area is planned as a mixed-use community incorporating a range of housing options in addition to public uses and commercial and residential/office transitional redevelopment along South Church Street and Battery Park Road. The future development and redevelopment of the Area should occur under the guidance of a master plan for the lone remaining Planning Sub-Area and the multiple properties located within the Redevelopment Area, as opposed to the parcel-by-parcel approach that has historically dominated Town development along its major corridors. This parcel-by-parcel development pattern has contributed to the proliferation of a mishmash of various uses along South Church Street that fail to link together in any sound urban context, thereby threatening the stability of the corridor. By creating a long range plan, the owners of the various properties within the Redevelopment Areas would be able to produce a better product that would appropriately respond to the existing, stable residential neighborhoods in the Planning Area. In the following sections, specific land use recommendations are presented for the lone Sub-Area and for the two Redevelopment Areas identified in the John Rolfe Planning Area.

### **Sub-Area 1 Recommendations**

Sub-Area 1 is located in the central portion of the John Rolfe Planning Area. It is bounded on the west by the Riverside Convalescence Center, on the south by the Lakeview Cove condominium community, on the east by a tributary of Moone Creek and north by Beale Park. Encompassing approximately 5.0 acres, Sub-Area 1 constitutes the largest remaining undeveloped property in the Planning Area. It is planned for parks and recreation uses. It is envisioned as a logical expansion area for the existing Beale Park facility.

The major issues involved with the potential development of this Sub-Area are (1) vehicular access and (2) sensitive environmental areas.

A thoughtful master plan should be created for the Sub-Area which provides for shared vehicular entrance, efficient internal street systems, a trail system with connections to the



adjacent Beale Park and neighborhoods, a detailed siting of proposed active and passive park uses, and protection of its scenic surroundings, sensitive ecology and Moone Creek which forms the eastern border of the Planning Area. The Town should commit to developing a master plan for the park similar to what has been developed for the proposed park at Windsor Castle. Access points into and out of each Sub-Area should be limited along South Church Street, John Rolfe Drive and Lumar Road in order to prohibit the further proliferation of curb cuts and the associated traffic bottlenecks along these roadways. Future active recreational fields and facilities should be sited within the areas which are most conducive for urban land uses, while the fragile environmental areas along the northeast boundary of Sub-Area 1 are to be maintained as permanent open space. Any active use of these "sensitive environmental areas" (situated outside the Sub-Area) should be avoided.

The future use of Sub-Area 1 as a public park facility should be responsive to the existing, adjacent residential uses by incorporating landscape buffers and sufficient setbacks into its final design. Development in Sub-Area 1 should be equally respectful of the existing Riverside Convalescence Center. In order to minimize the future traffic impact of the uses planned for these Sub-Areas, entrances should be efficiently located and designed as part of a master planned internal street system. Access to Sub-Area 1 should be limited to one entrance off an extension of Lumar Drive. Lumar Drive should be extended and dedicated as a public street from its existing terminus to the Sub-Area and any internal parking facility included therein.

### **Redevelopment Area Recommendations**

**Redevelopment Area 1** is located in the northwestern portion of the Planning Area and incorporates a mix of residential, office and service uses. It is bounded on the north by single family detached residences located along Lumar Road, on the west by South Church Street, on the south by Redevelopment Area 2 and on the east by Sub-Area 1. The Redevelopment Area borders South Church Street between Red Point Drive and the vacant lot adjacent to Sub-Area 1, covering approximately 6.8 acres. It is planned for residential-office transitional redevelopment with an allowable floor area ratio density of between 0.20 and 0.30. Based upon the existing development pattern and building area coverages in the Redevelopment Area, it is projected that future redevelopment will effectively gain no new net developable area in terms of estimated land yields. However, it is anticipated that the redeveloped uses will improve general property values in the area and will provide a much more suitable entrance impression for those traveling along South Church Street towards the Cypress Creek bridge and the Downtown area.

**Redevelopment Area 2** is located in the southwestern portion of the John Rolfe Planning Area and is comprised of a poorly connected mix of retail, personal service, medical, automobile dealerships and service and residential uses. It is bounded on the north by Redevelopment Area 1, on the west by South Church Street, on the south by Battery Park Road and on the east by the Mallory Pointe subdivision. Redevelopment Area 2 extends from the southern boundary

of Redevelopment Area 1 and borders both South Church Street and Battery Park Road, each of which function as an important corridor leading into Downtown Smithfield. The Redevelopment Area contains approximately 11.6 acres and is planned for retail commercial redevelopment. Just as is the case with Redevelopment Area 1, it is projected that the future redevelopment of the assorted uses along the corridors will have limited effectively net gain of developable area in terms of estimated land yields given existing lot coverage patterns. Projecting only a 1.0 acre net developable pick up in redevelopment potential along the corridor, it is assumed that the redevelopment of this corridor could lead to the net gain of between 8,712 and 21,780 square feet of new retail commercial space. However, it is anticipated that the redeveloped uses will improve general property values in the area and will provide a much more suitable entrance impression for those traveling along South Church Street towards the Cypress Creek bridge and the Downtown area. The various existing uses in these Redevelopment Areas currently do not represent the highest and best use of the properties. The lot-by-lot development of these Areas over time has led to a haphazard collection of land uses that do not fit together in a coherent mix of uses or capture a significant portion of the local or regional commercial marketplace. The end result is a corridor that does not fit together as a seamless mix of land uses.

The major issues involved with the potential redevelopment of these Areas are (1) implementing entrance corridor guidelines and gateway improvements, (2) acquiring and consolidating the properties within the Redevelopment Area, (3) removing and/or renovating the existing structures and (4) vehicular access.

Together with the assorted existing uses found in Redevelopment Area 1 in the Pagan Pines Planning Area, the mix of uses found in these Redevelopment Areas forms the principle entrance corridors into the Town from the south and east. Unfortunately, in its present state, these uses provide a less than optimal entrance statement for those entering Smithfield. These corridors are lacking any true “gateway” or true sense of beginning and arrival for travel in both directions. The major entrances to the Town should be articulated and clearly defined, offering a clear message that one is entering Smithfield. The perceived entrance to the Town should be defined by physical features rather than strict adherence to political boundaries marked by a simple incorporation sign as is presently the case. Within the context of the recommended redevelopment of these areas, the opportunity exists to more accurately relay the “Smithfield image” to both tourists and residents alike, without sacrificing the rural and historical backdrop that makes the Town so special. The redevelopment process should support the Town’s ongoing effort to upgrade corridor roadway capacities and pedestrian connections, while simultaneously helping local merchants and businesses to provide adequate access to their commercial or service establishments. The Town’s new, formal corridor design guidelines should establish landscaping and signage standards that apply consistently across each corridor and establish feasible strategies and timetables for compliance among existing businesses and landowners located along the corridor.

As a part of its expanded economic development function, the Town could initiate discussions with the property owners in each Redevelopment Area in an attempt to clarify the redevelopment potential of the properties. If the current owners show no interest in redeveloping the properties on their own, the Town could explore the possibilities of acquiring the properties and consolidating them into one contiguous parcel within the Redevelopment Area that could be marketed to a commercial developer. The Town should also approach the existing businesses located within the Redevelopment Area and encourage them to participate in the redevelopment process. The Town could also explore the potential for implementing a tax increment financing program within the Redevelopment Areas to aid in creating momentum for the proposed redevelopment of the specified portions of the corridors.

Future redevelopment should minimize the number of entrances along South Church Street. Future commercial uses should use shared entrances wherever possible, and parking setbacks should be increased to at least twenty feet in order to provide additional room for landscaping and screening. Parking should be restricted between the building and the roadway for new and redeveloped sites. Furthermore, should existing structures be replaced by new structures (as is anticipated), these new buildings should be placed at an appropriate setback distance from the road. Suitable land uses for the redevelopment effort would include: professional offices, tourist commercial and neighborhood retail commercial uses (including restaurants and possibly small motels if feasible).

#### **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the John Rolfe Planning Area as an integrated, mixed-use community which will provide several opportunities to meet the Town's long term planning objectives with respect to providing additional retail, office and parks and recreational opportunities, while also providing a suitable transition from its mix of highway related commercial, industrial and office/transitional uses along South Church Street and Battery Park Road to the existing residential uses in the balance of the Planning Area. The plan for this Area also calls for the support of extensive redevelopment along South Church Street and Battery Park Road in order to refine these major entrance corridors. The ultimate goal is to create a more positive entrance statement along these corridors by introducing landscaping and setback guidelines, establishing a more dynamic commercial center and constructing a pedestrian-friendly sidewalk system that links the corridor uses to adjacent neighborhoods.

Given the dramatic growth witnessed over the past decade, the John Rolfe Planning Area has the potential to accommodate little in the way of new development. It holds the potential to expand the existing Beale Park and to pick up a nominal increase in retail commercial or service net square footage through a coordinated redevelopment along South Church Street. All told, it is estimated that these redevelopment opportunities could lead to between approximately 8,712 and 21,780 square feet of additional retail commercial space within the Planning Area. The table on the following page summarizes the development potential of the sole Sub-Area and the two Redevelopment Areas as recognized in the Plan.



*Chapter VI: F*

**LAND USE:  
PAGAN PINES PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

*Chapter VI: F*  
**PAGAN PINES PLANNING AREA**

**PLANNING AREA PROFILE:**

**Location**

The Pagan Pines Planning area is located in the center of the Town of Smithfield. It is bounded on the north and east by South Church Street, on the west by Cypress Creek and its adjacent marsh and on the south by State Route 10 Bypass. This area has been included for study as a formal Planning Area due primarily to the Planning Commission's concern that the land along South Church Street is currently underdeveloped. An additional planning objective with respect to the Planning Area is to identify specific issues threatening the stability of the adjacent Grimesland neighborhood and to formulate recommendations concerning the Town's future approach to these issues. Including this South Church Street frontage, the Planning Area consists of approximately 256 acres.

**Existing Land Use and Transportation System**

The Pagan Pines Planning Area is an effectively built-out area consisting of a poorly planned mix of corridor based uses along South Church Street and an older, stable residential neighborhood located between South Church Street and Cypress Creek. This neighborhood is marked by a progression in lot sizes from the smaller, urban-sized lots fronting Wilson Road and Magruder Road to the larger estate lots that overlook Cypress Creek. A Town well (the South Church Street well-No.3), a 400,000 gallon elevated water tank and a rescue squad facility are also located in the southern portion of the Planning Area, while Wilson Road is home to a 150,000 gallon water storage tank. Of the Planning Area's 256 total acres, approximately 248 (96%) have been identified as being developed. The South Church Street corridor is home to an odd assortment of commercial, residential, office and service uses that are poorly linked. This hodgepodge of poorly linked uses has evolved as the direct result of the parcel-by-parcel development that has dominated the maturation of the corridor over the years. With few exceptions, each individual parcel was developed without consideration of adjacent properties and their existing or future uses. As a result of this lack of vision and proactive planning for the corridor, underdeveloped parcels dominate this important entrance corridor.

South Church Street accommodates the vast majority of internal street movements and connections to major arterials within the Planning Area. This minor arterial distributes local traffic to Talbot Drive, Heptinstall Avenue and several other minor residential streets that form the internal street network within the Pagan Pines neighborhood. South Church Street serves as

the Town's primary commercial corridor, as well as the primary entrance corridor into the Downtown Area from areas south of Smithfield.

### **Existing Environmental Considerations**

Although the Pagan Pines neighborhood lies directly adjacent to Cypress Creek and its surrounding marsh, the boundaries of the Pagan Pines Planning Area were purposely drawn so as to not include these sensitive environmental areas since the surrounding land is effectively fully developed. This strategy was undertaken in order to focus specifically on the issues threatening the stability of the neighborhood. Thus, although existing uses within the Planning Area clearly impact these environmental resources, only approximately 8 acres of sensitive environmental areas were identified within the Planning Area. These areas include marshlands that extend into the neighborhood and for the sake of simplicity, were not separated from the existing land uses delineated within the Planning Area. In terms of new development or redevelopment within the Planning Area, future activities will be limited to minor infill, rehabilitation or redevelopment projects which, if properly designed and managed, should have little or no impact on these valuable environmental resources.

### **PAGAN PINES LAND USE PLAN**

The Pagan Pines Planning Area is planned as a stable residential area bordering a likely commercial redevelopment area along South Church Street. Future redevelopment activities within the Planning Area should occur under the guidance of a master plan for the identified Redevelopment Area, as opposed to the parcel-by-parcel approach that has historically dominated Town development along its major entrance corridors.

In the following sections, specific land use recommendations are presented for both the Sub-Area and for the Redevelopment Area identified in the Pagan Pines Planning Area.

### **Sub-Area 1 Recommendations**

Sub-Area 1 occupies the vast majority of the Pagan Pines Planning Area, extending from the commercial uses bordering South Church Street to the marsh adjacent to Cypress Creek and incorporating the entire Grimesland neighborhood. It is bounded on the north and west by Cypress Creek and its adjacent marsh, on the east by the commercial uses described in Redevelopment Area 1 below and on the south by the Route 10 Bypass. Encompassing approximately 200 acres, Sub-Area 1 is effectively completely developed. Small infill opportunities do exist within existing parcels, but these are few in number and improbable in terms of the likelihood of being capitalized on during the upcoming planning term and therefore are not calculated into a net developable acreage calculation. Thus, it is anticipated that although the Sub-Area is planned for low density residential development, it is highly unlikely that it will support any additional dwelling units. Future development activities in the

Sub-Area will most likely be limited to rehabilitation and redevelopment projects on existing structures.

The major issues involved with the future stability of this Sub-Area are (1) stormwater management and (2) the impacts of the recommended redevelopment activities planned for Redevelopment Area 1. The Pagan Pines subdivision was developed without modern stormwater management facilities. For the most part, small, ill-equipped ditches or side swales adjacent to the minor residential streets are relied upon to store and transport surface stormwater flows in the absence of more formal curb and gutter and piping designs. During heavy storm events, these facilities typically fail to properly handle the stormwater flow and minor flooding occurs in the streets and in residential yards. In several sections of the Planning Area, the lots do not even have these primitive ditches or swales to manage storm water. Thus, drainage in Grimesland is a major concern for residents and Town officials. Unfortunately, given the mostly flat terrain of the neighborhood and the compact nature of the lots, the addition of sufficient stormwater management facilities in the Area would be very costly and perhaps prohibitive. The Town should initiate a Comprehensive Stormwater Management study to analyze existing problems in this and other existing established neighborhoods and to provide possible design solutions and recommended financing strategies for each area.

The stability of the Pagan Pines neighborhood also hinges on the future redevelopment of the South Church Street corridor (Redevelopment 1). The majority of the lots along Wilson Road lie directly adjacent to the uses along South Church Street. Clearly, the planned future redevelopment of these uses must be sensitive to the noise, light, traffic, drainage and other impacts they might have on the adjacent neighborhood. Future redevelopment plans must incorporate sufficient buffering and modern stormwater management practices to minimize the negative externalities impacting the Pagan Pines community in order to allow it to maintain its existing character and quality of life.

### **Redevelopment Area Recommendations**

**Redevelopment Area 1** is located in the eastern portion of the Pagan Pines Planning Area and incorporates the vast array of commercial, office, service and residential uses that line the western edge of South Church Street between Talbot Drive and Heptinstall Avenue. It is bounded on the north by Talbot Drive, on the west by Sub-Area 1, on the south by the access road leading to the Town rescue squad facility and the Town well and water tower and on the east by South Church Street. The 41.1 acre Redevelopment Area is planned for retail commercial use at a floor area ratio of 0.2 to 0.5 square feet per net developable acre. At this density, the Sub-Area could support between 16,030 and 40,075 square feet of new gross leasable space within its 1.8 net developable acres.

This Area has been identified by the Town Planning Commission as being suitable for redevelopment. Every lot within the Area contains frontage on South Church Street, the Town's primary commercial corridor and major entrance corridor into the Downtown Area



from the south. Given their potentially prime commercial locations, several parcels within this Area can be appraised as being currently underdeveloped, as many of the properties are deteriorating and/or unresponsive to their existing market potentials.

Several of the various existing uses in this Redevelopment Area currently do not represent the highest and best use of the properties. These uses include several scattered single family residences, offices and an assortment of small service-oriented businesses. The lot-by-lot development of this corridor over time has led to a haphazard collection of land uses that do not fit together in a coherent mix of uses or capture a significant portion of the regional commercial marketplace.

A thoughtful master plan should be created for the Redevelopment Area which would spell out the appropriate land uses, provide a buffer for the neighboring residential uses in Sub-Area 1 and protect the environmental resources associated with Cypress Creek to the west. Suitable land uses for the redevelopment effort would include: offices, tourist commercial and neighborhood commercial uses and possibly a new motel.

The major issues involved with the potential redevelopment of these Areas are (1) acquiring and consolidating the properties within the Redevelopment Area, (2) removing and/or renovating the existing structures, (3) vehicular access and (4) responding to the applicable Chesapeake Bay Preservation Act requirements. As with any major redevelopment project involving multiple property owners, this first issue can easily become a substantial hurdle. The Town should open discussions with the property owners in the Redevelopment Area in an attempt to clarify the redevelopment potential of the identified underdeveloped properties. If the current owners show no interest in redeveloping the properties on their own, the Town could explore the possibilities of acquiring the properties and consolidating them into one contiguous parcel that could be marketed to a commercial developer. Due to the narrow depth of many of the parcels along this corridor (especially between Mercer Street and Heptinstall Avenue), the Town should encourage property owners in this area to consolidate adjacent parcels in order to provide sufficient space to adequately support appropriate commercial uses. The Town should also approach the existing businesses located within each Redevelopment Area and encourage them to participate in the redevelopment process.

The proposed plan for the Redevelopment Area should minimize the number of entrances along South Church Street and support the sidewalk and road improvements planned for the street (see the Transportation Chapter for more details). Currently, due to the haphazard, parcel-by-parcel development of the corridor, little distinction is made between sidewalk and street along the corridor and excessive curb cuts are poorly marked and create additional traffic congestion along this valuable entrance corridor. Future commercial uses should use shared entrances wherever possible and should avoid excessive curb cuts for vehicular access across clearly defined pedestrian walkways.

All future redevelopment in the Planning Area also needs to respond to the applicable Chesapeake Bay requirements relating to water quality standards. The development of necessary stormwater management facilities to serve proposed redevelopment projects should be included in this consideration in order to protect nearby Cypress Creek. Future development should also employ extensive landscaping and minimal earthwork. The master plan for the Redevelopment Area should be developed in harmony with the goals, objectives and recommendations provided in the Town's entrance corridor study.

## **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the Pagan Pines Planning Area as an integrated mixed use community which provides a transition from its highway related commercial uses along South Church Street to the single family homes which border Cypress Creek. Future redevelopment should be designed in harmony with its adjacent uses and the picturesque surroundings beyond in order to retain its environmental beauty and to support the Town's goals for improving the appearance of its major entrance corridors. The Pagan Pines Planning Area has the potential to accommodate between 16,030 and 40,075 square feet of new commercial space. The redevelopment of this Planning Area should provide commercial and tourism-based employment and revenues for the Town. However, the active use of these properties may not occur for many years because there are no pending development plans for the Area. In the interim, the Town should encourage the creation of a master plan for the Redevelopment Area which respects the adjacent neighborhood and the natural environment. No development should take place until the transportation improvements planned for South Church Street are completed.

The table on the following page summarizes the development potential of each of the Sub-Areas as recognized in the Plan.



*Chapter VI: G*

**LAND USE:  
RIVER RESIDENTIAL PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

*Chapter VI: G*  
**RIVER RESIDENTIAL PLANNING AREA**

**PLANNING AREA PROFILE:**

**Location**

The River Residential Planning area is located in the northeastern portion of the Town of Smithfield. It is bounded on the north and west by the Pagan River, on the south by a portion of South Church Street and the John Rolfe Planning Area and on the east by Moone Creek, the Town's corporate boundary and the Gatling Pointe subdivision. The Planning Area consists of approximately 663 acres.

**Existing Land Use and Transportation System**

The River Residential Planning Area is composed almost entirely of single family detached residences with the exceptions being a handful of commercial uses and a Town sewer pump facility located adjacent to South Church Street just east of the Cypress Creek Bridge. Beale Park, a private neighborhood park is also located within the Planning Area, just north of Lumar Road. The Planning Area incorporates the entire Red Point Heights and Pagan Point neighborhoods, as well as the northern half of the Moonefield subdivision. Although the Planning Area is largely built-out (existing development occupies over 95% of its total land area), several limited in-fill development opportunities have been identified as having prime development potential. These infill opportunity areas account for approximately sixteen total acres, representing just 2% of the total land area within the Planning Area.

The neighborhoods in the River Residential Planning Area rely entirely on two principle access areas in order to travel into and out of their community: the South Church Street/Red Point Drive and Jordan Drive intersections and the John Rolfe Drive/Battery Park Road intersection. These three intersections serve the transportation demands associated with over 600 total residences located within the Planning Area, in addition to several dozen uses located in the adjacent John Rolfe Planning Area.

From these primary access points, traffic in the Planning Area is funneled to and from the residences via a hierarchy of residential streets, linked together by two local collector streets: Lumar Road and Moonefield Drive. In turn, these two collectors distribute local residential traffic to a series of minor residential streets, including Riverside Drive, Pagan Road and Watson Drive which then connect to local neighborhood streets and cul-de-sacs. Both Lumar and Moonefield typify the older, town-scaled collector alignments that dominate the stable residential areas in Smithfield in that they have been called upon to serve traffic functions

which are diverse, competing and often exceed their capacity. Both are marked by narrow pavements and rights-of-way and poorly functioning or otherwise lacking drainage facilities.

This loosely integrated transportation system puts great strain on the primary access points and the primary collector roads that provide access for each neighborhood in the Planning Area, particularly during peak commuting periods. Traffic entering and exiting Battery Park Road at the John Rolfe Drive intersection creates traffic bottlenecks during high traffic demand periods and increases the potential for traffic accidents. This excess traffic demand problem is magnified on Moonefield Drive which is too narrow (20-22' in width) to effectively handle existing peak traffic demands associated with the northern half of the Moonefield neighborhood. Neighborhood residents have also expressed concern with the high speeds commonly achieved by through traffic along this collector road.

### **Existing Environmental Considerations**

The Planning Area is impacted on three sides (the north, west and east) by the wetlands and marsh adjacent to the Pagan River and its associated tributaries. Wetlands and marsh areas lie directly adjacent to the Pagan Pointe and Red Point Heights neighborhoods, as well as to Moone Creek and its associated tributaries and surrounding wetlands separate the northern half of the Moonefield community from the Gatling Pointe subdivision. Each of these wetlands and marsh areas has been identified as Resource Protection Areas (RPAs) and are protected from future development. The boundary of the River Residential Planning Area has been located such that a majority of these areas have been excluded from consideration for development planning purposes. However, the scenic marshlands and critical slopes of these waterways penetrate the Planning Area in several areas in order to create barriers to construction for a small portion of the land. These penetration areas are identified as sensitive environmental areas, and together, they account for nearly ten percent (approximately 40 acres) of the total Planning Area. While these tidal waterways have limited the total buildable area in the Planning Area, they have provided dramatic siting opportunities from the adjacent ridges. Few of the infill development opportunities remaining in the Planning Area are located along these ridges, however.

### **RIVER RESIDENTIAL LAND USE PLAN**

The River Residential Planning Area is planned as a stable residential community focusing almost entirely on single family detached homes with a private neighborhood park. Future development in the Planning Area is limited to several scattered infill development and potential redevelopment opportunities in the residential areas. Together, these infill opportunities account for less than three percent (approximately 16 acres total) of the total land area in the Planning Area. The potential yield range listed for each Sub-Area below reflects the total of remaining platted, but as yet undeveloped parcels. These parcels are likely to remain undeveloped for the foreseeable future reflecting the will of the existing landowners. However, the opportunity for developing the net developable properties in the future remains, and the

range of potential future infill yield reflects the potential net gain in future residential units in the Planning Area.

In the following sections, specific land use recommendations are presented for the three Sub Areas identified in the River Residential Planning Area.

### **Sub-Areas 1, 2 and 3 Recommendations**

Sub-Area 1 is located in the northwestern portion of the River Residential Planning Area. It is bounded on the west and north by the Pagan River and its adjacent marsh and wetlands, on the south by Sub-Area 3 (the Red Point Heights subdivision) and on the east by Sub-Area 2 (the Moonefield subdivision). Sub-Area 1 includes the area commonly referred to as the Pagan Point neighborhood and encompasses approximately 108 acres. It is planned for low density residential use which is intended to protect and preserve the stable community that exists within the Sub-Area. This land use designation would allow infill single family detached residential development at a density of between one and three dwelling units per acre, representing a density that is consistent, if not slightly more restrictive than existing residential development within the community. At this density, it is estimated that between 3 and 7 new housing units could potentially be located within the Sub-Area's 4.2 net developable acres. This yield reflects the platted lot yield remaining within the Sub-Area.

Sub-Area 2 is located in the northeastern portion of the River Residential Planning Area. It is bounded on the north by the Pagan River and its adjacent marsh and wetlands, on the west by Sub-Area 1, on the south by John Rolfe Planning Area and on the east by Moone Creek and its adjacent marsh. The Sub-Area includes the northern half of what is commonly referred to as the Moonefield neighborhood and it encompasses approximately 310 acres. It is planned for low density residential use which is intended to protect and preserve the stable Moonefield community. This land use designation would allow infill single family detached residential development at a density of between one and three dwelling units per acre, representing a density that is consistent, if not slightly more restrictive than existing residential development within the Sub-Area. At this density, it is estimated that between 3 and 9 new housing units could potentially be located within the Sub-Area's 7.5 net developable acres. This yield reflects the platted lot yield remaining within the Sub-Area.

Sub-Area 3 is located in the southwestern portion of the River Residential Planning Area. It is bounded on the north by Sub-Area 1, on the west by the Pagan River and its adjacent marsh and wetlands, on the south by Lumar Road and on the east by the John Rolfe Planning Area. The Sub-Area includes the area commonly referred to as the Red Point Heights neighborhood and it encompasses approximately 244 acres. It is planned for low density residential use which is intended to protect and preserve the stable residential community located in the Planning Area. This land use designation would allow infill single family detached residential development at a density of between one and three dwelling units per acre, representing a

density that is consistent, if not slightly more restrictive than existing residential development within the Sub-Area. At this density, it is estimated that between 4 and 10 new housing units could potentially be located within the Sub-Area's 4.5 net developable acres. This yield reflects the platted lot yield remaining with the Sub-Area.

The major issues involved with the future stability and infill development in each of these Sub-Areas are (1) stormwater management, (2) traffic calming, (3) pedestrian access and (4) ensuring that future infill projects respect adjacent residential uses. Each of the three major subdivisions in the Planning Area was developed without the benefit of modern stormwater management facilities, and as a result, storm drainage problem areas have been identified throughout the Planning Area by residents and Town Staff. For the most part, small ditches or crude swales adjacent to the minor residential streets are relied upon to store and transport surface stormwater flows. During heavy storm events, these facilities are often too small to properly handle peak stormwater flows and minor flooding typically occurs in the streets and in residential yards. In several sections of the Planning Area, residential lots do not even have these primitive ditches or swales to manage stormwater flows. Stormwater management weaknesses are most glaring in the Beale Park area, as heavy storm events typically leave standing water on the playing fields and in the parking lot of the recreational facility.

As a result of these reoccurring problems, drainage in the Planning Area has become a major concern for residents and Town officials. Unfortunately, given the largely flat terrain of the communities and the compact nature of the lots, the addition of sufficient stormwater management facilities in the Area would be very costly and perhaps prohibitive. The Town should implement the improvements recommended by the recently completed comprehensive analysis of stormwater management in the community. These improvements should focus energy and attention on problem areas identified by Staff and residents in this and other Planning Areas. The Town should review the analysis of possible design solutions and recommendations concerning financing strategies for each neighborhood and planning Sub-Area. Furthermore, future infill development projects should incorporate modern stormwater management principles and strategies in site plans in order to insure that storm flow will be adequately managed on site in order to avoid further exacerbating existing drainage problems in the Planning Area.

Traffic calming is another important consideration for the future of the Planning Area. The existing transportation system serving the Planning Area is often overburdened during periods of peak demand, particularly at the points of primary access into the Planning Area and along the two primary collector roads that provide access into the three neighborhoods. This excess traffic demand problem is magnified by the fact that the majority of the roads in the Planning Area's internal street network are too narrow to effectively handle existing peak traffic demands associated with the local neighborhoods. Residents of the three communities within the Planning Area have also expressed concern with the high speeds commonly achieved by thru-traffic along collector roads. Combined with the lack of sidewalks or bikepaths in the



Planning Area, these high peak traffic volumes and speeds create a dangerous situation for pedestrians and children playing in the Planning Area.

The maturity of development in the Planning Area creates a “double-edged sword” with respect to future transportation planning. On the one hand, since the Planning Area is nearly built-out (infill development opportunities provide a potential for between only 10 and 26 new homes before complete build-out is achieved), vehicular traffic demand is unlikely to grow much beyond existing levels. This trend affords the Town the ability to gauge quite precisely what improvements are necessary to enable the transportation network to adequately serve future demand within the Planning Area. Unfortunately, the Town must work within the existing transportation system, poorly designed as it is, in order to plan these improvements in the hopes of creating a more pedestrian-friendly and child-safe environment for local residents.

Along several streets within the Planning Area, little or no substantial right-of-way is available to widen existing streets or add sidewalks and bikepaths. Sufficient right-of-way capacity is available along Moonefield Drive, however. As is described in more detail in the Transportation Chapter (Chapter X), it is recommended that the Town conduct a study to determine the feasibility of widening Moonefield Drive to allow it to function as a more effective collector street for the adjacent residential neighborhoods. Sidewalks and bikepaths should be included in any future improvement of this street in order to provide pedestrian and bicycle connections between residential areas in the Planning Area and Beale Park.

Where right-of-way capacity is not sufficient to implement similar improvements in the Planning Area, the Town should focus on the introduction of various traffic calming strategies to be used to slow thru-traffic and decrease pedestrian and vehicle safety hazards in the Area. Several specific calming measures could be used within the three major neighborhoods in order to remedy the potentially hazardous conditions that currently exist. Examples of possible measures include: more aggressive enforcement of existing posted speed limits, improved speed limit signage and street lighting, increased fines for speeding in the Planning Area, the addition of new stop lights and stop signs if warranted and the introduction of more visible crosswalks along heavily traveled pedestrian/roadway intersections and crossings.

A final important consideration with respect to the future of the Planning Area concerns the nature of infill development. Future infill projects in the Planning Area should respect existing, adjacent land uses in terms of scale, density, geometric siting configuration and building materials. Each project should also incorporate sufficient buffering and modern stormwater management design strategies and practices in order to minimize the negative externalities associated with the new development impacting existing communities, the Pagan River, Moone Creek and/or their tributaries and wetlands.

## **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the River Residential Planning Area as a continued stable single family detached residential community. The Town should focus its efforts in this Planning Area on implementing specific transportation improvements in the Planning Area, including provisions for lane widening where feasible and incorporating traffic calming strategies for the two local collector streets (Lumar Road and Moonfield Drive) and minor residential streets, including Riverside Drive, Pagan Road and Watson Drive. The Town should also undertake an in-depth analysis of stormwater management problems and opportunities in the Planning Area to include specific recommendations for improvements and financing alternatives.

Future infill development in the Planning Area needs to respond to the applicable Chesapeake Bay requirements applying to water quality standards. The development of necessary stormwater management facilities to serve proposed redevelopment projects should be included in this consideration in order to protect the nearby river and creeks. Future development should also employ extensive landscaping and minimal earthwork.

The River Residential Planning Area has the potential to accommodate between approximately 10 and 26 new households. New infill development should incorporate modern stormwater management strategies designed to prevent the drainage problems experienced in the surrounding neighborhood.

The table on the following page summarizes the development potential of each of the Sub-Areas as recognized in the Plan.



*Chapter V: H*

**LAND USE:  
SMITHFIELD INDUSTRIAL PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

*Chapter VI: H*  
**SMITHFIELD INDUSTRIAL PLANNING AREA**

**PLANNING AREA PROFILE:**

**Location**

The Smithfield Industrial Planning Area is located in the northern portion of the Town of Smithfield. It is bounded on the north by the Town's corporate boundary, on the west by a tributary of the Pagan River and the Town's corporate boundary and on the south and east by the Pagan River. The Planning Area consists of approximately 196 acres.

**Existing Land Use and Transportation System**

The Smithfield Industrial Planning Area is an intensely developed area that is home to Smithfield Foods' major meat packing and production plants. The meat processing industry has historically served as the backbone of the local economy as the ham products principally produced by Smithfield Packing and Gwaltney, both subsidiaries of Smithfield Foods, are world renowned for their quality and unique smoked flavor. Four separate meat processing facilities are located in the Planning Area: the Gwaltney meat packing plant, the Smithfield Packing plant, and the Smithfield Ham and Products production center. In addition to the major industrial area, several single family detached residential estates are scattered among the high land bordering the Pagan River in the northeastern section of the Planning Area, which is commonly referred to as River Oaks. Another residential area, the Pinewood Heights subdivision is located directly adjacent to the packing plants in the western portion of the Planning Area. This neighborhood suffers from a proliferation of dilapidated, vacant and poorly maintained homes and inadequate public utilities. Several of the homes are without adequate well and/or septic facilities, and living conditions within the community can be described generally as poor. Considered together, existing development accounts for nearly 153 total acres in the Planning Area, or approximately 78% of the total land area.

State Route 10 Business serves as the major transportation corridor within the Planning Area, providing connections to the Downtown Area via North Church Street and to the Route 10 Bypass via Berry Hill Road. Each of the existing developments in the Planning Area is accessed either directly or indirectly by the Route 10 Business link. Berry Hill Road provides a direct link from the processing plants to the Bypass and points beyond for the numerous trucks used to transport goods into and out of the meat processing facilities. Together, the Route 10 Bypass and the Route 10 Business link serve as the major entrance corridors into Smithfield from the north.

Traffic congestion at the meat processing plants is a major point of concern among Town residents and Smithfield Foods employees. Many pedestrians converge at primary facility cross walks during specific times as employees change shifts and typically cross Route 10 Business traveling to and from the plant parking lots in large groups. These groups often force vehicular traffic to stop for long periods of time, creating frustration for drivers and a potentially hazardous situation for pedestrians. Several traffic calming devices have been introduced along this link of the corridor in order to mitigate the potential hazards in this area.

The Planning Area is also home to Robert S. Clontz Memorial Park which is located just off North Church Street on the northern bank of the Pagan River. The park is equipped with a gazebo, picnic tables and an extensive fishing pier. The Park provides a scenic vista into Downtown Smithfield from its long pier running along the river. It also serves as a valuable means for residents to have direct access to the river, and its preservation and easy access must be maintained for future generations.

### **Existing Environmental Considerations**

The Planning Area's development potential is constrained somewhat by the presence of the Pagan River and its tributaries along its western, eastern and southern boundaries, respectively. The scenic marshlands and critical slopes of these waterways surround and penetrate the Planning Area to create barriers to construction for a significant portion of the remaining undeveloped land. Nearly eleven percent of the total Planning Area, approximately 21 acres, have topographic and wetland characteristics which make them unsuitable for urban development. While these tidal waterways limit the total buildable area, they provide dramatic siting opportunities from the adjacent ridges. Of the Planning Area's 196 total acres, only approximately 13.4 (7%) have been identified as having prime development potential remaining.

Over the past three decades, the operations of the packing facilities have had a dramatic impact on the Town's environmental resources, particularly the Pagan River. However, over the past decade, Smithfield Foods has taken several steps to eliminate many of the serious environmental problems initiated in the plants. The most important of these measures concerned the treatment of waste products created by the plants during the meat production process. In 1997 Smithfield Foods and the Hampton Roads Sanitation District (HRSD) agreed to install lines allowing the corporation to pump wastewater from its slaughterhouses and meat packing facilities to a regional HRSD facility via a 24" line. This arrangement has enabled Smithfield Foods to adequately dispose of its large volume of wastewater in an efficient and environmentally-friendly fashion, as opposed to having to attempt to treat the wastewater on site at the Smithfield and Gwaltney wastewater treatment facilities and then dispose of the treated water directly into the Pagan River, as had been done previously. This new arrangement has effectively mitigated the negative impact of the packing plants on the Pagan River, and improvement in the ecology of the river and its surrounding marsh lands has already been noted.

## **SMITHFIELD INDUSTRIAL LAND USE PLAN**

The Smithfield Industrial Planning Area is planned for the continuation and moderate expansion of the existing high density, heavy industrial uses located along Route 10 Business and the continued conservation of the lands bordering the Pagan River. In concert with the goals and objectives expressed in this Plan with respect to economic development and in particular to the support of existing industry and the encouragement of expansion wherever possible (see Chapter IX: Economic Development), the Future Land Use Plan for the Planning Area identifies opportunities for logical expansion of the existing meat processing facilities or for another industrial user that would benefit the Town and its local economy. One of these identified opportunity areas is land currently occupied by the Pinewood Heights subdivision. The Town has taken the lead in encouraging and supervising the long-discussed redevelopment of the neighborhood, as well as developed a plan for relocating the existing residents. The Future Land Use Plan also calls for the continued conservation of the vacant lands lying east of the plant parking lots between Route 10 Business and the Pagan River.

In the following sections, specific land use recommendations are presented for both of the Sub-Areas and for the lone Redevelopment Area identified in the Smithfield Industrial Planning Area.

### **Sub-Area 1 Recommendations**

Sub-Area 1 is located in the northern portion of the Smithfield Industrial Planning Area. It is bounded on the north by River Oaks Lane and the Town's corporate boundary, on the west by Route 10 Business, on the south by the Smithfield Foods plant parking facility and on the east by Sub-Area 2. Sub-Area 1 is heavily wooded and forms a natural buffer between Route 10 Business, the parking lot and the packing plants and the estates in the River Oaks neighborhood overlooking the Pagan River. The 11.4 acre Sub-Area is planned for community conservation. This land use designation allows extremely low density residential development at a ratio of up to 1 dwelling unit per acre. At this density, approximately eight additional single family detached dwelling units could be located within the Sub-Area's 8.0 net developable acres, assuming that a special use permit could be obtained for the site. However, it is relatively unlikely that the land will be developed in the near planning term.

The major issues involved with the potential development of this Sub-Area are (1) the appropriate density of future development and (2) buffering to protect the nearby residential uses. Due to the proximity of the site to the existing industrial uses in the Planning Area, the Plan recommends that any future residential development of the site allow for the preservation of the existing trees bordering Route 10 in order to preserve the natural, existing buffer between the uses bordering Route 10 on the west and the nearby residences in River Oaks. Site planning for the site should emphasize high quality design standards incorporating extensive, mature landscaping to serve as a buffer between the highway and future and nearby residences. It is

hoped that the type of housing product developed in the Sub-Area would mirror the density and quality in design and building materials evidenced in the existing residential developments located adjacent to the Pagan River in River Oaks. The two neighborhoods should be logically linked by a neighborhood connecting roadway.

### **Sub-Area 2 Recommendations**

Sub-Area 2 is located in the northeastern portion of the Smithfield Industrial Planning Area. It incorporates the River Oaks neighborhood and is bounded on the north by the Town's corporate boundary, on the west by Sub-Area 1 and the parking lots serving the meat processing facilities, on the south by marshlands adjacent to the Pagan River and on the east by the Pagan River. The 51.6 acre Sub-Area is planned for community conservation. This land use designation allows extremely low density residential development at a ratio of up to 1 dwelling unit per acre. At this density, approximately five additional single family detached dwelling units could be located within the Sub-Area's 5.4 net developable acres, assuming that a special use permit could be obtained for the site. It is hoped that the type of housing product developed in the Sub-Area would mirror the density and quality in design and building materials evidenced in the existing residential developments located adjacent to the Pagan River.

The major issues involved with the potential development of this Sub-Area are (1) vehicular access and (2) sensitive environmental areas. The existing residences in the Sub-Area are accessed from Route 10 Business via River Oaks Lane which forms the Town's corporate boundary. It is projected that this road could adequately support the future development planned for the Sub-Area given the relatively small increase in density if these residences are properly planned. Any future subdivision within the Sub-Area will have to incorporate public roads, as private roads are prohibited in new subdivisions in the Town.

Existing vegetation in the Sub-Area should also be maintained as much as possible and should be incorporated into a thoughtful landscaping plan for the site in order to preserve the existing rural character of this area adjacent to the river. Future residences should be sited well away from the river on the high lands in the central portion of the Sub-Area. Future development should also incorporate adequate stormwater management measures, including best management practices if necessary, to ensure that the new residences do not negatively impact the quantity or quality of water draining into the river.

### **Redevelopment Area Recommendations**

Redevelopment Area 1 is located in the southwestern portion of the Smithfield Industrial Planning Area and incorporates the Pinewood Heights subdivision. It is bounded on the north by Berry Hill Road and Smithfield Foods property, on the west by marshlands adjacent to a tributary of the Pagan River, on the south by the Pagan River and on the east by the Smithfield Foods meat processing facility and more specifically, its wastewater treatment lagoon. The 17



acre Redevelopment Area is planned for heavy industrial development once the existing residents have been relocated and the homes have been razed. This redevelopment project would serve a need expressed repeatedly in public work sessions by the Town Council, Planning Commission, Staff and concerned residents with respect to the less than satisfactory living conditions witnessed in the neighborhood and the need for additional lands suitable for economic development uses, specifically heavy industrial uses. At an allowable floor area ratio of 0.30 to 0.50 square feet per acre, the Redevelopment Area could support between 225,076 and 376,794 square feet of new heavy industrial space within its 17.3 net developable acres.

The major issues involved with the future redevelopment of this community focus upon (1) the future of the existing neighborhood residents, (i.e. equitably relocating the existing residents to a better living environment, either within the Town or within Isle of Wight County), (2) rezoning the subject parcels and (3) encouraging private investment in the redevelopment of the community to include the relocation of the existing residents. The future of the Pinewood Heights subdivision represents one of the most critical issues addressed by the Planning Commission and Town Council in planning for the long term future of the Smithfield community during the development of this Comprehensive Plan. In the summer of 1998, the Town Council listed the resolution of the future of the neighborhood as its fourth most important strategic goal for the upcoming planning period. Since that time, the Town has remained committed to initiating this program, but funding limitations have prohibited the formal program kick-off from progressing as quickly as had been hoped.

Pinewood Heights consists of approximately 38 duplex and 2 single-family residential structures (containing 78 total dwelling units). The community is located directly adjacent to the Smithfield Foods meat packing plants, more specifically, the plant's wastewater treatment facility. Over the course of the past two decades, the community has increasingly lost its suitability as a livable residential community. The neighborhood has a high rate of vacant, abandoned and poorly maintained homes, as well as a high majority of absentee owners. Noise, smell and industrial traffic generated by the adjacent packing plants cannot be reasonably prevented from negatively impacting this community and any future Town investment in utility, street or home rehabilitation improvements is highly discouraged.

After much public debate during the development of the 1992 Land Use Plan, the neighborhood was designated for industrial use. Soon thereafter, the Town received a grant from the Virginia Department of Housing and Community Development and commissioned a planning study focusing on the best possible redevelopment alternatives for the community. The study recommended that the existing residents be relocated and the existing structures be razed to make way for industrial redevelopment. Several alternatives were developed as to the most feasible means of financing the relocation of the residents. The recommended solution called for the Town to share the cost of relocation with future redevelopment partners. It was hoped that a substantial portion of the Town's share of the relocation cost could be obtained via a grant from the State DHCD office. After much deliberation, the Town determined that the cost

associated with relocating the existing residents (estimated at approximately \$3.5 million) was prohibitive.

After further deliberation during the 1998 revision to the Town Zoning Ordinance, the subdivision remains zoned for attached residential use and development. As a part of the zoning revision process, discussion has been revived between the Town and residents and landowners in the neighborhood in the hopes of establishing a constructive dialogue concerning a feasible solution to the existing problems in the subdivision. During the course of these discussions, Town officials have become convinced that the future redevelopment of the neighborhood is inevitable and that the Town's clear objective is to develop an equitable and financially feasible strategy through which the land could be redeveloped for heavy industrial uses. The first steps in this long, complicated process were to place the recommended future land use designation of heavy industry on the subdivision and to rezone the parcels to I-2 (Heavy Industrial), which were done in 2008. Although the rezoning of the neighborhood to an I-2 designation would not necessarily guarantee the expedient conversion of the land, it would show the Town's commitment to fulfilling its stated goal and objective for the community.

Community Development Block Grant funds, a pledge from Isle of Wight County and an increase in the town's meals tax are the primary sources of funding for the project. The town has held numerous public information meetings on the project and has retained K. W Poore Associates to assist in administering the grant's purchases of homes and the relocation of their inhabitants. The project is a voluntary buyout program, implemented in three phases and spanning a twelve year period. While the project is still in its infancy, it is running smoothly and is hoped to be beneficial to all.

## **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the Smithfield Industrial Planning Area as an area of limited future development potential bisected by the North Church Street/Route 10 Business corridor. To the west of this corridor, the Plan envisions an intensively developed area which will provide several opportunities to meet the Town's stated economic development objectives with respect to allocating additional industrial development. The corridor shall continue to mark a clear transition from its existing and planned industrial uses to the delicate highlands and marshes bordering the Pagan River to the east that merit conservation. The Smithfield Industrial Planning Area has the potential to accommodate approximately thirteen new households within this community conservation area. It also has the potential to provide between approximately 226,076 and 376,794 square feet of new heavy industrial space. All told, the development of this Planning Area should provide significant employment and revenues for the Town. The table on the following page summarizes the development and redevelopment potential projected for the Planning Area.



*Chapter V: I*

**LAND USE:  
SOUTHERN GATEWAY PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**

*Chapter VI: I*  
**SOUTHERN GATEWAY PLANNING AREA**

**PLANNING AREA PROFILE:**

**Location**

The Southern Gateway Planning Area is located in the southeastern portion of the Town of Smithfield. It is bounded on the north by the Route 10 Bypass and the Waterford Oaks planned development, on the west by Cypress Creek and the adjacent marsh, on the south by Smithfield High School and the Town's corporate boundary and on the east by Jones Creek and the Town's corporate boundary. The Planning Area, so named because of its location at the confluence of State Route 10/U.S. Route 258, the Route 10 Bypass and South Church Street, which forms the primary gateway welcoming travelers from points southward to the Town of Smithfield, consists of approximately 745 total acres.

**Existing Land Use and Transportation System**

The Southern Gateway Planning Area is a relatively undeveloped area which includes a mix of scattered single family residences, corridor-based commercial uses and farmland bordered by an expanse of fallow land. Its most notable existing uses are the Smithfield Plaza Shopping Center, an existing horse stable and two large borrow pits, one active and one which is no longer used. The Planning Area incorporates roughly half of the Southern Annexation Area, one of three Isle of Wight County territories annexed by the Town of Smithfield on January 1, 1998. The vast majority of this land is vacant and maintained as woodlands, wetlands and open fields, supporting significant agricultural activities.

The State Route 10/U.S. Route 258 corridor provides the principle source of vehicular access within the Planning Area. The only other state maintained roads of any significance in the Planning Area are Cypress Crossing and Cypress Run Drive, two undivided and unmarked roads serving the horse stables, several residences and the borrow pits in the western half of the Planning Area. No major public transportation improvements are currently planned for the Area. Additional road improvements will be necessary to access the interior parcels from State Route 10/U.S. Route 258.

### **Existing Environmental Considerations**

The Planning Area's development potential is constrained somewhat by the presence of two significant creeks, Cypress Creek and Jones Creek, located along its western and eastern boundaries, respectively. The scenic marshlands and surface tributaries of these waterways surround and penetrate the Planning Area to create barriers to construction for a significant portion of the land. Slightly over twenty percent of the total Planning Area, approximately 125 acres, have topographic and wetland characteristics which make them unsuitable for urban development. While these tidal waterways limit the total buildable area, they provide dramatic siting opportunities from the adjacent ridges. Of the Planning Area's 745 total acres, approximately 42 (57%) have been identified as having prime development potential remaining. Additional undeveloped environmental conservation areas totaling approximately 66 acres have purposely not been included in Sub-Area designation as there are no current plans for the future development of this land. It is projected that these lands identified for conservation will be faced with little development pressure in the near planning term as other, more accessible undeveloped parcels in Town with direct access to public water and sewer service will likely be targeted for development well before these lands are considered. Thus, for immediate planning purposes, these lands have been designated on the Town's Future Land Use Map as Community Conservation lands for which existing uses should be maintained and protected from dense development until market considerations warrant a revised analysis of their particular highest and best uses.

### **SOUTHERN GATEWAY LAND USE PLAN**

The Southern Gateway Planning Area is planned as a mixed-use community incorporating a range of single family residential housing along with retail commercial and motel lodging uses along its principal corridor. These commercial uses are designed to augment the Town's existing commercial base and to support its ongoing effort to increase regional tourism within the community. The future development of the Planning Area should occur under the guidance of a master plan for each Planning Sub-Area, as opposed to the parcel-by-parcel approach that has historically dominated Town development along its major corridors. By creating a long range plan, the owners of the various properties would be able to produce a better product that would identify the highest and best use of each property and allow a design strategy that would appropriately respond to the existing, stable uses found in the Planning Area. A thoughtful master planning effort in this Planning Area would also allow the Town to better prepare its efforts to provide the necessary public services to support future development in the area. No intensive development should take place in the vast amount of vacant land in this Planning

Area until existing water and sewer distribution systems extended to adequately serve the planned uses.

In the following sections, specific land use recommendations are presented for the seven Sub Areas identified in the Southern Gateway Planning Area.

### **Sub-Areas 1 and 3 Recommendations**

Sub-Area 1 is located in the northwestern portion of the Southern Gateway Planning Area. It is bounded on the north and east by the Route 10 Bypass, on the west by Cypress Creek and on the south by a single family residence, a borrow pit and Sub-Area 3. Encompassing approximately 204 acres, Sub-Area 1 is planned for low density residential uses. This land use designation would allow single family detached residential development at a density of between one and three dwelling units per acre. At this density, between approximately 118 and 353 new housing units could potentially be located within the Sub-Area's approximately 117 net developable acres.

Sub-Area 3 is located in the southwestern portion of the Southern Gateway Planning Area. It is bounded on the north by Sub-Area 1, on the east by Sub-Area 4 and the Route 10 Bypass, on the west by Cypress Creek and on the south by the town's corporate boundary. Encompassing approximately 208 acres, Sub-Area 3 is planned for low density residential uses. This land use designation would allow single family detached residential development at a density of between one and three dwelling units per acre. At this density, between approximately 173 and 519 new housing units could potentially be located within the Sub-Area's approximately 173 net developable acres.

The major issues involved with the potential development of these Sub-Areas are (1) vehicular access, (2) provision of public utilities, (3) sensitive environmental areas and (4) buffering from adjacent uses. Establishing vehicular access from State Route 10/U.S. Route 258 will be an important consideration for both of these Sub-Areas.

Currently, two large borrow pits are operated on the subject properties. The property owner would like to continue to allow his business associate to operate the borrow pits for the near future. Ultimately, the property owner foresees the operation ceasing in coming years, at which time the pits would be converted into a stand-alone lake covering approximately 45-50 acres. The balance of the site (80-90 acres) could be developed into a residential community surrounding the lake. Significant environmentally sensitive land areas along the western boundary of the property, along with the size and location of the proposed pond limit the

resulting developable property. The Town should encourage clustering of the low density residential uses in order to maximize the preservation of open space within the Sub-Area.

Before any future significant residential development of the properties would be approved by the Town, adequate public water and sewer service would have to be provided for all planned uses. Currently, public water service is provided along Cypress Crossing along an 8-inch water line, while a 30-inch force main maintained by the Hampton Roads Sanitation District (HRSD) provides sanitary sewer service in the area. Future development in the Sub-Areas will be capably served by simply extending the existing 8" water line to serve residences; however, the extension of sanitary sewer service could be more costly given the distance to the Bypass and the fees involved with tapping into the HRSD line and constructing extensions. An alternative to the HRSD line would be to run a sanitary line via Cypress Crossing from the existing 12-inch Town force main that runs along the State Route 10/U.S. Route 258 corridor. Regardless of the alternative chosen, the future developer(s) will be responsible for extending the necessary public utilities to serve the area as no lots shall be permitted with private domestic well and septic utilities except by special permit for temporary service.

The Town should encourage traditional neighborhood development (TND) within the Sub-Areas. Such a proposal should be implemented through a master plan and accompanying code of development per the proposed TND overlay district as par of a necessary rezoning of the property. The rezoning to this district would necessitate the development of a code of development which would outline appropriate building forms, lot sizes, densities within neighborhoods, street sections, etc.

A thoughtful master plan should be created for the Sub-Areas which provides for home siting and internal roadways within the areas which are most conducive for urban land uses, while the fragile environmental areas along the Sub-Area's western boundary are to be maintained as permanent open space. Any urban use of these "sensitive environmental areas" (situated outside the Sub-Area) should be avoided. The siting of new homes should be gently placed within the angular terrain, employing minimal earthwork and extensive landscaping in order to buffer the homes from the nearby borrow pits and the Route 10 Bypass. The proposed master plan should also protect as many existing trees as physically possible within the future development plan, as the Sub-Area is dominated by mature forest. A master plan approach is critical to insuring that each of these issues is appropriately responded to in the efficient and environmentally sensitive development of this site.



### **Sub-Area 2 Recommendations**

Sub-Area 2 is located in the northern portion of the Southern Gateway Planning Area. It is bounded on the north by Cypress Crossing, on the east by State Route 10/U.S. Route 258, on the west by an active borrow pit and on the south by the Smithfield Shopping Center. The Sub-Area is currently home to horse stables and covers slightly over 14 acres and is planned for an expansion of the adjacent retail commercial uses at a floor area ratio of 0.20 to 0.50 square feet per net developable acre per acres. At this proposed density, Sub-Area 4's 11.5 net developable acres could support between approximately 100,188 and 250,470 square feet of additional commercial retail space. Hospitality and restaurant uses are also encouraged within the Sub-Area as supporting land uses.

Sub-Area 2 fronts the Route 10 Bypass, a limited access roadway that affords high visibility to a high volume of regional commuters but prohibits a direct outlet into the property. At present, Cypress Crossing provides the only direct vehicular access to Sub-Area 2, and in its present form, it is unsuitable to support the traffic demands typically associated with the uses recommended for the property. Therefore, any future development of Sub-Area 2 for substantial corporate office and research development would necessitate the improvement of Cypress Crossing into a road capable of supporting future traffic demands imposed by the future user(s).

The major issues involved with the potential development of this Sub-Area are (1) vehicular access and (2) the implementation of the Town's new corridor design guidelines. A master plan should be created for the Sub-Area in order to ensure the efficient allocation of planned retail uses and road infrastructure within the planned development, as well as to provide the necessary access for these uses from State Route 10/U.S. Route 258. The recommended master plan guiding future development in the Sub-Area should incorporate two separate, consolidated entrances into the new infill retail area: one each off Route 10/258 and Cypress Crossing. These consolidated entrances will allow the necessary access into the infill retail area without adding to the proliferation of curb cuts that already exists along this important entrance corridor. The master plan should also respond to the new corridor design guidelines currently under development by the Town with respect to set backs, landscaping and parking standards for the future development in the Sub-Area. It should also include a siting plan that would allow the future retail user to maximize exposure to the Route 10 Bypass while still meeting the requirements of the corridor design guidelines and providing appropriate landscaping, parking and pedestrian access from its entrance off Cypress Crossing. The sidewalk improvements recommended for both sides of the road on Route 10 Bypass and the State Route 10/U.S. Route

258 corridor as part of the Town's new Sidewalk Plan (see the Transportation Plan provided in Chapter XI for a more detailed summary of the Plan) should also be incorporated into the master plan.

#### **Sub-Areas 4 and 5 Recommendations**

Sub-Area 4 is located in the southern portion of the Southern Gateway Planning Area. It is bounded on the north by the existing Smithfield Plaza shopping center, on the west by Sub-Area 3, on the south by the Town's corporate boundary, and on the east by Benns Church Boulevard (State Route 10/U.S. Route 258). The entire Sub-Area is undeveloped, and much of the land is actively farmed. The 34.5 acre Sub- Area is planned for retail commercial use at 0.20 to 0.50 square feet per net developable acre. At this density, between 240,451 and 601,128 square feet of retail commercial (including supporting uses such as lodging facilities and restaurants) could be located within the Sub-Area's 27.6 net developable acres.

Sub-Area 5 is located in the southern portion of the Southern Gateway Planning Area, just east of Sub-Area 4 along Benn's Church Boulevard. It is bounded on the north by existing retail uses, on the west by Benn's Church Boulevard, on the south by the Town's corporate boundary, and on the east by Sub-Areas 6 and 7. The entire Sub-Area is undeveloped, and much of the land is actively farmed as well. The 36.9 acre Sub- Area is planned for retail commercial use at 0.20 to 0.50 square feet per net developable acre. At this density, between 241,105 and 602,762 square feet of retail commercial space (including supporting uses such as lodging facilities and restaurants) could be located within the Sub-Area's 27.7 net developable acres.

The major issues involved with the potential development of this Sub-Area are (1) vehicular access, (2) the implementation of the Town's new corridor design guidelines and (3) buffering adjacent uses.

Sub-Areas 4 and 5 both directly front the Benn's Church Boulevard (State Route 10/U.S. Route 258) corridor and enjoy excellent visibility and easy access to this major entrance corridor. In Sub-Area 5, access should be provided solely through the existing signals (i.e. the existing Edwards home site across from the Cypress Creek Street intersection and Cypress Creek Plaza and at Turner Drive intersection) and from Waterford Oaks via Canterbury. Further curb cuts along Route 10 should be avoided at all costs. Access to the interior of the sites should be provided via the existing intersections/signals along Route 10. In the long-term planning horizon for the Sub-Area 4 property, the potential exists to access the southern half of the property from Turner Drive in the County. Both Sub-Areas 4 and 5 should incorporate a sufficient easement within any future development plans to allow sufficient vehicular and sidewalk access to the adjacent Sub-Areas planned for residential uses. A 60-foot easement is

recommended by the Town. Sub-Areas 4 and 5 should also incorporate the sidewalk improvements recommended for both sides of the road on Route 10 Bypass and the State Route 10/U.S. Route 258 corridor as part of the Town's new Sidewalk Plan (see the Transportation Plan provided in Chapter X for a more detailed summary of the Plan). Any future development proposal should include a traffic impact analysis compliant with State 527 legislation. As part of this analysis, the need for additional turn lanes and turn and taper along Rt. 10 & U.S. Rt. 258 shall be analyzed.

The Town believes that the future development of these Sub-Areas should provide a "sense of arrival" and "destination" for those entering the Town of Smithfield from the south. As such, uses should be appropriate to the gateway and designed in a manner that fits the character of the Town. The Town also recommends limiting the depth of retail commercial uses to approximately 800 feet off the Benn's Church Boulevard in each Sub-Area. The Town seeks a landscape berm and landscaping within a forty foot setback along Benns Church Boulevard (Rt. 10 and U.S. Route 258). The berm should be at least four feet in height and should include landscaping such as bushes or trees on its top. Further, the Town recommends that future development along Benns Church Boulevard include a landscape buffer of a minimum of 40 feet along the corridor. This buffer should include significant landscaping or perhaps a berm to limit the visual impact of future commercial retail/office development recommended for the property.

Future development should respect architectural style, including lighting and signage standards which reflect quality and feel of Smithfield, as outlined in the entrance corridor design guidelines. The Town shall expect future development along the corridor to incorporate the use of colonial architecture in future development of the properties, to include colonial-inspired lighting standards for all parking areas and travelways.

The Town would be willing to consider a mixed use development consisting of a mix of commercial and office uses along the corridor, but only those that will be satisfied with achieving access via one of the two existing curb cuts/signals along Route 10 adjacent to the property.

### **Sub-Area 6 and 7 Recommendations**

Sub-Area 6 is located in the northeastern portion of the Southern Gateway Planning Area. It is bounded on the north by the residential portion of the Waterford Oaks subdivision, on the west by State Route 10/U.S. Route 258, on the south by Sub-Area 7 and on the east by the marsh adjacent to Jones Creek. This Sub Area covers slightly over 106 acres and is planned for low density residential land uses, supporting a recommended density of between one and three dwelling units per acre. This density is consistent with the adjacent Waterford Oaks neighborhood (i.e. 1-3 dwelling units per acre). At this proposed density, Sub-Area 6's 51.4 net developable acres could support between approximately 51 and 134 new dwelling units.

Sub-Area 7 is located in the southeastern portion of the Southern Gateway Planning Area. It is bounded on the north by Sub-Area 6, on the east by State Route 10/U.S. Route 258, on the west by State Route 10/U.S. Route 258, and on the south by a tributary of Jones Creek and the Town's corporate boundary. This Sub Area covers slightly over 20 acres and is planned for attached residential uses at a recommended density of 6-8 dwelling units per acre for the southern half of the property. At this proposed density, Sub-Area 7's 15.7 net developable acres could support between approximately 94 and 126 new dwelling units.

The Planning Commission believes that the tributary to Jones Creek which bisects the two Sub-Areas and the marsh adjacent to Jones Creek on the eastern edge of the property should be protected from future development. As such, the Planning Commission expressed a desire for the tributary to serve as a buffer between the land areas proposed for attached residential and single family residential development.

The major issues involved with the potential development of these Sub-Areas are (1) vehicular access, (2) provision of public utilities, (3) sensitive environmental areas, (4) buffering from adjacent uses and (5) the promotion of traditional neighborhood development.

A master plan should be created for each of these two Sub-Areas in conjunction with the plans for Sub-Area 5 in order to ensure the efficient plans guiding the future development of the property. Access will play a vitally important role in the future development of the site. Access to the Sub-Areas shall be limited to a well-planned and integrated system of internal streets which connect to the planned shared entrances in Sub-Area 5. The Town believes that it is critically important for the future development of the property to be integrated both internally and externally with the neighboring Waterford Oaks project via Canterbury Drive. Further, the internal transportation program for the site must be designed to respect the existing environmentally sensitive areas within the property and to avoid any future curb cuts by tying into the existing signalized intersections.

The provision of public utilities to the planned development will be another important consideration in the planning of each Sub-Area. Each Sub-Area could easily obtain water service via an extension from the existing 8-inch line that currently runs along State Route 10/U.S. Route 258 to the Smithfield Plaza Shopping Center. Sanitary sewer service is provided in the Planning Area via a thirty-inch HRSD force main that runs along this major entrance corridor. Future development in each of the three Sub-Areas would need to tap into this HRSD line in order to extend a serviceable line to planned residences. Subdivisions in these Sub-Areas would need to obtain an easement for the line extension from adjacent properties. The future developer of Sub-Area 5 will also have to obtain an easement to extend a water line extension from the existing 8-inch line that runs along Route 10/258 to serve planned uses. The costs involved with obtaining these easements and constructing the necessary utility line extensions dictate that these Sub-Areas will most likely not be developed in the near planning term as other better located, vacant residentially-zoned lands are absorbed first by market demand. Thus, it is anticipated that these Sub-Areas will not be developed for several years. Regardless, none of the three Sub-Areas should be developed until the necessary public utility improvements are put in place.

Each of these three Sub-Areas is impacted by the presence of sensitive environmental areas. The development potential of Sub-Area 6 is particularly constrained by the presence of a tributary of Jones Creek which bisects the property. While this tributary and its adjacent marsh limit the development potential of the Sub-Area, it provides dramatic siting opportunities overlooking the waterway. Similar opportunities are available overlooking Cypress Creek in the western portion of Sub-Area 7. The final development plan for both of these Sub-Areas must ensure that residences and supporting infrastructure pieces are sited sufficiently away from these environmentally sensitive areas in order to minimize their impact on these valuable resources while still maximizing the valuable views. Future development in each Sub-Area should also be well buffered from adjacent planned commercial uses with appropriate landscaping as is provided for in the revised Town Zoning Ordinance.

Another important consideration for the future development of these Sub-Areas is the future stability of adjacent uses. Each development should incorporate sufficient landscaping and setbacks to create an appropriate buffer to minimize the impact of the future uses on adjacent uses, particularly adjacent, existing residential properties.

These Sub-Areas afford the Town an ideal opportunity to promote traditional neighborhood development. The Town should encourage any future development of the property to consider

a master planned, TND approach to be implemented via the proposed TND overlay zoning district.

### **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the Southern Gateway Planning Area as an integrated, mixed-use community which will provide several opportunities for the Town to meet its economic development objectives with respect to retail commercial development and tourism support. The plan for this area also provides a suitable transition from its mix of highway-related commercial uses along State Route 10/U.S. Route 258 to the rural, undeveloped lands adjacent to Smithfield High School and beyond in Isle of Wight County. Future end users that would generate new professional job opportunities, expand upon the existing lodging infrastructure, enhance the Town's position in the regional retail marketplace, respect the Town's new corridor design guidelines and fit as an appropriate use within the area's role as a visual gateway should be actively targeted and solicited as part of the Town's new more proactive economic development function.

According to the adopted Future Land Use Plan, the Southern Gateway Planning Area holds the potential to accommodate between approximately 436 and 1,153 new households. It also has the potential to provide between approximately 581,744 and 1,454,360 square feet of new retail commercial space. The active use of these properties may not occur for many years as there are no pending development plans for the Area. In the interim, the Town should encourage the creation of a master plan for the various Sub- Areas designated above which respects the natural environment and efficiently provides suitable building sites to meet Town planning objectives. No development should take place until the required and extensive utility improvements are completed.

The table on the following page summarizes the development potential of each of the Sub-Areas as recognized in the Plan.



*Chapter VI: J*

**LAND USE:  
WEST MAIN PLANNING AREA**

**ADOPTED  
AUGUST 4, 2009**



## *Chapter VI: J*

### **WEST MAIN PLANNING AREA**

#### **PLANNING AREA PROFILE:**

##### **Location**

The West Main Planning Area is located in the western portion of the Town of Smithfield. It is bounded on the north by Mount Holly Creek and the Town's corporate boundary, on the west by Waterworks Road and the Town's corporate boundary, on the south by the upper reaches of Little Creek and the Town's corporate boundary and on the east by the Route 10 Bypass, West Main Street and Cary Street. The Planning Area, so named because of the Town's expressed goal to expand the design influence and spirit of redevelopment witnessed along West Main Street in the Downtown Area westward along Route 258, consists of approximately 862 acres.

##### **Existing Land Use**

The West Main Planning Area is a relatively underdeveloped area which includes a mix of corridor-based commercial, industrial and residential uses bordered by an expanse of vacant property. Its most notable existing uses are the Westside Elementary School, the Jersey Park and Lakeside subdivisions and a mobile home park located in the Woods Edge neighborhood. The Planning Area is also home to the Isle of Wight County Health Department, located just off Grace Street. The Route 258 Corridor is home to a diverse mix of uses, including a general store, a small engine repair shop, a Southern States/Farmer's Service commercial operation, a VDOT park-and-ride facility, a mini-storage facility, several single family residences, and a handful of other light industrial or service related uses. The Town's Public Works facility is also located within the Planning Area on the northwest side of Cary Street.

The Planning Area incorporates the Western Annexation Area, one of three Isle of Wight County territories annexed by the Town of Smithfield on January 1, 1998. This Annexation Area lies principally west of the Westside Elementary School and north of Route 258, with a small exception being several tracts of land south of Route 258 adjacent to a tributary of Little Creek. The vast majority of this land is vacant and maintained as woodlands, wetlands and open fields, supporting little active agricultural activities. The 1992 Comprehensive Plan listed the Jersey Park neighborhood located just north of Route 258 and adjacent to the Westside Elementary School as one of the three major concentrations of blight existing within the Town and placed a high priority on implementing several specific measures to combat the deteriorating housing conditions therein. Several significant improvements were made to the

neighborhood during the 1990's, including the rehabilitation of several abandoned homes and the upgrading of a substandard water line that serves the neighborhood. As a result of these improvements and the investment of private funds and sweat equity in the redevelopment and improved maintenance of the community, the Jersey Park subdivision is now considered a stable neighborhood that should be properly buffered from the future development planned for adjacent lands. Little in the way of significant development or land use change has occurred in the Planning Area since the 1999 Comprehensive Plan was adopted. The most noteworthy change has been the development of a self-storage facility to the south of Route 258 near the Town's corporate boundary in what was referred to in the 1999 Plan as Sub-Area 5. The balance of the Planning Area has remained relatively stable over the past decade.

### **Existing Transportation System**

The major roads serving the Planning Area are the Route 10 Bypass, West Main Street/Route 258 (which serves as an extension of West Main Street beyond the Route 10 Bypass intersection and is also referred to as "Courthouse Highway"), Waterworks Road (Route 709) and Cary Street. Each of the existing developments in the Planning Area is accessed either directly or indirectly via Route 258 or West Main Street.

Significant planned transportation improvements in the Planning Area were made in 1999 and include the widening of Route 258 from two to three lanes and the addition of curb and gutter from just west of Route 620 to the Westside Elementary School. This long range project is included in the VDOT Six-Year Plan for Isle of Wight County, but funding, at least for preliminary design, will be shared between the Commonwealth and the MPO. At this time, funding commitments are limited to preliminary engineering, and the MPO is expected to supplement State funding for the engineering work. Construction is projected to be delayed until additional funding becomes available after 2013.

### **Existing Environmental Considerations**

The Planning Area's development potential is constrained somewhat by the presence of two significant creeks, Mount Holly Creek and Little Creek, along its northern and southern boundaries, respectively. The scenic marshlands and critical slopes of these waterways surround and penetrate the Planning Area to create barriers to construction for significant portions of the land. Nearly thirty percent of the total Planning Area, approximately 236 acres, have topographic and wetland characteristics which make them unsuitable for urban development. While these tidal waterways limit the total buildable area, they provide dramatic siting opportunities from the adjacent ridges. Of the Planning Area's 862 total acres, approximately 350 (40%) have been identified as having prime development potential.

## **WEST MAIN FUTURE LAND USE PLAN**

The West Main Planning Area is planned as a mixed-use community incorporating a range of housing options in addition to light industrial and retail uses along its principal corridor, Route 258. The future development and redevelopment of the Area should occur under the guidance of a master plan for each Planning Sub-Area, as opposed to the parcel-by-parcel approach that has historically dominated Town development along its major corridors. This parcel-by-parcel development pattern has contributed to the proliferation of a hodgepodge of uses along Route 258 that fail to link together in any sound urban context. By creating a long range plan, the owners of the various properties would be able to produce a better finished development product that would appropriately respond to the existing, stable residential uses in the Planning Area. A thoughtful master planning effort would also allow the Town to better coordinate and time its efforts to provide the necessary public services to support future development in the area. No intensive development should take place in the vast amount of vacant land in this Planning Area until the water and sewer distribution systems are significantly upgraded and extended to adequately serve the planned uses. The Town should also take the lead in encouraging and supervising the extension of the ongoing redevelopment of the West Main Corridor beyond the Route 10 Bypass intersection along Route 258.

In the following sections, specific land use recommendations are presented for the various sub-areas and redevelopment areas identified in the West Main Planning Area.

### **Sub-Areas 1 and 2 Recommendations**

Sub-Area 1 is located in the western portion of the West Main Planning Area. It is bounded on the west by Waterworks Road (Route 709) which serves as the Town's corporate boundary, on the north by the Town's corporate boundary and Mount Holly Creek, on the east by the Westside Elementary School and on the south by Route 258. Encompassing approximately 289 acres, Sub-Area 1 constitutes the largest amount of undeveloped land in the Planning Area and one of the five largest undeveloped areas in the entire Town. It is recommended for low density residential land use. At between 1 and 3 dwelling units per acre, this Sub-Area could yield between approximately 217 and 650 new dwelling units.

Sub-Area 2 is also located in the western portion of the West Main Planning Area, running parallel to Route 258 adjacent to the south of Sub-Area 1. It is bounded on the west by Waterworks Road (Route 709), on the north by Sub-Area 1 and Mount Holly Creek beyond, on the east by and historic home and the Westside Elementary School and on the south by Route 258. Encompassing 23.9 acres, Sub-Area 2 has the potential to support between 187,395 and 468,488 square feet of retail commercial space.

The 1999 Comprehensive Plan recommended that the land be planned for community conservation in an attempt to preserve existing natural features and vegetation, promote interim agricultural and forestry activities and production and encourage the conservation and maintenance of sensitive environmental areas in the Sub-Area. This community conservation designation was selected also as a means of serving as a “holding designation” for the property, acknowledging that the land annexed from Isle of Wight County needed to be zoned in a manner consistent with that which was in place in the County (i.e. for agricultural purposes) and was controlled by only a handful of property owners that had no immediate plans for developing the property.

The community conservation land use designation would allow single family detached residential development at a density of no more than one dwelling unit per acre. At this density, as many as 121 new housing units could potentially be located within the Sub-Area’s 120.8 net developable acres. At the time of the adoption of the 1999 Plan, market conditions and the availability of several preferable vacant parcels currently zoned for low density single family detached residential development within the Town served as strong indicators that the Sub Area was likely to remain undeveloped for the foreseeable future. Clearly, market conditions and net developable land availability within the Town have changed dramatically since then.

In recognition of the changing market conditions, the Town recommends three significant changes to the future land use recommendations for the Sub-Areas: (1) Extend the boundaries of Sub-Area 1 to include the undeveloped land to the east of the Sub-Area and north of the Westside Elementary School; (2) change the future land use recommendation for the land fronting Route 258 between the middle school and Waterworks Road for a depth of approximately 800 feet from Community Conservation to Retail Commercial; and (3) change the future land use recommendation for the balance of the property to Low Density Residential.

The extension of this Sub-Area boundary is critically important to this area behind the middle school in order to properly plan for the future access to this site, which due to the presence of Mount Holly Creek to the north and the adjacent school and Jersey Park subdivisions is effectively “landlocked” from the primary vehicular corridors within Smithfield. A key land use decision being made with this recommendation is to focus the future development of the “addition area” on residential uses via the connection to the balance of Sub-Area 1, as opposed to tying the land to the adjacent Sub-Area 3 which is recommended for light industrial uses. Given the remote nature of the site and the sensitive environmental factors associated with Mount Holly Creek, a low density residential or community conservation land use recommendation is deemed much more appropriate than that of light industrial uses for this area. The logic behind the recommendation for retail uses is based upon the desire of the Town to expand commercial opportunities along this important entrance corridor in accord with the corridor design guidelines established in the Town Code. This recommended land use is consistent with existing commercial uses across Route 258, although the intent is to promote a master planned commercial development in which the uses will be integrated and accessed via

a single shared entrance, preferably located off Waterworks Road. This land use recommendation extends the entire length between the middle school and the Waterworks Road intersection for a depth of approximately 800 feet to allow for a master planned commercial project which can be professionally designed in accord with the Town Code and the Entrance Corridor guidelines. The land use recommendation for the balance of the Sub-Area is for Low Density Residential uses.

The major issues involved with the potential development of this Sub-Area are (1) the appropriate density of future development, (2) the availability of public utilities, (3) vehicular access, (4) provision of open space, (5) corridor appearance and edge buffering (6) the future of a home located directly west of the middle school which may have historic significance, and (7) sensitive environmental areas.

The Future Land Use Plan for the Planning Area includes an allowance for a logical expansion of the Westside Elementary School facility. Any future development of Sub-Area 1 should incorporate a minimum setback of 50 feet from the school expansion site. This setback should include a landscape buffer put in place as part of the master plan of development which is sufficient to screen and buffer the planned residences from the school facility.

The Town should also consider a thoughtful proposal for a mix of uses which incorporates the entire property into a suitable master plan that could be implemented via the proposed mixed use zoning district.

Although the future land use designation for the Sub-Area promotes a density range that would support up to three residential units per acre, the existing zoning (C-C, Community Conservation) of the properties located within the Sub-Area provides that new residential subdivisions shall only be permitted in the district via special permit and that each subdivision shall not exceed five lots. Thus, any future subdivisions proposed for residential purposes incorporating a higher density must be individually rezoned to a residential zoning district compatible with the Comprehensive Plan and pursuant to the provisions of the Zoning Ordinance. The Town should encourage Traditional Neighborhood Development-style development within the Sub-Area. Such development be facilitated and implemented via the proposed TND overlay district. Future development of the Sub-Area should also incorporate affordable, workforce housing opportunities within the new community.

Before any rezoning of this nature would be approved by the Town, adequate public water and sewer service would have to be provided for all planned uses. Currently, public sanitary sewer service culminates at the Westside Elementary School along Route 258. The Town has recently extended its water service beyond the school along Route 258 to Waterworks Road. As a part of this public works improvement, an 8" line was also extended along Waterworks Road to the Town's corporate limits. Future development in the Sub-Area will be able to tap directly into this 8" water line to serve residences; however, the developers of the Sub-Area will be responsible for completing a water line loop within the Sub-Area and for extending the sanitary

sewer line to serve the area. Additionally, no lots shall be permitted with private domestic well and septic utilities except by special use permit for temporary service.

A thoughtful master plan should be created for the Sub-Area which provides for shared vehicular entrances and efficient internal street systems and protects its scenic surroundings, sensitive ecology and the Mount Holly Creek which parallels the northern border of the Planning Area. Access points into and out of the Sub-Area should be limited along both Route 258 and Waterworks Road in order to prohibit the further proliferation of curb cuts along these roadways. The Planning Commission would prefer that all future access the site be provided via Waterworks Road. As part of this recommendation, Waterworks Road must be upgraded as part of any future development of the site to include necessary turn lane improvements to handle the future traffic demands associated with the proposal. Further, future development along Waterworks Road and Rt. 258 should incorporate appropriate setbacks, landscape buffers and fencing, where appropriate in order to meet the objectives and requirements established by the Town Ordinance and the Entrance Corridor design guidelines. Future development should be sited within the areas which are most conducive for urban land uses, while the fragile environmental areas along the Sub-Area's northern boundary are to be maintained as permanent open space. Any urban use of these "sensitive environmental areas" (situated outside the Sub-Area) should be avoided. The topography of the northernmost portion of the Sub-Area is not suitable for massive buildings and expansive parking; therefore, low density single family detached residential development would be the most efficient use of this segment of the property. The siting of new homes should be gently placed within the angular terrain, employing extensive landscaping and minimal earthwork. The proposed master plan should protect as many existing trees as physically possible within the future development plan. A master plan approach is critical to insuring that each of these issues is appropriately responded to in the proper development of this site.

### **Sub-Areas 3 and 4 Recommendations**

Sub-Area 2 covers approximately 24 acres and is located in the northern portion of the West Main Planning Area. It is bounded on the west and north by the forested land bordering Mount Holly Creek, on the south by the Jersey Park subdivision and on the east by Sub-Area 4.

Sub-Area 3's 24.3 acres are located directly adjacent to Sub-Area 2 and are bounded on the north by the Town Public Works facility, on the east by the Route 10 Bypass, on the south by Redevelopment Area 2 and the west by the Jersey Park subdivision and Sub-Area 2.

Both of these Sub-Areas are planned for light industrial use with an allowable floor area ratio of 0.20-0.30 square feet per net developable acre. At this proposed density, Sub-Area 3's 15.8 net developable acres could support between approximately 137,650 and 206,474 square feet of light industrial space, while Sub-Area 4's 25.6 net developable acres could support between 223,027 and 334,541 square feet of light industrial space. Considered together as one contiguous site,

the two Sub-Areas could support as much as 540,000 square feet of space for light industrial users.

The major issues involved with the potential development of this Sub-Area are (1) vehicular access and (2) buffering. Access is the most critical issue impacting the future land use plan for these Sub-Areas. At present, Pole Road provides the only direct vehicular access to the Sub-Areas. Any future development of these areas for industrial use would necessitate the improvement of Pole Road as a two lane road capable of supporting future trucking and employment traffic demands imposed by the future user(s). As a limited access road, direct access from the adjacent Route 10 Bypass is currently unavailable to these Sub-Areas. It is recommended that once a suitable employment-generating user is identified for these Sub-Areas, the Town and the user should lobby VDOT for a restricted access point along the Bypass into and out of the planned light industrial facility. It is also recommended that these Sub-Areas be developed as a formal light industrial park that would be master planned to incorporate an efficient internal street system that would funnel the majority of its traffic demands to this restricted access ramp, thereby minimizing the burden placed on Pole Road and the Pole Road/Route 258 intersection. If VDOT is unwilling to work with the Town to support such an access, either Pole Road must be upgraded as part of the future development of the Sub-Areas or a suitable parallel road alignment affording a direct connection from Route 258 must be identified and improved. Vehicular connections to the neighboring Jersey Park subdivision, the Westside Elementary School or the adjacent undeveloped property in Sub-Area 1 should be avoided given the disparate projected future land uses.

Another important consideration for the future development of these Sub-Areas is the future stability of adjacent uses: the Jersey Park subdivision to the south and the Town recreational facility and park planned for Redevelopment Area 5 to the east. Further, given the recommended expansion of Sub-Area 1 to include the undeveloped land behind the Westside Elementary School, it is likely that the area directly west of these Sub-Areas will one day support residential uses. As such, the master plan for the recommended light industrial park for Sub-Areas 3 and 4 should include sufficient setbacks and landscape buffers, as provided in the revised Zoning Ordinance, to minimize the impact of light, noise, dust, smoke, vehicular traffic or any other externality on these adjacent uses and net developable areas.

### **Sub-Area 5 Recommendations**

Sub-Area 5 is located in the northeastern portion of the West Main Planning Area. It is bounded on the north and east by Cary Street, on the west by the Route 10 Bypass and on the south by commercial uses adjacent to West Main Street. In the 1999 Comprehensive Plan, the 39.4 acre Sub-Area was planned for low density residential use at one to three dwelling units per acre. At this density, only between 39 and 117 new single family detached dwelling units could be located within the Sub-Area's 22.9 net developable acres. The Plan recommended that the type of housing product developed in the Sub-Area mirror that of the density and quality in design and building materials witnessed in the nearby Goose Hill Creek subdivision which lies directly across Cary Street. In response to the 2005 Citizen's Survey conducted in conjunction

with the Comprehensive Plan Update, the Town has identified this Sub-Area as an ideal location to provide a much needed park. The Survey indicated that Town residents currently feel underserved by existing parks and recreation facilities, particularly in terms of providing active recreation opportunities. Given the location of this Sub-Area within the Town (more specifically its proximity to other Town and County park facilities and the Luter Family YMCA and its potential for accessibility to the Route 10 Bypass) and its ideal topographic attributes, Sub-Area 5 holds strong potential to serve as the requested new Town park facility. It is recommended that the park include soccer, baseball and softball fields, basketball courts, tennis courts, bicycle and walking trails, and ample open space. Strong pedestrian and bicycle linkages (via sidewalks and dedicated bicycle paths) connecting the park to the adjacent Luter Family YMCA across Cary Street should be included in the future master plan for the park.

The major issues involved with the potential development of this Sub-Area are (1) vehicular, pedestrian and bicycle access, (2) the provision of safe, accessible and adequate parking and (3) buffering. It is recommended that in order to eliminate the potential for overloading the already strained West Main Street corridor with additional vehicles the primary entrance to the proposed park facility should be located off Cary Street. Ideally, the entrance would be located directly across Cary Street from the Luter Family YMCA in order to build upon the outstanding services provided in the youth and family-oriented facility, and to provide cross-linkages between the two uses. A secondary entrance to the park should be considered from the south via West Main Street provided that the necessary right-of-way to allow access via the adjacent commercial parcels could be obtained. The master plan for the park should also incorporate a parking lot suitable to support peak period demand for the parks uses, which could include festivals, sports tournaments, etc. The park should also include a strong visual buffer to include landscaping, as well as appropriate fencing to protect future park users (especially young children) from the vehicular traffic on the Route 10 Bypass and West Main Street.

### **Sub-Area 6 Recommendations**

Sub-Area 6 is located in the southern portion of the West Main Planning Area. It is bounded on the west by Sub-Area 5, on the north by an assortment of uses fronting Route 258 (including an apartment complex, a mobile home park and an industrial use), on the south by the upper reaches of Little Creek and on the east by the vacant woodlands bordering the Quail Street neighborhood. The 40.9 acre Sub-Area is planned for light industrial use at a floor area ratio of 0.20 to 0.30 square feet per net developable acre. At this density, the Sub-Area could support between approximately 231,609 and 347,413 square feet of new light industrial space within its 26.6 net developable acres.

The major issues involved with the potential development of this Sub-Area are (1) sensitive environmental areas, (2) vehicular access and (3) buffering. A thoughtful master plan should be created for the Sub-Area which protects its scenic surroundings, especially the sensitive ecology found in the adjacent tributaries of Little Creek. Thus, future development plans for any given sector of the Sub-Area should not be approved without a clear vision for the future of



the entire property. Planned light industrial uses should be sited in an industrial park setting in the areas which are most conducive for urban land uses, while the fragile environmental areas along the fringes of the property are to be maintained as permanent open space. The planning effort should include a comprehensive stormwater management analysis of the local watershed to include a formal plan for future management strategies, including any best management practices needed for the future development of the site. Access to the site will be another primary consideration for the future development of the Sub-Area. Right-of-way will need to be obtained via one or more of the properties fronting Route 258. If feasible, two separate main entrances off Route 258 should be incorporated into the master plan of the site, and these entrances should be connected by a thoughtful internal street network. Topographic and environmental concerns on the eastern edge of the property would prevent any feasible direct access to the site via an improved Great Spring Road.

Another important consideration for the future development of this Sub-Area is the impact of the proposed use on the numerous adjacent, stable land uses. The master plan for the recommended light industrial park should include sufficient setbacks and landscape buffers, as provided in the Town's Zoning Ordinance to minimize the impact of light, noise, dust, smoke, vehicular traffic or any other externality on these adjacent uses. The use's hours of operation and peak transportation demands should also respect the existing nature of the surrounding community and not pose any undue hardship on existing homeowners, business and retailers.

## **REDEVELOPMENT AREA RECOMMENDATIONS**

### **Redevelopment Area 1 Recommendations:**

Redevelopment Area 1 is located in the eastern portion of the West Main Planning Area. It is bounded on the north and west by Sub-Area 4, on the south by Route 258 and on the east by the Route 10 Bypass. The 2.6 acre Redevelopment Area is located within the right-of-way of the Route 10 Bypass and is maintained and under the complete control of the Virginia Department of Transportation (VDOT). Currently, it is used as a commuter parking lot for employees of the pork production plants or other nearby businesses. Along with several adjacent commercial uses, it forms the principle gateway into the Town from the north and west, and as such, provides as a less than optimal entrance statement for those entering the Town of Smithfield. Although the Town has little, if any, regulatory control over the appearance and use of the site, it has worked with VDOT in recent years to add landscaping in order to improve the visual image provided at the intersection of Route 258 and the Bypass. Further improvements are needed to transform this site into an appropriate gateway for the community. Although it is anticipated that VDOT will retain the existing use of the site in the near planning term, it is recommended that the Town continue to lobby the State to provide appropriate landscaping, buffering and signage improvements that will fit in nicely with the Town's planned entrance corridor improvement program and form an inviting statement to connect travelers on the Bypass to the Historic Downtown Area and waterfront.

### **Redevelopment Area 2 Recommendations:**

Redevelopment Area 2 is located in the eastern portion of the West Main Planning Area. It is bounded on the north by Route 258, on the west by an apartment complex, on the south by the Quail Street neighborhood and on the east by the Route 10 Bypass. The 11.9 acre Redevelopment Area is planned for retail commercial use at a floor area ratio of 0.20 to 0.50 square feet per net developable acre. At this density, the Sub-Area could support between approximately 37,000 and 94,000 square feet of new gross leasable space within its 4.3 net developable acres. The Redevelopment Area is currently home to a convenience store and other “underdeveloped” commercial uses. It is recommended that these parcels be combined in order to provide a sufficient amount of acreage to support a retail commercial use that would provide the highest and best use for the property, as well as improve the image of the gateway area represented at the Route 258/Route 10 Bypass intersection.

The major issues involved with the potential redevelopment of these Areas are (1) acquiring and consolidating the properties within the Redevelopment Area, (2) removing and/or renovating the existing structures and (3) vehicular access. As with any major redevelopment project involving multiple property owners, this first issue can become a substantial hurdle. The Town should open discussions with the property owners in each Redevelopment Area in an attempt to clarify the redevelopment potential of the properties. If the current owners show no interest in redeveloping the properties on their own, the Town could explore the possibilities of acquiring the properties and consolidating them into one contiguous parcel within the Redevelopment Area that could be marketed to a commercial developer. The Town should also approach the existing businesses located within the Redevelopment Area and encourage them to participate in the redevelopment process.

### **FUTURE LAND USE SUMMARY**

The Comprehensive Plan projects the West Main Planning Area as an integrated, mixed-use community which will provide several opportunities to meet the Town’s economic development objectives with respect to additional light industrial development, as well its objectives relating to the much-needed provision of additional parks and recreation spaces. Equally important, the plan also attempts to shape a suitable transition in land use from its mix of highway related commercial, industrial and high density residential uses along Route 258 to the expanse of undeveloped land bordering the Mount Holly and Little creeks. The Planning Area also has the potential to introduce a new traditional neighborhood development project to Smithfield in the undeveloped property adjacent to the Route 258 and Waterworks Road.

The West Main Planning Area has the potential to accommodate a significant number of new households (between 217 and 650 at full build-out). It also has the potential to provide between 592,285 and 888,428 square feet of new light industrial space and between 187,395 and 468,488 square feet of new retail commercial space. The development of this Planning Area should provide significant non-tourist related employment and revenues for the Town. However, the

active use of these properties may not occur for many years because there are no pending development plans for several of the identified net developable properties within the Area. In the interim, the Town should encourage the creation of a master plan for the various Sub-Areas designated above which respects the natural environment and efficiently provides suitable building sites to meet Town planning objectives. No development should take place until the required and extensive utility improvements are completed.

The table on the following page summarizes the development potential of each of the Sub-Areas as recognized in the Plan.



*Chapter VII:*

**HISTORIC AREAS**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter VII:* **HISTORIC AREAS**

### **Introduction**

Longtime Smithfield residents refer to the essence of the Town as having always been best exemplified by the area “between the bridges.” Those bridges, of course, are those traversing the Pagan River and Cypress Creek, respectively, carrying vehicular and pedestrian traffic along Church Street. These two landmarks delineate the approximate boundaries of Smithfield’s historic Downtown. The fundamental premise of this Historic Areas Plan for the Town is to demarcate this Historic Area, explain its importance to the soul of the Town, and put into place measures that will ensure that this area “between the bridges” will always exemplify Smithfield and what its residents value and hold dear about their community.

Smithfield is home to one of the most unique and extensive collections of historic buildings in the Commonwealth of Virginia. The community has done much to maintain this rich architectural heritage. The historic structures defining Downtown Smithfield have long served as a source of pride within the community, and as such, historic preservation has been given high priority in the Town in recent decades. This tradition continues today in Smithfield as local residents, property owners, businesses and the Town government invest valuable resources in the preservation of historic structures. This Historic Areas Plan attempts to capture the spirit of the Town’s commitment to protecting and preserving its past through historic preservation by summarizing past and ongoing efforts, as well as introducing specific recommendations for future planning efforts.

### **Goals and Objectives for Historic Preservation**

The Town’s major goal statement for Historic Preservation is best expressed as follows:

*Preserve and protect the Town’s rich architectural and cultural heritage which positively impacts tourism and contributes to the overall well-being of the community. Integrate opportunities for pro-active expansion of the Town’s public parks and recreational amenities within the context of Smithfield’s historic and cultural traditions.*

The Town is committed to furthering the following planning objectives and policies as they relate directly to historic preservation:

**Planning Objectives and Policies:**

- A. Preserve the integrity of the architectural and historic character of Smithfield by protecting historic buildings and neighborhoods from inappropriate uses, as well as design practices and materials.
- B. Encourage the appropriate adaptive reuse of both publicly and privately owned, historically significant structures in the Town.
- C. Guide contemporary development in a way which compliments the historic fabric of the Town and works to strengthen the overall character of the community.
- D. Update and expand the inventory of privately held historic properties of significance, and develop strategies for their protection.
- E. Encourage the continuation of the ongoing revitalization activities along the South Church Street corridor.
- F. Implement new architectural and land development guidelines and ordinances for the Town's historic districts and entry corridors.
- G. Evaluate the feasibility of the Town maintaining the Windsor Castle property for long-term historic preservation, incorporating appropriate and compatible public and quasi-public parks and recreational uses by the Town.

These goals and objectives reflect the great importance stressed on historic preservation over the years by the Town and its residents. This importance was underscored by the results of the Citizens' Survey conducted in support of the 2008 Comprehensive Plan Update. Two distinct questions among the over forty included in the survey focused upon preservation of the Town's waterfront and architecturally significant structures. The questions and results are shown below, as well as a summary of the results of citizen responses received from a similar survey conducted in 1998:

*Protection and preservation of the Town's waterfront area is a high priority and should be a major goal for any future land use planning.*

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>16</b>	<b>27</b>	<b>81</b>	<b>133</b>	<b>460</b>	
	<b>(2%)</b>	<b>(4%)</b>	<b>(11%)</b>	<b>(19%)</b>	<b>(64%)</b>	

*Results from*

1998:	28	11	73	126	437
	(4%)	(2%)	(11%)	(19%)	(65%)

Over 83% of all respondents agreed or strongly agreed with this statement, down slightly from 84% in the 1998 survey. Of all the attitudinal questions included in the survey, this question received the fourth strongest response in terms of overall agreement among respondents. In 1998, the same question received the second strongest attitudinal ranking in the 1998 survey.

*The preservation of historic sites and buildings is an important goal for the Town, and I support the expenditure of public funds to promote and maintain the Town's historic character.*

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>55</b>	<b>42</b>	<b>108</b>	<b>170</b>	<b>331</b>	
	<b>(8%)</b>	<b>(6%)</b>	<b>(15%)</b>	<b>(24%)</b>	<b>(47%)</b>	

*Results from*

1998:	60	45	77	160	337
	(9%)	(7%)	(11%)	(24%)	(50%)

Nearly 71% of all respondents agreed or strongly agreed with this statement, down slightly from 74% in the 1998 survey.



### **Brief History of Smithfield's Development**

Incorporated in 1752, the oldest section of the Town was originally established on a slight crest along a bend in the Pagan River, encompassing the blocks which now constitute South Church, Main, Mason and Cedar streets. In its earliest form, the Town consisted of approximately 72 lots. While early settlement centered on the courthouse and neighboring wharf area, growth in the area led to the geographic expansion of new development beyond what is now considered to be the Downtown Area. Eventually, the original grid pattern street design was abandoned as new streets were designed to fit within the constraints imposed by the Pagan River, Little Creek and their adjacent marshlands.

Smithfield has a richly diverse collection of historic buildings. An unusually high number of eighteenth-century structures survive, including town buildings and the two farm complexes of Windsor Castle and Pierceville. Other notable examples are the Georgian-style residences on South Church Street, the Smithfield Inn, and several public buildings including the courthouse, clerk's office, and the original jail. Federal-style homes from the early nineteenth century are well represented on South Church and North Mason streets.

The late nineteenth-century was a period of great expansion in Smithfield and good examples of Victorian styles, from showcase Queen Anne residences to more modest vernacular houses, are common throughout the district. Steamboat traffic contributed significantly to Smithfield's prosperity during this era. The Town's two major products, peanuts and ham, were shipped out from the wharf. Local merchants enjoyed direct connections with ports up and down the seaboard.

The town's street plan was extended from its confined block pattern to include Grace Street in 1882. North Mason Street was also added soon thereafter. Compact adjoining neighborhoods, such as Riverview, were developed in the early twentieth century. Grace and Thomas streets were subsequently connected to the Town's grid.

As Smithfield has evolved, the Downtown has witnessed periods of both economic prosperity and discouraging economic times when several established businesses relocated to outlying highway sites. For instance, a major fire in 1921 coincided with the decline of water transportation to effectively shut down the commercial and industrial area that had grown to define the Town's waterfront. The large Gwaltney's peanut factory, a mainstay of the town's successful post-bellum economy, was not rebuilt after it burned, and in the late 1930s the meat-packing industry, rather than expanding at its Commerce Street location, moved across the Pagan River beyond the Old Town boundaries. Meanwhile, retail business had shifted inland along Main Street. Most of the district's historic commercial buildings were erected on Main Street in the early twentieth century, and today this area still forms the heart of the historic district.

Through these various turns in the Town's economic cycle, Downtown Smithfield has managed to retain a historically significant building stock and a strong sense of community cohesiveness. Historic preservation and revitalization efforts undertaken over the past twenty-five years have played a major role in preserving the integrity of the Downtown Area. Today, historic Smithfield is identified by residents as the area "between the bridges." The Comprehensive Plan seeks to promote and protect the legacy of the unique sense of place that defines this area. The Main Street area is comprised of a variety of vernacular commercial structures dating from around the turn of the century. The residential areas which surround the Downtown contain a number of high-style Georgian, Federal and Victorian homes, and thus incorporate structures from a broad time frame which help to tell the story of the Town's evolution.

### **DOWNTOWN REVITALIZATION EFFORTS**

Downtown Smithfield has traditionally functioned as the "heart" of the community, and its health and character are reflective of the Town's values and its prospects for the future. Over the past three decades, the community has done much to maintain its rich architectural heritage. Smithfield citizens and business leaders have developed and implemented a number of strategies to help revitalize the appearance and economic health of the downtown. A brief review of past historic preservation and revitalization efforts is provided below.

Formal historic preservation efforts in Smithfield began in the early 1970's when the Town commissioned an architectural survey identifying significant historic properties in the area. This survey led to the development of the Smithfield National Register Historic District in 1973. During the early part of the decade, an alarming number of businesses began to leave Downtown Smithfield for outlying highway locations, and Main Street began to suffer during a deteriorating economic environment. Downtown property owners became cautious about reinvestment, building maintenance was often neglected and public areas and infrastructure began to show signs of age and disrepair. In spite of these challenging trends, Downtown Smithfield retained a number of important characteristics that enabled it to survive this difficult period including: a historically significant building stock; few actual vacancies; a strong office/professional service presence; and a growing tourism trade.

Case history clearly indicates that successful historic preservation is ultimately up to the locality and to individual property owners to protect the integrity of the historic district. Toward this end, the Town enacted a Historic Preservation District Ordinance in 1979. This ordinance set boundaries for a local historic district roughly comparable with that of the National Register District, and created an architectural review board (known as the Board of Historic and Architectural Review or BHAR) to review proposed changes to property in this district. The ordinance included general design guidelines to provide direction to the review board and promised "more definite standards" later. The resulting *Smithfield, Virginia Historic Design Guidelines*, were first published in 1990 to help staff and citizens to determine what is

“appropriate” in terms of new development and redevelopment within the district. In 2006, Frazier and Associates of Staunton, Virginia developed an update to the design guidelines, which were adopted by the Town Council that same year. These guidelines stand today as a valuable means of identifying what is valuable and worth preserving in the district, as well as an outstanding tool for Town residents and property owners in the ongoing quest to respect these features as they make changes or repairs to historic buildings or in designing new buildings adjoining the old.

Since the 1998 Comprehensive Plan was adopted, several other important public efforts, beyond the update to the design guidelines, have been developed by and for the Town which have targeted the historic area and have aided the historic preservation efforts in Smithfield. The most important of which culminated in the Main Street Beautification Project. In 1999, the Town completed this decade-long, \$2-million public improvement project in downtown Smithfield. Several efforts involving Downtown revitalization had been initiated over the preceding decades, but none ever came to fruition. Finally, in 1988, Mr. Joseph W. Luter, III, president of Smithfield Foods, Inc. offered to make a challenge grant if an organization could be established and formal plans adopted for a downtown project. *Historic Downtown Smithfield, Inc.* was created a short time later in January 1989, and that formation served as a catalyst in securing a financial commitment by a large percentage of Main Street businesses and property owners.

The Main Street project concluded in February 1999 with the completion of street landscaping. Additional public improvements associated with the project included: the relocation of all overhead utilities underground; construction of brick sidewalks; installation of period street lights and street signage; landscaping, granite curbing, street resurfacing, water and sewer line replacements and enhancements; additional parking; and the introduction of informational kiosks on local history and street art sculptures. Private investment resulted in many significant building renovations, reconstruction, and/or façade improvements, as well. The Virginia Downtown Development Association (VDDA) singled out Smithfield for its Main Street Beautification Project in April 1999 in recognition of these improvements. The Town of Smithfield was one of 20 communities in the United States designated a Preserve America Community. The Preserve America initiative is a White House effort developed to encourage and support community efforts for the preservation and enjoyment of America’s priceless cultural and natural heritage. On March 18, 2004 in Washington, D.C. Smithfield Mayor, James B. Chapman and Town Manager, Peter M. Stephenson received the certificate of designation signed by First Lady Laura Bush.

## SMITHFIELD HISTORIC PRESERVATION OVERLAY DISTRICT

The purpose of the Town's Historic Preservation Overlay District ordinance is to maintain, preserve, protect and enhance the architectural excellence, cultural significance, economic vitality, visual quality and historic importance of the Town of Smithfield. The district is designed to protect designated landmarks and other historic or architectural features and their surroundings from destruction, damage, and the incompatible development of adjacent lands. The ordinance also established formal boundaries for a local historic district and created an architectural review board to review proposed new construction and alterations to existing structures in the district.

Prior to 1991, the boundaries of the Smithfield National Historic District were located slightly inside those of the Local Historic District. However, these boundaries have since been expanded to include Riverview, Cedar Street, the open space west of Cary Street and the farmland surrounding Windsor Castle. As a result, the boundaries of the two districts now roughly coincide. The local historic district includes a few small extensions of the boundary in order to make the district a bit more self-contained.

Designation in the National Register district does not restrict the property owner in any way. It does, however, offer the benefit of several federal and state programs:

- *If a property owner is undertaking a major rehabilitation of a contributing building in the historic district, he might qualify for state and/or federal tax credits.*
- *Any adverse impact of a federally funded or licensed project on the district must be determined and minimized if possible.*

The distinction between the two districts is that properties in the local district are under architectural review. These restrictions are placed on property owners in order to protect the rich architectural integrity of the district.

The Smithfield Historic Preservation Overlay District encompasses 295 acres and is bounded roughly by the Pagan River on the north, Cypress Creek on the east, the Windsor Castle tree line and southern marshlands on the south, and Route 10 on the west. The district contains the Downtown commercial area and surrounding residential neighborhoods.

The Historic Preservation Overlay District (HP-O) is an overlay zone which provides for the review of certain changes that affect the appearance of buildings located within it. The underlying zoning, however, still governs basic site development features like setback, minimum lot size, maximum height, and use.

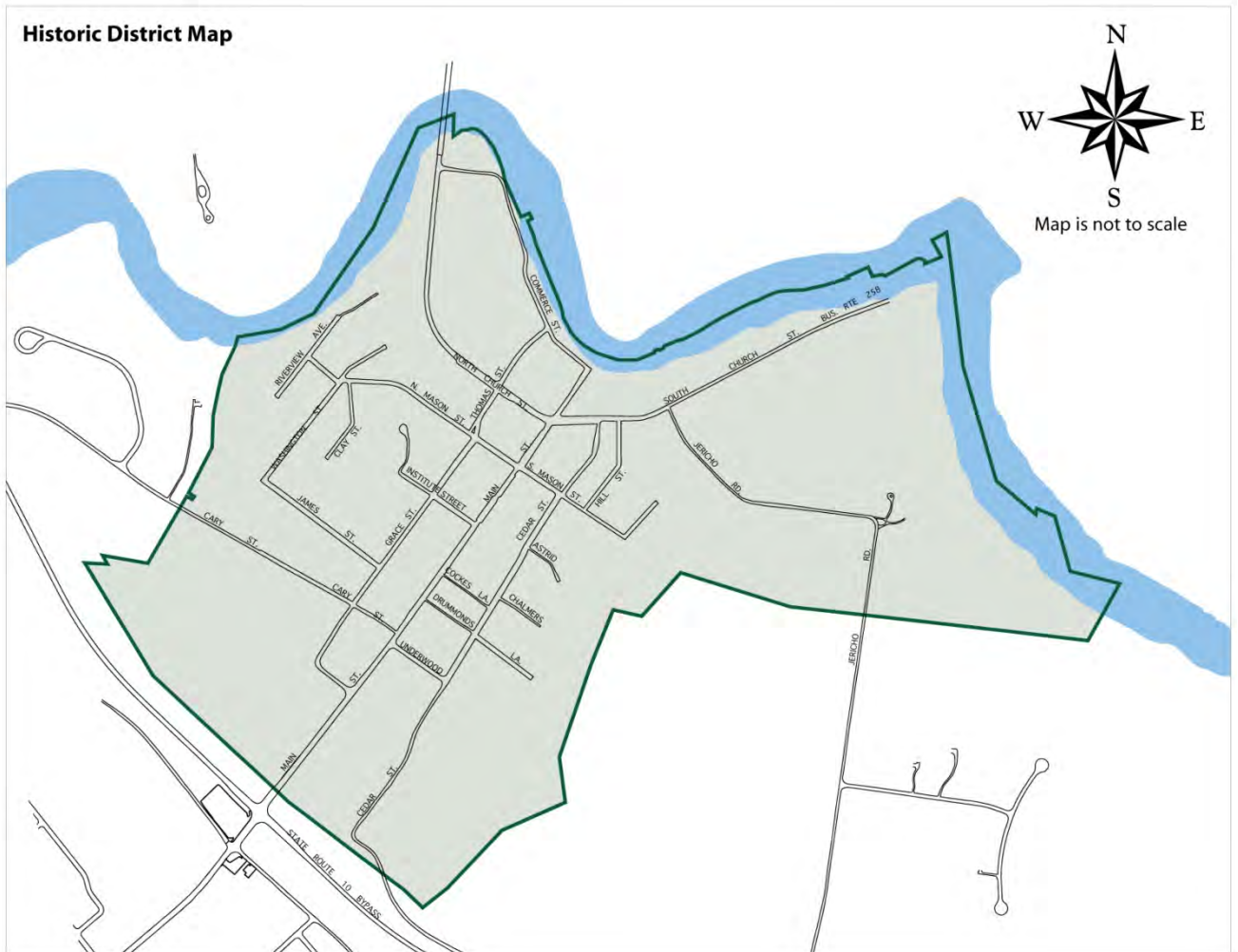


Exhibit VII-1: Smithfield's Historic District

## **HISTORIC PRESERVATION OVERLAY DISTRICT SUB-AREAS**

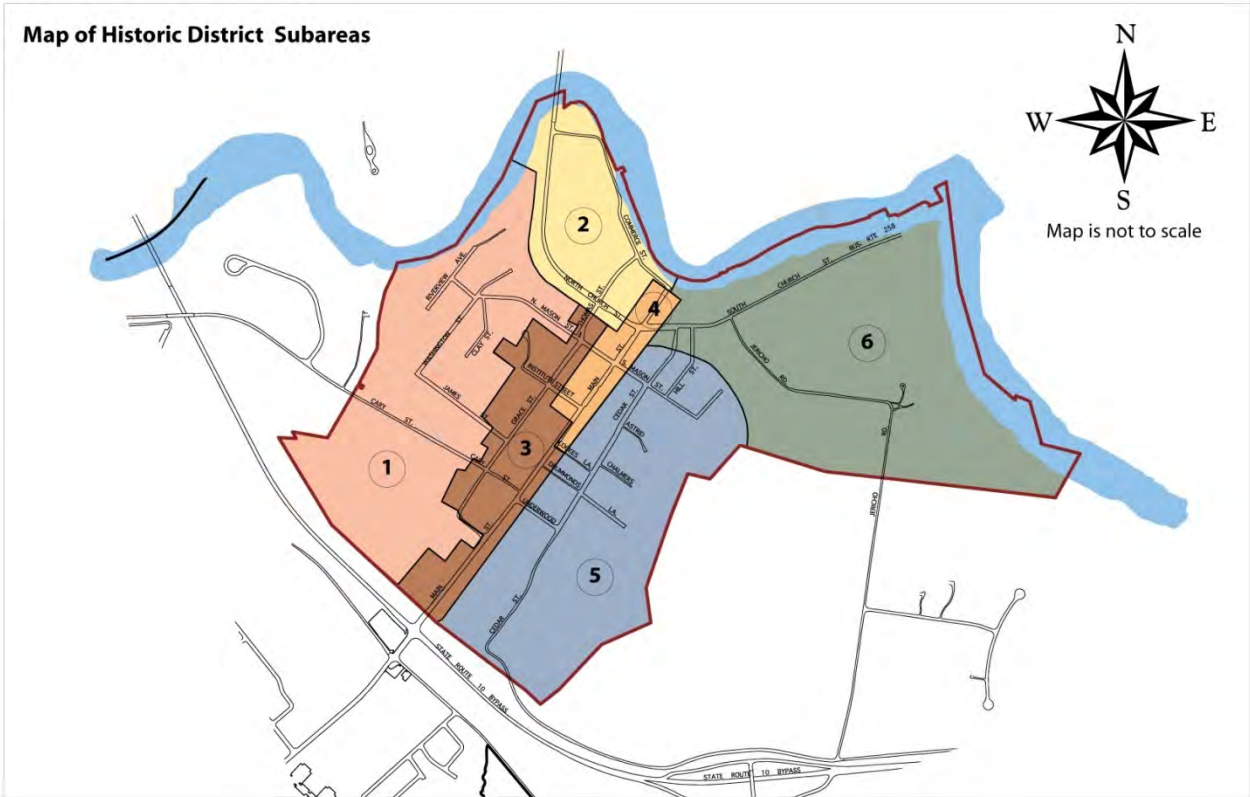
Smithfield's Local Historic District is divided into six distinct neighborhoods or sub-areas, which are marked by their own unique architectural styles and characteristics that are representative of the development patterns witnessed over time in Smithfield. These sub-areas include:

- *Riverview/James/Cary Streets;*
- *North Church Street;*
- *Main and Grace Streets;*
- *Commercial Main Street;*
- *South Church Street; and*
- *Cedar Street*

A brief summary of each of these neighborhoods is provided below:

### *1. Riverview/James/Cary Streets Historic Planning Sub-Area:*

This sub-area is located within the district's western half and encompasses Riverview Avenue and Washington Street and the north ends of James, Clay, North Mason and Cary streets. Riverview Avenue and Washington Street contain a number of one- and one-half story dwellings set close to the road. Sections of the area have been paved and have had curbs installed. Private landscaping in the area is minimal, and consists mainly of a few mature trees and foundation plantings. The residences located on James and Cary streets are larger and set farther back from the road. A variety of architectural styles dating to the late nineteenth and early twentieth centuries can be found within this sub-area, including notable examples of highly decorative Victorian-era homes. Recent additions to the sub-area include the Child Care Day Center built on James Street in 2003 and the major addition to the YMCA completed in 2004. This addition included an indoor swimming pool and additional recreational opportunities.



- Subareas
- 1** Riverview
  - 2** North Church Street
  - 3** Main and Grace Streets
  - 4** Commercial Main Street
  - 5** Cedar Street
  - 6** South Church Street

Exhibit VII-2: Smithfield Historic District Sub-Areas

## *2. North Church Street Historic Planning Sub-Area*

This sub-area, located in the northwestern portion of the Town, encompasses North Church Street from the Pagan River to Main Street; Commerce Street; and Thomas Street from North Church Street to Commerce Street. This neighborhood has experienced a dramatic revival since the 1998 Comprehensive Plan was adopted. Smithfield Foods, Inc., a Fortune 500 company, has constructed its corporate headquarters and an administration building on Commerce Street. In 2000, the Smithfield Center, a town-owned and operated event/conference facility was built adjacent to the Smithfield Foods headquarters overlooking the Pagan River. All town meetings are held at the Center. The Little Theatre was razed, and a new Little Theatre was built adjacent to the Smithfield Center. Five new townhouses have also been constructed at the intersection of Main and Commerce streets. These homes feature attractive landscaping with foundation plantings and planters.

## *3. Main and Grace Streets Historic Planning Sub-Area*

This sub-area is located within the center of the Historic District and contains several well-maintained, medium- to large-scale residences, many of which are a variation of Victorian styles. The majority of these dwellings are two stories in height, set close to the road, with large backyards and manicured lawns. Sidewalks are located on both sides of Grace Street, with a row of mature trees between the walkway and the street. On-street parking is promoted on both sides of Main Street.

Several noncontributing commercial buildings, fronted by parking lots, are located at the west end of Main Street near Route 10. Pierceville Farm, one of the Smithfield Historic District's two major farm sites, is located in this sub-area. The associated farm buildings sit quite close to the bend in Grace Street, while the remainder of the land is in open space.

In 1999, the Town completed a decade long \$2 million public improvement project in downtown Smithfield. The Main Street project concluded with the completion of landscaping along the downtown corridor. Public improvements included: relocation of all overhead utilities underground; construction of brick sidewalks; installation of period street lights and street signage; landscaping; granite curbing; street resurfacing; water and sewer line replacements; drainage enhancements; additional parking; informational kiosks on local history; and street art sculptures. Private investment resulted in many significant building renovations, reconstruction, and/or façade improvements. In April 1999, the Virginia Downtown Development Association (VDDA) awarded Smithfield for its Main Street Beautification Project.



#### *4. Commercial Main Street Historic Planning Sub-Area*

This sub-area encompasses the traditional Downtown Area dating from around the turn of the 20th century. The majority of the contributing commercial buildings are two-story brick structures with little or no setback, while residences tend to have small, landscaped front yards. Several of the lots have been converted to parking areas, predominantly beside the noncontributing buildings. Sidewalks line both sides of Main Street, and parallel parking is permitted as well. Hayden's Lane, a notable passageway in the sub-area, provides an attractive walkway from Main to Grace Streets.

#### *5. South Church Street Historic Planning Sub-Area*

This northeastern sub-area possesses some of the most magnificent residences in Smithfield. The Town's finest examples of Georgian, Federal and Victorian architecture are found here. Wetlands define the edges of the Church Street corridor, providing owners with long lots, extending back to these conservation areas. In general, residences are sited in close proximity to the street and to one another. The north side of the street has larger lots with larger-scaled homes. The narrow width of Church Street cannot support much on-street parking; however, the deep lots described above allow for private driveways. Sections of the sub-area are lined with mature trees which provide a natural canopy over the road. Landscape and building maintenance in the sub-area is characterized as good to excellent, and a variety of architectural styles and decorative detail contribute to the aesthetic appeal of the neighborhood. A South Church Street Beautification Project which will involve landscaping, the placement of utilities underground, and the installation of brick sidewalks, traditionally styled lighting and signage is also in the Town's current plans for capital improvements.

Windsor Castle, located on Jericho Road, is also located within this sub-area. This farm complex, one of two located within the historic district limits, is also visible from South Church Street. The property contains the main house and an extensive collection of outbuildings sited next to open fields. The Windsor Castle property is cherished within the community, and the Town has placed a high priority on preserving the integrity of this historic property, including its vast, adjacent open space.

The Town has recently adopted a master plan for Windsor Castle Park. The town's adopted master plan provides for passive recreational use on the site, being sensitive to the state historic conservation easement which has been placed on 42 acres of the overall property, inclusive of the private home and outbuildings. Extensive trails will encompass the property affording the public the opportunity to experience the diversity of the site's environmental features, from woodlands and agricultural fields to marsh. The trail system also includes proposed pedestrian boardwalk connections to other areas within the historic district. A kayak and canoe launch is planned along Cypress Creek and equestrian trails are also to be incorporated into the park.

#### *6. Cedar Street Historic Planning Sub-Area*

This sub-area is located east of Main Street and is characterized by a mixture of residential, institutional and business uses. A narrow sidewalk lines the south side of Cedar Street; however, sidewalks are absent on the side streets. Parking lots associated with the Main Street business area front on Cedar Street. The east end of the street contains several church parking lots, while the west end is comprised of several multi-family buildings. The neighborhood's cross streets contain small, two-story dwellings set on narrow lots with minimal landscaping. South Mason and Sykes streets are comprised of small residences, as well; however, a majority of these are one-story dwellings on well-maintained lots with foundation plantings. Since the last Comprehensive Plan was adopted, a new subdivision has been constructed on Cedar Street. This subdivision, Evergreen Acres, consists of a mixture of single family residences, townhouses, and duplexes.

### **ENTRANCE CORRIDORS**

Since the last Comprehensive Plan was adopted, the Town has devoted a significant amount of time and attention to the future of its major entrance corridors. Included in this effort has been the implementation of a new overlay district, the ECO, Entrance Corridor Overlay District, as well as complementary Design Guidelines for these corridors. Both of these implementation tools focus attention on the protection of the future of the Town's critical entrance corridors.

#### **Entrance Corridor Protection District**

In Smithfield, entrance corridors are important transition passages and serve as gateways to the Historic Area. Therefore, these corridors should provide visual clues which indicate one's entrance to the historic area, and contribute significantly to the visual and historic character of the community. Virginia law allows localities to establish overlay zoning districts along its major entrance corridors providing they offer direct access to defined historic areas and/or tourism areas. The Town has advanced this provision in Virginia law locally in order to establish the formal Entrance Corridor Overlay zoning district along its six identified principle entranceways as part of the Town's ongoing effort to plan for the future of its corridors.

These corridors include the following:

- *North Church Street/Business Route 10, extending from the Town limits to the Pagan River Bridge;*
- *West Main Street/United States Route 258, extending from the town limits to the intersection of U.S. Route 258 and U.S. Route 10 Bypass;*
- *South Church Street from Battery Park Road to the Cypress Creek Bridge;*
- *South Church Street from the Bypass to Battery Park Road;*
- *Benns Church Boulevard/U.S. Route 10 Bypass, extending the entire distance between the Town's corporate boundaries; and*
- *Battery Park Road from South Church Street to the corporate Town limits*

The Entrance Corridor Overlay zoning district augments the Town's successful historic preservation efforts by serving to mark distinct entrance points to the historic area, preserve viewsheds and important landmark views, guide development and ensure compatibility with existing zoning, conserve the natural, historical, and architectural character of the district and finally, define a visual identity for the district. All development proposed within the overlay district is subject to the procedures, standards, and guidelines specified in the Ordinance. These include:

- *Tree protection;*
- *Minimum visual buffer;*
- *Exemption from buffer requirements;*
- *Yard and height requirements;*
- *Access and internal circulation;*
- *Site development guidelines;*

- *Landscape Requirements;*
- *Signs;*
- *Site design standards;*
- *Sign landscaping standards; and*
- *Development plan review*

The overlay district seeks to achieve the following objectives with respect to protecting the Town's major entrance corridors:

1. *Encourage and better articulate positive visual experiences along the town's major existing and proposed highway corridors;*
2. *Provide for the continued safe and efficient use of these highway corridors;*
3. *Maintain natural beauty and scenic, cultural, and historical character of these corridors, particularly distinctive views, vistas, and visual continuity;*
4. *Protect existing natural vegetation and wildlife habitats along these corridors;*
5. *Discourage indiscriminate clearing, excessive grading, and clear cutting along these corridors;*
6. *Minimize cut and fill operations by placing emphasis on the retention of natural topography of these corridors; and*
7. *Minimize intersections and individual site access points along these corridors.*

### **FORMAL CORRIDOR OVERLAY DESIGN GUIDELINES**

In order to further the ongoing attempt to both protect the function of and improve the aesthetic quality of the streetscape along its entrance corridors, Smithfield has implemented a set of specific entrance corridor-related design standards similar those established for the Historic District. As with the Historic District guidelines, these standards have been adopted in the form of a stand alone document which provides specific guidance and examples of appropriate building and landscaping improvements within the transitional corridor zones.

Developed under the thoughtful guidance and dedicated direction of Frazier Associates and adopted by the Town in 2005, these guidelines were developed as an official policy document responsive to the desired vision for each of the identified, individual corridors. The intent was to establish a clearly written and well illustrated document in order to provide a framework for better designed corridors in Smithfield. This manual provides recommendations more specific than the vision statements and design principles set forth in the Comprehensive Plan and less detailed than the requirements found in Town's Zoning Ordinance. While these guidelines provide specific recommendations for development, they cannot, and are not intended to, cover all circumstances. Rather, the structure and content of the manual are meant to give property owners, developers and reviewers the perspective to address the unique conditions of each project and the flexibility to develop designs that meet the intent, principles and spirit of the guidelines.

The Corridor Overlay Design Guidelines focus attention on the importance of the relationship between the entrance corridors and the Historic District, and specifically upon the role the corridors play in protecting the Historic Area and attracting attention and visitors to it. Within this context, the Guidelines place heavy emphasis on the following objectives outlined for the ongoing role of each entrance corridor:

- *Mark distinct entrance points to the historic area;*
- *Preserve viewsheds and important landmark views;*
- *Provide visual clues which draw visitors to the Historic Area;*
- *Create a strong sense of arrival to the historic area through the use of distinctive signage; and*
- *Achieve consistency in streetscape through simplicity of design and repetition of common landscape and streetscape elements*

## **RECOMMENDATIONS FOR FUTURE PRESERVATION PLANNING**

While Smithfield has been extremely proactive in successfully implementing historic preservation strategies within its Historic Area, particularly over the past decade, several opportunities exist to expand the protection of the Town's historic resources and to increase public awareness of the additional opportunities in preservation and rehabilitation that exist in the area. The following sections provide a brief summary of future efforts which may be undertaken in order to continue to enhance the visual and historic character of the district.

### **Expansion of Corridor Overlay District**

The Town should consider an expansion of the scope of the entrance corridor overlay district and its accompanying design guidelines to include the Great Springs Road and Cary Street corridors. Both of these streets link outlying Town areas directly to the Historic District and serve as important gateways to the Town. The Town should amend its current Entrance Corridor Overlay District boundaries to include these corridors. Following the strategy invoked in the development of the Entrance Corridor Design Guidelines, specific guidelines should be established for each of these corridors upon their inclusion within the Town's formal Entrance Corridor Overlay district.

The Town should also work with the County to cooperate in the extension of the application of corridor overlay design guidelines to those portions of the identified entrance corridors which extend outside of the Town's corporate limits. As growth pressures continue to press into the County service districts surrounding the Town, it will become increasingly important for the Town and the County to coordinate in the review and regulation of future development which will impact the future form and function of these important gateways and entrance corridors leading to the area "between the bridges" in Smithfield.

### **Additional Opportunities in Public Education**

The development of additional public education and awareness programs would help to inform residents and visitors as to the variety of historic resources which exist in Smithfield. Several new programs should be considered for implementation in order to accomplish this goal. Walking tours which provide a sense of community history and highlight architectural focal points within the Town often serve as a valuable means to increase awareness of historic resources and encourage public participation. While one such tour is currently offered in the Town, it is hoped that this tour could be extended beyond the core of the historic district to incorporate additional sites, such as the Windsor Castle estate and planned park facility, which deserve greater attention.

The Town should also seek to integrate ties between recreation area planning and historic properties. The Master Plan for the public park at the Windsor Castle estate provides the perfect vehicle to implement this objective, particularly, with the planned pedestrian connections between the estate and Main Street and Church Street. Additional opportunities exist to introduce eco-tourism tours incorporating a historical theme via the many waterways that are found in Smithfield. The new Master Plan for Windsor Castle designates several specific opportunity areas within which such a tour could be initiated.

A series of public workshops have been conducted in previous years by the Town Staff in order to provide owners of historic properties with guidance in the areas of building maintenance, renovation and restoration through a grant from the Virginia Department of Historic Resources. The Town should consider revisiting these work sessions to advance this program. The National Park Service publishes a series of technical briefs which provide assistance in choosing the proper materials for building repairs which meet the Secretary of the Interior's Standards for Rehabilitation. These briefs are made available to property owners so as to ensure that building improvements preserve the integrity of individual buildings and contribute to the character of the historic district as a whole. Property owners are also made aware of the federal tax credits available for the rehabilitation of income-producing properties listed on the National Register of Historic Places or located within National Register Historic Districts. Fundraising strategies should be implemented which would enable the town to purchase important historic and cultural resources, as well as support ongoing maintenance of existing publicly-owned historic properties, such as the Windsor Castle estate. Possible funding sources may include private contributions, donations from corporate sponsors and community fundraising activities.

### **Promoting Preservation Incentives**

Owners of income-producing properties listed on the National Register of Historic Places or located within the Smithfield National Register Historic District may be eligible for a twenty percent federal tax credit for rehabilitation projects which meet the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. In order to qualify for tax credits, a structure must be deemed a "certified historic structure" by the Secretary of the Interior, and thereby contribute to the historic character of the district in which it is located. The Town should actively promote these programs among residents and property owners within the Historic District.

For qualifying properties, state tax credits are available as well, to any individual, trust, estate, or corporation incurring eligible expenses in the rehabilitation of a "certified historic structure." Properties must be "certified historic structures", but do not need to be income-producing, and may qualify as owner-occupied residences. The credit is applied to improvements or reconstruction consistent with the Secretary of the Interior's Standards. Project expenses must total at least fifty percent of local real estate tax assessed value for the year before rehabilitation expenses were incurred.

The rehabilitation tax credit is calculated as a percentage of the eligible expenses which include: architectural and engineering fees, site survey fees, legal expenses, insurance premiums, developer's fees, and other construction-related soft costs. Applications must be filed with the VDHR and approved before construction and rehabilitation efforts begin. Property owners should contact the Town of Smithfield Department of Planning, Engineering and Public Works, P. O. Box 246, 310 Institute Street, Smithfield, Virginia 23431, (757) 365-4200 and the Virginia Department of Historic Resources, located at 2801 Kensington Avenue, Richmond, Virginia, 23221, (804) 367 2323 for more information on federal tax credit programs and project expenses eligible for reimbursement. State designation of historic properties provides eligibility for several programs administered through the Virginia Department of Historic Resources. Grant programs, when available, provide funds to owners of threatened landmark properties, and to non-profit groups for work on historic properties. The State also accepts donations of preservation easements from owners listed in the Virginia Landmarks Register.

Under this program the owner can claim the value of easements as charitable contributions for tax purposes in exchange for preserving the property in perpetuity. The Town of Smithfield may also consider developing a local tax abatement program which would relieve property owners of property tax increases for certain time periods following the rehabilitation of historic properties as an added incentive for preservation efforts.

### **Continued Town Staff Support**

Throughout the successful past of Smithfield's historic preservation efforts, the Town Staff has played a crucial role in promoting the ongoing effort, informing local residents and property owners of opportunities, assisting the Board of Historic and Architectural Review in administering the regulations of the Historic District and monitoring maintenance of both public and private properties within the district. In order to ensure the continued success of the historic preservation effort in Smithfield, the Town Staff should continue to provide its valuable assistance in the future planning and implementation of preservation strategies in the Historic District. More specifically, Town Staff should continue to be diligent in the maintenance of an up-to-date inventory of the Town's Historic Properties. Staff should also continue to maintain its excellent standard in providing property owners with ongoing technical assistance and guidance in the areas of building maintenance, renovation and restoration, as well as information on tax credits available for rehabilitations to income-producing properties. Furthermore, the Town Staff could expand its role in historic preservation by working together with Historic Downtown Smithfield (HDS) to promote and conduct fundraising activities in order to support the preservation of historic and architectural resources. The continuation of proactive Staff support in the process will be critical in ensuring that the momentum of past historic preservation efforts is carried forward into the new millennium.



*Chapter VIII:*

**URBAN DESIGN**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter VIII:* **URBAN DESIGN**

### **Urban Design Strategy for Smithfield**

Urban design, an often lost and ignored art in town planning, is a foundational element of this Comprehensive Plan. In its essence, urban design is nothing more than a way to sort out what is good and bad in the organization of a community's buildings, cultural features and landscape forms. It is a shaping process which attempts to creatively merge progress with preservation, innovation with conformance, organization with chaos and harmony with disharmony.

Throughout its initial stages of development, the process of organizing Smithfield's buildings, cultural features and landscape forms was a simple task served well by its early grid street system. Thanks to the commitment of Town Staff and an active citizenry over the years, the Downtown Area, shaped by this surviving grid system is still effectively organized and functions as a vibrant mixed use commercial core today. However, as growth and development began to far exceed Arthur Smith's original vision for the "new towne" on the Pagan River, the sorting process became all the more difficult beyond the boundaries of the original town grid. This trend has been accelerated during the past three decades, as progress through innovation has often overwhelmed interests in preservation, design conformance and growth management along the edges of the Downtown Area and in the surrounding rural areas. As a result, a large percentage of the most recent development in Town, especially along the major corridors leading into Smithfield, fails to meet the high standards established and preserved in the Historic District.

For decades, the Town's identity has been best exemplified as that area "between the bridges", that is the land area encompassing Downtown Smithfield lying between the bridges traversing the Pagan River and Cypress Creek along the Church Street corridor. This historic district embodies the traditional neighborhood development patterns that are being encouraged in new developments throughout the country and indeed, in Smithfield as part of this Comprehensive Plan. Recognizing that the area "Between the Bridges" has evolved within a completely different context than that of the Town's major commercial corridors and rural residential neighborhoods, the Urban Design Plan approaches these differing areas accordingly. However, an overriding goal of the Plan is to insure that these different segments of the Town are not considered in a vacuum, but rather are studied as an interwoven community consisting of land uses, structures, cultural and historical features, landscapes and citizens that should function well together in establishing a strong sense of place that defines Smithfield as a unique

and vibrant town. New planning initiatives introduced in this Comprehensive Plan, including the emphasis on traditional neighborhood development and “smart growth” respects this dichotomy, while hoping to embrace and indeed add to the sense of place in the Town, without seeking to replicate the area “between the bridges” or denigrating the experience of Smithfield. The challenge within this effort is how to best blend together the old and the new. The Comprehensive Plan generally, and this Urban Design strategy more specifically, hope to provide guidance for how best to achieve this blend, while still celebrating the unique sense of place that has long and will continue to define the Town.

Serving as the guiding element of Smithfield’s growth management process, the Comprehensive Plan sets the tone and protocol for how future development and redevelopment within the town is to be shaped. From a town-wide perspective, the goal of urban design is to maintain, strengthen and enhance the unifying characteristics of the community and the patterns which yield its unique identity. From an individual project perspective, the goal of urban design is to insure that new buildings and landscape forms respect, preserve and conform to the characteristics which embody the “vision for Smithfield.”

These underlying goals of urban design are consistent with the major goals and objectives established by the Town with respect to urban design and community development for the Plan:

**Major Urban Design Goal:**

**Protect and enhance both existing and future development in Smithfield through pro-active growth management programs and progressive community design guidelines.**

**Major Urban Design Planning Objectives:**

- A. Protect and enhance the unique qualities of Smithfield’s small town atmosphere, as well as its sense of history and place.
- B. Promote development opportunities which respect, preserve and protect the Town’s ambience, historic properties, waterfront areas and sensitive environmental areas.
- C. Reduce structural decay of buildings throughout the Town by strengthening planning, zoning and building code enforcement.

- D. Emphasize adherence to thoughtful and coordinated urban design programs as well as the coordinated phasing of adequate public infrastructure to support the Town’s remaining undeveloped and underdeveloped parcels. Explore opportunities to work with service providers to employ state-of-the-art technologies where feasible.
- E. Encourage continued streetscape, landscaping and pedestrian improvements throughout the Town.
- F. Ensure the high quality of future development in the Town by enacting creative urban design standards and implementation procedures. Emphasize, encourage and employ cluster development where feasible.
- G. Implement gateway and corridor improvements recommended by the Entrance Corridor Master Plan to enhance the visibility and attractiveness of Smithfield.
- H. Provide stronger and better coordinated planning and project review of development proposals in Isle of Wight County that could potentially impact the Town.

These goals and objectives reflect the strong emphasis placed on urban design and growth management by Town residents. This emphasis was underscored by the results of the Citizens’ Survey conducted in support of the 2008 Comprehensive Plan Update. Several distinct questions among the over forty included in the survey focused upon urban design and related issues. Two of these questions received the strongest response among all those included in the entire survey. The questions and results are shown below, as well as a summary of the results of citizen responses received from a similar survey conducted in 1998:

*The Town should set high standards to guarantee that new subdivisions and residential communities have properly designed and constructed streets and sidewalks, utility networks, storm drainage and site improvements.*

Strongly	1	2	3	4	5	Strongly
Disagree	<b>16</b>	<b>2</b>	<b>309</b>	<b>85</b>	<b>59</b>	Agree
	<b>(2%)</b>	<b>(0%)</b>	<b>(4%)</b>	<b>(14%)</b>	<b>(79%)</b>	

1998:	13	7	38	91	533
	(2%)	(1%)	(6%)	(13%)	(78%)

Over 93% of all respondents agreed or strongly agreed with this statement, up slightly from 91% in the 1998 survey. Of all the attitudinal questions included in the survey, this question received the strongest response in terms of overall agreement among respondents. In 1998, this same question received the strongest attitudinal record as well.

*The planting of trees and other public landscaping along streets should be a requirement of any new residential subdivision development in Smithfield.*

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>18</b>	<b>16</b>	<b>74</b>	<b>123</b>	<b>482</b>	
	<b>(3%)</b>	<b>(2%)</b>	<b>(10%)</b>	<b>(17%)</b>	<b>(68%)</b>	
1998:	24	25	71	135	427	
	(4%)	(4%)	(10%)	(20%)	(63%)	

Nearly 86% of all respondents agreed or strongly agreed with this statement, up slightly from 83% in the 1998 survey. This question received the third strongest response in terms of overall agreement among respondents, just as it did in the 1998 survey.

*New residential developments should be required to provide sufficient recreational improvements (i.e. tennis courts, swimming pools, playgrounds, walking trails, bikepaths, etc.) to serve the needs of their residents.*

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>35</b>	<b>39</b>	<b>109</b>	<b>121</b>	<b>401</b>	
	<b>(5%)</b>	<b>(6%)</b>	<b>(15%)</b>	<b>(17%)</b>	<b>(57%)</b>	
1998:	35	41	110	136	366	
	(5%)	(6%)	(16%)	(20%)	(53%)	

Nearly 75% of all respondents agreed or strongly agreed with this statement, up slightly from 73% in the 1998 survey. This question received the fifth strongest response in terms of overall agreement among respondents.

In pursuit of achieving these established planning goals and objectives, the Plan emphasizes the need to establish an “urban design framework” around which future development within Smithfield is to be patterned. This “urban design framework” establishes the “vocabulary” through which land use, architecture, landscape design, transportation, community facilities, recreational areas and open spaces are to be ordered and integrated. In turn, the public sector’s management and orchestration of this “urban design framework” must be in touch with the demands of the marketplace, the rights of the property owner and the visual elements which create compatibility between tradition and progress.

The Plan identifies the “vision for Smithfield” on a macro-level and defines the essential implementation “linkages” through which the “vision” can be achieved. The concept of maintaining and improving the "linkages" between the future land use plan and the Town’s growth management implementation tools has been a dominant planning theme in this update of the Plan, much as it was in the 1999 Plan. The Implementation Chapter (Chapter XIII) of this Plan addresses the specific improvements and upgrades to these "linkages" necessary to promote a successful urban design strategy.

Fortunately, it is not necessary to “reinvent” planning and zoning legislation in Virginia to provide the enabling structure for an effective urban design strategy. The Code of Virginia allows localities to regulate land development through zoning, subdivision and site planning ordinances and to protect its historic resources through the use of historic district and corridor regulations. The Town has already exhibited its firm commitment to establishing a sound urban design strategy by substantially revising its Zoning and Subdivision ordinances. This revision process included the expansion of zoning districts and the establishment of more contemporary site plan and subdivision plat standards for new development in Smithfield. This ordinance update provides the first important step towards establishing the linkages necessary to implement an effective urban design strategy. Additional refinements are necessary, however, to insure that the initial momentum established in the past decade will continue to drive the efficient implementation of the Town’s urban design strategy.

A key evolution in the town’s urban design strategy is to promote mixed use development within the Town. Much as the successful integration of varied uses within the same block and neighborhood successfully defines the area “Between the Bridges” in Smithfield, a movement is underway to promote similar development patterns in the remaining undeveloped parcels (and suitable redevelopment areas) within the Town. Two new zoning districts are recommended to support this effort: a Traditional Neighborhood Overlay District option, as well as a new NU-R, New Urbanism Residential District. As noted in Chapter XIII, the Plan recommends additional basic refinements, enhancements and additions to existing ordinances, guidelines and standards which, in combination with the Town’s new Zoning and Subdivision ordinances, will create a well integrated set of growth management “tools” which support the Town’s urban design goals and objectives.

The most notable of these enhancements is the introduction of the regulatory means through which future traditional planned residential and mixed use neighborhoods are implemented within Smithfield. This approach to development represents a departure from the traditional suburban interpretation of zoning practices in that it promotes compact, mixed-use development with an urban scale, massing, density, and infrastructure configuration.

In summary, the implementation recommendations include the following:

- A. *Introduce a new Traditional Neighborhood Development Overlay District to serve as the district through which future traditional planned residential and mixed use neighborhoods may be implemented within Smithfield.*
- B. *Introduce the new NU-R, New Urbanism Residential District to accommodate new residential dwellings within subdivisions that are organized around the principles of neo-traditional and “smart growth” forms of development.*
- C. *Modify the S-R, Suburban Residential District to encourage the seamless integration of single family detached and attached dwellings in new communities.*
- D. *Consider an expansion of the Entrance Corridor Overlay district and its accompanying design guidelines to include the Great Springs Road and Cary Street corridors.*
- E. *Work with the County to coordinate the consideration of the Town’s Entrance Corridor Design Guidelines in future development in the County along corridors linking directly to those impacted by the Entrance Corridor Overlay District.*
- F. *Modify all applicable residential and mixed use zoning districts to reflect the Commonwealth’s new laws concerning the incorporation of by-right bonus density provisions for cluster development.*
- G. *Review all applicable zoning districts for opportunities to implement the new affordable workforce housing goals and objectives as outlined in the Housing Chapter (Chapter XI.)*
- H. *Update of the Town’s Design and Construction Standards manual.*
- I. *Review the Chesapeake Bay Preservation Ordinance and related design guidelines; and update these documents to include recommendations contained in this Comprehensive Plan and recent changes state and federal regulations.*
- J. *Modifications to the Erosion and Sediment Control Ordinance.*

- K. *Design and construction of entrance gateway projects.*
- L. *Design and construction of corridor landscape improvements.*

### **“Partnerships” in Urban Design**

Success in urban design does not simply materialize from new ordinances or innovative language in the plan; real achievement is the result of a mutual commitment between the people of the community and its leaders. One of the most valuable lessons learned during the most recent planning effort has been that quality environments and design excellence require exhaustive work by both the private sector (*in defining specific market opportunities and project designs*) and the public sector (*in insuring project land use compatibility within the context of the Comprehensive Plan*). Often the "linkage" between good planning and effective implementation is short circuited due to lack of "elbow grease." Through mutual hard work, developers and local officials are challenged to undertake a greater effort to insure that the net result of good planning carries through to yield good development. Similar urban design partnerships have been successfully implemented in many other communities in the Commonwealth and elsewhere, this Comprehensive Plan recommends that a similar cooperative approach be fundamental to any land development activity within the Town.

This Plan recognizes that, to be effective, land use implementation responsibilities must be shouldered by both the public and private sector alike. It acknowledges an extended process that unfolds sequentially as development occurs incrementally. The old adage goes that “a community is built one brick at a time.” As Smithfield develops, the success of the Comprehensive Plan will ultimately be measured by the success (or failure) of any given land development project. The Plan's "vision" is defined by the many discrete decisions (both public and private) which address the matters of location, density, scale, infrastructure, visual quality and phasing of any particular project. Accordingly, the tools and methods to be incorporated into an effective “urban design partnership” must focus on each individual aspect of the land development process.

Carrying forward the planning initiative introduced in the 1999 Plan, an emphasis is placed in the Comprehensive Plan on the Town’s unique Planning Areas and Entrance Corridors. The Plan stresses the importance of creating an “urban design framework” for each of these Planning Areas and Corridors. This framework provides greater planning detail than that which is normally found in a traditional comprehensive plan. It identifies the future development opportunities and limitations for each area while establishing guidelines for the scale, order, intensity and architectural expression of that development.

If future growth is to be planned via strengthened linkages between the planning process and the land development controls, both public officials and private landowners/developers should embrace the concept of the "urban design partnerships." This is not a partnership in the



common usage of the term, but, rather, it is a communication mechanism around which effective public/private dialogue can take place from the inception of a project to its completion. Similarly, in promoting a partnering of communications by and between the developer and regulator of the land use process, the Town does not want to place an undue burden on any applicant. As such, this process is structured so that the involved parties can fully explore planning issues, concerns, and site opportunities at every level in the land development process.

To be effective, the urban design partnership concept must be applied via close working relationships between the private developer, Town officials, and their design consultants on each and every land use application. Towards that end, the Plan promotes the idea of conducting pre-application conferences and urban design work sessions prior to each of the key milestones in the process: rezoning, preliminary plat, site plan, subdivision, erosion and sediment control, and building permit issuance. Communication of expectations at each step in the development review process is critical in achieving a successful partnership.

### **Fundamentals for Urban Design**

The Comprehensive Plan recognizes that the fruits of quality urban design emerge from satisfying issues related to project feasibility, design continuity and site-specific sensitivities. Within any given real estate orientation and site planning exercise, certain fundamental urban design principles should be carefully tested within this context. These commonly accepted fundamental urban design principles have been used to formulate goals, objectives, specific design guidelines and strategies to be used in an attempt to protect the unique cultural and historical architectural character of Smithfield. Design guidelines provide a set of fundamental criteria for a community to achieve an identifiable character or image. They are typically based on the area's existing architectural and spatial relationships and the overall aesthetic qualities desired. The design guidelines provided in this chapter provide a framework for future design to insure the best design solutions are achieved within a given area.

The Plan emphasizes that every new and redevelopment project in Smithfield should strive to incorporate urban design fundamentals which embody the "Vision for Smithfield." In order to achieve urban development which respects the commonly-held urban design goals of the Plan, development applications should demonstrate a clear understanding of and appreciation for certain broader, but interrelated, Town-wide objectives:

- *Compatible inter-relationships among uses and use groupings;*
- *Harmonious growth and expansion within the historic areas and entrance corridors;*
- *Optimal building locations throughout the community;*
- *Appropriate architecture related to massing, image, form, and scale;*
- *Preservation of open space and creation of recreational amenities; and*
- *Efficient access, circulation and parking systems to serve development.*

When viewed in its entirety, the Town's growth management program must be carefully coordinated to optimize these principles. As mentioned previously, there is no one manual that provides all the urban design solutions, but, rather, the Comprehensive Plan, zoning and subdivision ordinances, corridor and historic design guidelines, environmental regulations and other ordinances all combine to provide the requisite structure and substance to the Town's urban design framework. Equally important to the successful implementation of sound urban design principles within the Town is the intent of the guidelines to remove the mystery from the design review process and provide some measure of predictability for property owners. The guidelines also insure that Architectural Review Board decisions are objective and consistent for building and sign projects in the Historic District, as well as in the proposed Entrance Corridor Overlay District.

New development and redevelopment should seek an identity which is unique to Smithfield. This means that projects should be sensitive to the Town's historic traditions, architectural scale, cultural landmarks, environmental attributes, and community patterns. The following "vocabulary" for urban design should be considered in the public/private dialogue for new projects at the conceptual site planning stage:

**1. Project Land Use and Density**

- *Functional organization of site*
- *Land use relationships*
- *Net developable area*
- *Performance-based density*
- *Land use yield*
- *Compatibility with Comprehensive Plan*

**2. Transportation and Circulation**

- *Identify transportation hierarchies*
- *Vehicular access and circulation*
- *Pedestrian access and circulation*
- *Highway corridors and gateways*

**3. Urban Design Vocabulary**

- *Compatibility of scale and massing*
- *Compatibility of design and materials*
- *Landscape style and form*
- *Architectural style and detailing*
- *Historic relationships and expression*
- *Coherence and cohesion*
- *Color and tone*

**4. Environment**

- *Inventory of Assets*
- *Quality of ecological setting*
- *Preservation of natural systems*
- *Quality of environmental design*
- *Open space and conservation*
- *Waterfront characteristics*

**5. Public Infrastructure**

- *Adequate public facilities*
- *Utility and traffic impact analyses*
- *Responsibility for financing*
- *Proffers and conditional zoning*

**6. Regional Considerations**

- *Parks and recreation*
- *Schools and libraries*
- *Fire and police*
- *Municipal facilities and service*
- *Tourism influences*
- *Transportation linkages*
- *Marketplace realities*

## **Urban Design Guidelines**

Quality urban design is more than just an architectural or landscaping concern. They emerge from satisfying a range of issues related to architectural compatibility, economic feasibility, marketplace acceptance, and environmental appropriateness. However, the form, scale, density, and appropriateness of use are essential to the "Vision for Smithfield." The guiding principle behind the recommended design review guidelines established for the Town of Smithfield should be to enhance the quality of life for all residents and visitors to the Town by preserving the character and desirable aesthetic features of the community. In order to preserve this character, it is necessary to protect significant features from destruction and to insure that new projects in the town do not detract from the identifiable character of the community. New construction projects and substantial renovation projects should respect the scale, materials, massing and setbacks of neighboring buildings and the overall streetscape, and should preserve and enhance the natural features present on the project site and along the street.

Thus, certain fundamental urban design principles should be carefully tested in conjunction with future land development applications in all areas of the town. The Plan has identified the following general design guidelines which developers and landowners are to address in preparing individual land use proposals:

### **A. Single Family Residential Development**

#### **General Site Design Principles**

- New development should be compatible with the adopted Comprehensive Plan.
- New residential development should be reasonably-scaled and compatible with adjacent neighborhoods.
- Development densities should be performance-oriented, with total land use yields based on the "net developable area" concept.
- Residences should be clustered to conform to the Plan's goal of siting units in the most developable areas of a given property.
- Principles of traditional neighborhood design should be tested in appropriate locations.
- Subdivisions incorporating minimum levels of affordable, workforce housing shall be eligible for density bonuses.
- Community designs should embrace sustainability principles and consider energy conservation in site planning.
- Affordable workforce housing units should be integrated into new neighborhoods, rather than constructed as separate, "stand alone" communities.

### **Transportation Design Principles**

- Residential neighborhood transportation planning should utilize a hierarchical system of internal roadways.
- Single family residences should not have direct access to major collector roads and highway arteries.
- Streets should be designed with minimal disturbance of the natural environment and should be sensitive to excessive earthwork and steeply sloped/highly erodible terrain features.
- Residential street alignments should reinforce a "neighborhood sense of scale" and should avoid monotonous street layouts: principles of traditional neighborhood design should be tested.
- On-street parking should be minimized in low-density single-family communities, but encouraged in areas where Traditional Neighborhood Development is promoted.
- Grid street patterns should be encouraged where feasible in new communities, thereby promoting interconnectivity to adjacent neighborhoods and existing street network.
- Public utilities should be accommodated, to the extent possible, within proposed street rights-of-way.
- Residential streets should be oriented in order to maximize southern (solar) exposure for frontage residences to the extent possible.
- Sidewalks and walkways should be of appropriate size, based on the density of the neighborhood.
- Residential streets should not adversely impact sensitive environmental areas, as defined by the Comprehensive Plan and Chesapeake Bay Preservation Areas.

### **Landscape Design Principles**

- Existing vegetation should be preserved and organized into a comprehensive community landscape design program.
- "Street trees" should be located along all neighborhood streets, using consistent grouping of species compatible with the supporting ecology and indigenous habitat.
- Landscape design concepts should be sensitive to the placement of utility infrastructure (and vice versa).
- Community entrances should incorporate special landscaping treatment, signage, lighting and other amenities to "identify" the neighborhood.
- A variety of landscape materials is encouraged.
- Neighborhood "focal points" should be identified during the site planning process, and varying scales and varieties (including seasonal diversity) of

trees, shrubs and flowers should be employed to promote visual interest and quality.

- Large open spaces, natural areas and common areas which do not receive scheduled maintenance should employ low-maintenance landscape materials.
- Individual residential lots should be landscaped to protect solar access to residences, to protect residences from wind during the winter and to orient plantings to promote site air flow during hot weather.
- Private outdoor lighting, signage, mailboxes, accessory structures, fencing and site furnishings should be compatible with a consistent neighborhood design theme and be compatible with Smithfield architectural review and urban design guidelines.

### **Open Space and Environmental Principles**

- Dominant natural features as well as sensitive environmental areas should be integrated into the design of the neighborhood.
- Each single-family development should provide sufficient levels of open space, conservation areas, "pocket-parks" and other recreation areas for its residents.
- Greenbelts along major transportation routes should be incorporated into the neighborhood open space system.
- Grassed swales should be employed for storm drainage, where possible, with structural outfalls located well above the floodplain limits.
- Single-family construction practices should incorporate enhanced erosion and sediment control measures on a lot-by-lot basis, employing Best Management Practices to the fullest extent feasible.
- All electric and telephone utility lines should be placed underground with above ground appurtenances and service areas screened, bermed and/or landscaped from public view, when possible.
- Environmental management and best management practices in the Chesapeake Bay Preservation Areas should employ well coordinated site engineering and landscape design expertise which is sensitive to CBLAD and other regulatory criteria.

### **Architectural Design Principles**

- Historic District and Entrance Corridor Overlay District design guidelines of the Town's Review Board should be followed where applicable.
- New housing should be of a consistent massing and scale within each neighborhood.
- Single-family building types should be selected and sited with sensitivity to and respect for the existing terrain and natural features of the site.
- Similar and visually compatible architectural materials should be utilized within a given cluster of single-family residences.

- Within single family neighborhoods, compatible design themes should be pursued, while avoiding repetitious facade treatments from house to house.
- Residential architecture should embrace sustainability principles and consider energy conservation in site planning.

## **B. Attached and Multifamily Residential Development**

### **General Site Planning Principles**

- New attached and multifamily residential development should be compatible with the adopted Comprehensive Plan.
- New attached and multifamily residential development should be designed employing a "neighborhood-scale" to housing orientations and massing. Excessively large neighborhoods should be avoided.
- Development densities should be performance-oriented, with total land use yields based on the "net developable area" concept. Site planning should be preceded by extensive environmental analysis.
- Where consistent with the Land Use Plan, attached dwelling units shall be encouraged to be integrated with single family detached dwelling units in neo-traditional communities. In these communities, the attached dwelling units must be architecturally compatible with the single family detached residences with respect to materials, colors, styles and vernacular.
- Residential buildings should be clustered to conform to the Plan's goal of siting units in the most developable areas (planning sub-areas).
- Site planning and housing design for these residential developments should consider potential highway noise impacts.
- Attached residential development site planning should evaluate and respond to solar-siting opportunities and other energy conservation site planning techniques.
- Where non-residential structures are to be incorporated into community designs, consideration should be given to architectural compatibility with residential units.
- Community designs should embrace sustainability principles and consider energy conservation in site planning.

### **Transportation Design Principles**

- Transportation planning should utilize a hierarchical system of internal roadways, incorporating both public and private streets, as well as private parking areas.
- Multifamily residential units should not have direct access to any public street.

- Private drives and parking areas should be coordinated with the Town's street system.
- Streets and parking bays should be designed with minimal disturbance of the natural environment and should be sensitive to excessive earthwork and steeply sloped terrain features.
- Residential street alignments should reinforce a "neighborhood sense of scale" and should avoid linear, monotonous street layouts.
- A street and parking area signage system should provide for clear directions and safe movement throughout the neighborhood.
- Private off-street parking areas should be buffered and landscaped from primary views from public streets.
- Dedicated, screened off-street parking areas should be provided for special vehicle storage (campers, boats, recreational vehicles). Such vehicles should not be permitted in normal parking areas.
- Interior parking areas and private driveways should provide adequate turnaround areas for emergency and delivery vehicles.
- Proper linkages should be provided for pedestrian access from buildings to parking areas.
- A pedestrian/open space system linking neighborhood activity centers should be provided in each new community.
- Public utilities should be accommodated, to the extent possible, within proposed street rights-of-way.
- Driveways and parking areas in multifamily and attached neighborhoods should be oriented in order to maximize southern (solar) exposure and other energy conservation practices for residential buildings to the extent possible.
- Residential streets as well as private driveways and parking areas should not adversely impact the sensitive environmental areas, as defined by the Comprehensive Plan.

### **Landscape Design Principles**

- Existing quality vegetation should be preserved and organized into a comprehensive community landscape design program.
- "Street trees" should be located along both public and private neighborhood streets, using consistent groupings of species compatible with the supporting ecology and indigenous habitat.
- Special landscape treatments should identify and reinforce neighborhood and building entry areas.
- Landscape design concepts should be sensitive to the placement of utility infrastructure (and vice versa).
- Community entrances should incorporate special landscaping treatment, signage, lighting and other landscape amenities to "identify" the neighborhood.

- Neighborhood "focal points" should be identified during the site planning process, and varying scales and varieties (including seasonal diversity) of trees, ornamental shrubs and flowers should be employed to promote visual interest and quality.
- Well landscaped, special community use areas, such as pools, tennis courts and other neighborhood recreation areas should be provided.
- In elderly housing neighborhoods special recreational and landscaped amenities should be provided.
- Large open spaces, natural areas and common areas which are not likely to receive scheduled maintenance should employ low-maintenance landscape materials.
- Building clusters should be landscaped to protect solar access to residences, to protect residences from wind during the winter and to orient plantings to promote site air-flow during hot weather.
- Private outdoor lighting, signage, mailboxes, accessory structures, fencing and site furnishings should be compatible with a consistent neighborhood design theme and be compatible with Smithfield architectural review guidelines.
- Walls and fencing should be employed to enhance the privacy and enjoyment of outdoor spaces adjacent to residential units.

#### **Open Space and Environmental Principles**

- Dominant natural features as well as sensitive environmental areas should be integrated into the design of the neighborhood.
- Attached and multifamily residential projects should provide sufficient levels of open space, conservation areas, parks and other active recreation areas for its residents.
- Greenbelts along active, external transportation routes should be incorporated into the neighborhood open space system.
- Grassed swales should be employed for storm drainage, where possible, with structural outfalls located well above the floodplain limits.
- Parking lot drainage designs should seek to minimize cumulative runoff concentrations.
- Stormwater management facilities should be integral to neighborhood designs, emphasizing both water quality and runoff quantity control principles as well as minimizing the impacts on sensitive environment areas.
- All electric and telephone utility lines should be placed underground with above ground appurtenances and service areas screened, bermed and/or landscaped from public view, where possible.



- Screened and landscaped on-site storage areas for refuse and wastes should be provided for easy and safe access to the residents.
- Environmental management and best management practices in the Chesapeake Bay Preservation Areas should employ well coordinated site engineering and landscape design expertise which is sensitive to CBLAD and other regulatory criteria.

### **Architectural Design Principles**

- Design guidelines of the Review Board for the historic district and entrance corridors should be followed where applicable.
- New housing should be of a consistent massing and scale within each neighborhood grouping or building cluster.
- Attached and multifamily building types should be selected and sited with sensitivity to and respect for the existing terrain and natural features of the site.
- Similar and visually compatible architectural materials should be utilized within a given cluster of neighborhood buildings.
- Within higher density neighborhoods, a consistent design theme should be pursued, while avoiding repetitious facade treatments from building to building.
- Unit siting should employ varied frontage setbacks and sensitivity to existing terrain.
- Siting of residential buildings should consider clustering units around courtyard-styled areas or other "thematic" landscape focal points in order to reinforce neighborhood scale and visual appeal from building approaches.
- Townhouse and multifamily architecture and supporting landscape designs should embrace sustainability principles and consider energy conservation in site planning.

## **C. Commercial and Office Development**

### **General Site Planning Principles**

- New commercial and office development should be compatible with the adopted Comprehensive Plan.
- New commercial and office development should be designed in a scale compatible with adjacent development and street systems.
- Commercial and office development densities should be performance oriented, with total land use yields based on the "net developable area" concept; site planning should be preceded by extensive environmental analysis.

- Buildings should be clustered to conform to the Plan's goal of siting units in the most developable areas (planning sub-areas) and restricting development in sensitive environmental areas.
- Site planning should evaluate and respond to solar-siting opportunities and other energy conservation site planning techniques.
- Major office projects and large employment centers should employ "campus" design programs, accentuating integrated site planning, landscaping and architectural concepts.
- Parking areas should be located outside of required yard areas.

### **Transportation Design Principles**

- Transportation planning should utilize a hierarchical system of internal roadways, incorporating both public and private streets, as well as private parking areas.
- Individual parking spaces for commercial and office developments should not directly access any public street. Private drives and parking areas should be coordinated with the street system.
- Streets and parking bays should be designed with minimal disturbance of the natural environment and should be sensitive to excessive earthwork and steeply sloped terrain features.
- Interior street alignments should reinforce an appropriate sense of scale relative to the proposed commercial development massing and should avoid linear, monotonous street layouts.
- A street and parking area signage system should provide for clear directions and safe movement throughout the planned development.
- Private off-street parking areas should be buffered and landscaped to the extent possible from primary views from public streets.
- Interior parking areas as well as private driveways and loading areas should provide adequate turnaround areas for emergency and delivery vehicles.
- Sidewalks should be provided for pedestrian access (emphasizing handicap access needs) from buildings to parking areas and adjacent properties.
- Public utilities should be accommodated, to the extent possible, within proposed street rights-of-way.
- Streets, private travelways and parking areas in commercial and office developments should be oriented in order to maximize southern (solar) exposure and other energy conservation practices for commercial buildings to the extent possible.
- Public street alignments as well as private drives and parking should not adversely impact the sensitive environmental areas, as defined by the Comprehensive Plan.

### **Landscape Design Principles**

- Existing quality vegetation should be preserved and organized into a comprehensive community landscape design program.
- "Street trees" should be located along both public and private commercial streets, using consistent groupings of species compatible with the supporting ecology and indigenous habitat.
- Shade trees should be provided in landscaped medians in all parking lots, employing consistent species groupings to reinforce the character of development and ambience of the parking areas.
- Special landscape treatments should identify and reinforce major commercial or office entry areas as well as primary building entry zones.
- Landscape design concepts should be sensitive to the placement of utility infrastructure (and vice versa).
- Entrances from public streets should incorporate special landscaping treatment, signage, lighting and other landscape amenities to thematically "identify" the development.
- Significant physical "focal points" of the site should be identified during the conceptual planning process, and varying scales and varieties (including seasonal diversity) of trees, ornamental shrubs and flowers should be employed to promote visual interest and quality at key nodes.
- Large open spaces, natural areas and common areas which are not likely to receive scheduled maintenance should employ low-maintenance landscape materials.
- Building clusters should be landscaped to protect solar access to residences, to protect residences from wind during the winter and to orient plantings to promote site air-flow during hot weather.
- Outdoor lighting, commercial signage, directional signage, mailboxes, accessory structures, fencing and site furnishings should be compatible with a consistent project design theme and be compatible with Smithfield architectural review guidelines.
- Bus shelters of compatible architectural styling should be provided at major roadway entries into commercial and office developments, when required by the Town.

### **Open Space and Environmental Principles**

- Dominant natural features as well as sensitive environmental areas should be integrated into the design of commercial and office areas.
- Commercial and office projects should provide sufficient levels of open space, conservation areas, parks and other recreation areas for its employees and visitors.
- Greenbelts along active, external transportation routes should be incorporated into the open space system.

- Grassed swales should be employed for storm drainage, where possible, with structural outfalls located well above the floodplain limits.
- Parking lot drainage designs should seek to minimize cumulative runoff concentrations.
- Stormwater management facilities should be integral to commercial and office designs, emphasizing both water quality and runoff quantity control principles as well as minimizing the impacts on sensitive environment areas.
- All electric and telephone utility lines should be placed underground with above ground appurtenances and service areas screened, bermed and/or landscaped from public view, where possible.
- Screened and landscaped on-site storage areas for refuse and wastes should be provided for easy and safe access to the residents.
- A landscaped "backdrop" should be established along the rear property lines of commercial development, with landscaping compatible with the screening needs of adjacent land uses. Areas should employ well coordinated site engineering and landscape design expertise which is sensitive to CBLAD and other regulatory criteria.

#### **Architectural Design Principles**

- Design guidelines of the Review Board Committee for historic districts and tourism corridors should be followed where applicable.
- New commercial and office buildings should be of a consistent massing and scale within each grouping or building cluster.
- Retail and office building types should be selected and sited with sensitivity to and respect for the existing terrain and natural features of the site.
- Similar and visually compatible architectural materials should be utilized within a given cluster of commercial buildings.
- Within higher density commercial and office developments, a consistent design theme should be pursued, while avoiding repetitious façade treatments from building to building.
- Unit siting should employ varied frontage setbacks and sensitivity to existing terrain.
- Primary building entries should be segregated from service oriented entries.
- Siting of commercial buildings should consider clustering units around courtyard-like areas to reinforce the scale of the area and visual appeal from building approaches.
- Commercial architecture and landscape designs should embrace sustainability principles and consider energy conservation in site planning.

## D. Mixed Use Development

### General Site Planning Principles

- New mixed use development should be compatible with the adopted Comprehensive Plan.
- New mixed use development should be designed in a scale compatible with adjacent development and street systems.
- Residential development densities and non-residential development intensities should be performance-oriented, with total land use yields based on the "net developable area" concept; site planning should be preceded by extensive environmental analysis.
- Buildings should be clustered to conform to the Plan's goal of siting units in the most developable areas (planning sub-areas) and restricting development in sensitive environmental areas.
- Projects to be considered as a "TND" mixed use community shall promote compact, mixed use development with an efficient town or village scale, massing, density and infrastructure configuration which integrates diversified uses both within close proximity to each other and within individual buildings, where appropriate.
- A mix of uses shall be encouraged within blocks in the community and within individual buildings located within the block. However, a vertical integration of uses within a building shall not be the sole determination of a true mix of uses within a block or neighborhood.
- Site planning should evaluate and respond to solar-siting opportunities and other energy conservation site planning techniques.

### Transportation Design Principles

- Transportation planning should utilize a hierarchical system of internal roadways, incorporating both public and private streets, as well as public and private parking areas.
- Streets should be designed to achieve a hierarchical system of urban and village-scaled streets employing traditional neighborhood traffic and transportation standards as well as flexible geometric criteria
- Grid street patterns shall be encouraged where environmental features within the subject property allow.
- Private drives and parking areas should be coordinated with the street system.
- Streets and parking bays should be designed with minimal disturbance of the natural environment and should be sensitive to excessive earthwork and steeply sloped terrain features.

- Interior street alignments should reinforce an appropriate sense of scale relative to the proposed development massing and should provide multiple points of interconnection with other streets in the neighborhood.
- A street and parking area signage system should provide for clear directions and safe movement throughout the planned development.
- On-street parking shall be encouraged and may be counted towards the minimum parking requirements within a community.
- Shared parking among uses with compatible peak demand periods shall be encouraged.
- Private off-street parking areas should be buffered and landscaped to the extent possible from primary views from public streets.
- Interior parking areas as well as private driveways and loading areas should provide adequate turnaround areas for emergency and delivery vehicles.
- Sidewalks should be provided for pedestrian access (emphasizing handicap access needs) from buildings to parking areas and adjacent properties.
- Public utilities should be accommodated, to the extent possible, within proposed street rights-of-way.
- Streets, private travelways and parking areas in commercial and office developments should be oriented in order to maximize southern (solar) exposure and other energy conservation practices for commercial buildings to the extent possible.
- Public street alignments as well as private drives and parking should not adversely impact the sensitive environmental areas, as defined by the Comprehensive Plan.

### **Landscape Design Principles**

- Existing quality vegetation should be preserved and organized into a comprehensive community landscape design program.
- "Street trees" should be located along both public and private mixed use streets, using consistent groupings of species compatible with the supporting ecology and indigenous habitat.
- Shade trees should be provided in landscaped medians in all parking lots, employing consistent species groupings to reinforce the character of development and ambience of the parking areas.
- Special landscape treatments should identify and reinforce major commercial or office entry areas as well as primary building entry zones.
- Landscape design concepts should be sensitive to the placement of utility infrastructure (and vice-versa).
- Entrances from public streets should incorporate special landscaping treatment, signage, lighting and other landscape amenities to thematically "identify" the project.

- Significant physical "focal points" of the site should be identified during the conceptual planning process, and varying scales and varieties (including seasonal diversity) of trees, ornamental shrubs and flowers should be employed to promote visual interest and quality at key nodes.
- Large open spaces, natural areas and common areas which are not likely to receive scheduled maintenance should employ low-maintenance landscape materials.
- Building clusters should be landscaped to protect solar access to residences, to protect residences from wind during the winter and to orient plantings to promote site air-flow during hot weather.
- Outdoor lighting, commercial signage, directional signage, mailboxes, accessory structures, fencing and site furnishings should be compatible with a consistent project design theme and be compatible with Smithfield architectural review guidelines.
- Bus shelters of compatible architectural styling should be provided at major roadway entries into commercial, office and mixed use developments, when required by the Town.

#### **Open Space and Environmental Principles**

- Dominant natural features as well as sensitive environmental areas should be integrated into the design of commercial and office areas.
- Mixed use projects should provide sufficient levels of open space, conservation areas, parks and other recreation areas for its residents, employees, shoppers and visitors.
- Greenbelts along active, external transportation routes should be incorporated into the open space system.
- Grassed swales should be employed for storm drainage, where possible, with structural outfalls located well above the floodplain limits.
- Parking lot drainage designs should seek to minimize cumulative runoff concentrations.
- Stormwater management facilities should be integral to mixed use community designs, emphasizing both water quality and runoff quantity control principles as well as minimizing the impacts on sensitive environment areas.
- All electric and telephone utility lines should be placed underground with above ground appurtenances and service areas screened, bermed and/or landscaped from public view, where possible.
- Screened and landscaped on-site storage areas for refuse and wastes should be provided for easy and safe access to the residents.
- A landscaped "backdrop" should be established along the rear property lines of commercial development, with landscaping compatible with the screening needs of adjacent land uses. Areas should employ well

coordinated site engineering and landscape design expertise which is sensitive to CBLAD and other regulatory criteria.

### **Architectural Design Principles**

- Design guidelines of the Review Board Committee for historic districts and entrance corridors should be followed where applicable.
- The Town should consider the introduction of a form-based code to regulate the construction of new buildings within mixed use communities.
- New commercial and office buildings should be of a consistent massing and scale within each grouping or building cluster.
- Mixed use building types should be selected and sited with sensitivity to and respect for the existing terrain and natural features of the site.
- Similar and visually compatible architectural materials should be utilized within a given cluster of commercial buildings.
- Within higher density developments, a consistent design theme should be pursued, while avoiding repetitious façade treatments from building to building.
- Unit siting should employ varied frontage setbacks and sensitivity to existing terrain.
- Primary building entries should be segregated from service oriented entries.
- Siting of buildings should consider clustering units around courtyard-like areas to reinforce the scale of the area and visual appeal from building approaches.
- Commercial architecture and landscape designs should embrace sustainability principles and consider energy conservation in site planning.

### **Traditional Neighborhood Development**

Within this Comprehensive Plan, the Town seeks to emphasize the need for and indeed, encourage new development of traditional neighborhood development and “smart growth” in Smithfield. This approach to land development represents a departure from the traditional suburban interpretation of zoning practices in that it promotes compact, mixed-use development with an urban scale, massing, density and infrastructure configuration. Such projects should integrate diversified uses within close proximity to one another as well as within the same buildings, where appropriate. The dominant goal for this new initiative is to provide the urban infrastructure and amenities which are essential to establishing a community which provides economic opportunity within the context of social, physical and environmental sustainability. Key to the successful implementation of these types of neighborhoods are the encouragement of pedestrian movement and inviting public open spaces which so often enable the civic interaction deemed critical to vibrant neighborhoods.



The Town should seek to introduce and adopt a new "Traditional Neighborhood Overlay Option" zoning district to implement this significant urban design objective. This overlay district would enable applicable projects to be submitted and considered for approval as a land use option within any of the Town zoning districts pursuant to the additional regulations and enhanced design criteria established in the proposed Ordinance. Each proposed "Traditional Neighborhood Overlay Option" project shall be guided by the appropriate land use planning designation included in this Comprehensive Plan, and shall be governed by the overlay requirements included in the proposed overlay district, the underlying zoning districts, a submitted Master or General Development Plan, a submitted Code of Development, and the applicant's proffers which may be attached thereto.

Projects to be considered as a "Traditional Neighborhood Overlay Option" shall promote compact, mixed-use development with an efficient town or village scale, massing, density and infrastructure configuration which integrates diversified uses both within close proximity to each other and within individual buildings, where appropriate. The dominant goal for the "Traditional Neighborhood Overlay Option" is to clearly define and establish the foundational infrastructure and urban design elements within the context of social, civic, economic, and environmental sustainability. Applications to be considered under the "Traditional Neighborhood Overlay Option" shall integrate into its Code of Development and General Development Plan the following principles:

- 1. Centers:** The "Traditional Neighborhood Overlay Option" development must establish a thematic, axial, and socially functional "center," and shall include an integrated "core" identity for the total project. It should provide urban (or village) spaces organized into civic spaces, squares, greens and parks. The concept of establishing a "center" should be evaluated from both a local and regional perspective, recognizing the cultural and historic traditions and integrity of Smithfield land use.
- 2. Open Space and Recreation:** The project shall provide a mix of well organized open spaces, recreation and entertainment elements which foster a pedestrian-friendly environment. Both formal and informal spaces are encouraged. Open spaces should give deference to the quality of spatial treatments as opposed to the quantity of open spaces. Recreation may be construed to be served by either indoor or outdoor facilities.
- 3. Network:** The project shall emphasize and incorporate a system of coordinated, interconnecting streets, sidewalks and pedestrian facilities. Streets should be designed to achieve a hierarchical system of urban and village-scaled streets employing traditional neighborhood traffic and transportation standards as well as flexible geometric criteria. At appropriate locations, bus and public transit opportunities and services should be coordinated with the project. Private streets are encouraged where they improve the applicant's ability to achieve commonly accepted TND transportation objectives which cannot be otherwise achieved

via public streets. Pedestrian facilities should be linked to the adjoining neighborhoods within Smithfield.

**4. Mixed Uses:** In addition to a commercial and service component, other appropriate urban uses shall be integrated into the town center. A mix of offices, lodging, restaurants, recreation, freestanding residential dwellings, upper level residential uses in commercial structures, institutional buildings and public uses should be considered and tested for site accommodation and market feasibility.

**5. Building Placement and Scale:** The architectural styling, massing, heights, orientation, rhythm, color and materials of the project's buildings should be sensitive to the "Smithfield scale and texture" as well as other traditional neighborhood architectural design principles, with an emphasis on a "user friendly" street environment. Plazas, "greens" and squares should be incorporated, where feasible.

**6. Alleys and Minor Streets:** The use of alleys and minor urban or village-scaled streets, (either public or private), should be included in the project's transportation approaches to achieve efficient block organization, intra- and inter-block access patterns and traffic distribution.

**7. Relegated Parking:** The project should be designed with on-street parking within the designated mixed-use and commercial areas of the "Traditional Neighborhood Overlay Option" while other designated parking areas should be "buffered" from the dominant pedestrian linkages and located to the rear or sides of buildings, where possible. On street parking may be achieved on either public or private streets.

**8. Variety of Housing Types:** The incorporation of a mix of residential uses compatible with the "Smithfield style" is encouraged within each "Traditional Neighborhood Overlay Option" district. In addition to single family residences, multi-family dwellings, upper level residential "flats" above commercial structures and garages, and other forms of innovative urban residential dwellings should be considered. A proliferation of repetitive, similarly sized and decorated "McMansions" are not the "vision" for these projects. Appropriate levels of affordable workforce housing should be considered.

**9. Appealing Streetscapes:** The "Traditional Neighborhood Overlay Option" district should be designed as an exemplary New Urbanism streetscape, applying tested traditional and vernacular elements. The project master planning process should evaluate, test and apply, where feasible, elements such as roundabouts, paved crosswalks, urban street tree landscaping, plazas and squares, and traditional street hardscapes (such as high quality street lighting, benches, pavements, and signage). Buildings should form a consistent, distinct edge which defines the border between the street and the block.

**10. Transportation and Pedestrian Options:** The project should be convenient to pedestrians, bicyclists and buses. Pedestrian movements within the project must be accommodated via safe, friendly and well landscaped paths and walks.

**11. Architectural Character:** Architectural and landscape designs should respond to the unique character and tradition of the “Smithfield style” and the traditions of historic Virginia residential design. While not encouraging repetitive forms, architecture within the “Traditional Neighborhood Overlay Option” district should recognize and uphold principles of integration in the massing, scale, rhythm, color and materials of buildings throughout the project.

**12. Market Feasibility:** The project shall make economic sense in that it can be demonstrated that its mix and intensity of land uses are organized to serve the existing and future marketplace located within Smithfield and the greater sphere of influence of the project. Principles of demographic and economic sustainability should be applied in the selection and organization of land uses, notwithstanding the acknowledged goal that project uses should not compete with the downtown business and retail uses.

*Code of Development: Application Requirements*

In order to optimally integrate the flexibility offered by the “Traditional Neighborhood Overlay Option” with the regulations contained in the underlying conventional zoning districts, zoning approval shall be subject to and governed by a Code of Development which establishes the major regulating elements for the project. It shall be the responsibility of the applicant to prepare and proffer a Code of Development for the project which supplements the General Development Plan. The objective of the Code of Development is to promote both:

- (1) *Flexibility in establishing the location, mix of uses and densities within the “Traditional Neighborhood Overlay Option” district and*
- (2) *Codification of the unifying and regulating guidelines for each location, use and density.*

The Code of Development shall address and incorporate the following:

**1. Regulating Block Plan and Master Plan** which establishes the framework for the project’s development plan, including the internal block and planning area configuration, the master plan for proposed uses, the general allocation of uses to each block or internal planning area as related to the uses prescribed in the conventional underlying Smithfield zoning categories (residential, commercial, service, shopping center areas and industrial areas), street and alley locations, block size and organization, “build to” lines, and the conceptual approach to the subdivision of private building lots as well as tracts for recreation, park, civic and public spaces.

**2. Urban Regulations** which establish the following for each internal block or planning area: permitted land uses, and land use exclusions (in terms of specific uses to be excluded), generalized building type(s), building densities, frontage “build-to lines”, minimum and maximum lot and yard dimensions, lot coverage ratios, building heights, sidewalk and pedestrian guidelines, parking criteria, and other use requirements. These regulations serve as a form of “mini-zoning ordinance” for each internal block or planning area within the project.

**3. Architectural and Landscape Guidelines** which define the characteristics of urban design and landscape architectural improvements proposed for each Block or Planning Area within the district. The guidelines shall include conceptual representations of planned architectural themes, building massing, scale, and materials as well as identification of planned landscape treatment of streets, civic spaces, open areas, parking areas, and other activity centers within the “Traditional Neighborhood Overlay Option” district. Where applicable, the Architectural and Landscape Design Guidelines and companion master plan should be reviewed by the Board of Historic and Architectural Review (or other design review entity constituted by the Council) as the criteria by which subsequent BHAR applications would be reviewed and processed during the implementation phases (i.e. subdivision and site plan submissions) of the project.

**4. Street Classification Plan and Design Regulations** which provides the design intent and criteria for the types of vehicular and pedestrian access improvements as well as other major infrastructure components within the project. The street classification plan and design regulations shall address the following: street types and classifications, street widths, parking dimensions, parking and loading standards, intersection configuration and details, sidewalk and path locations, mass transit accommodation, and the proposed urban design criteria and engineering standards for hardscape improvements, sidewalks, paths, street lights, signage, utilities, street trees and landscaping for each block and street.

Transportation design criteria for the above shall be based on the applicant’s traffic impact assessment and transportation improvements analysis. A determination of street ownership (public or private) and maintenance responsibility shall be included for each street type. Waivers and standards relating thereto shall be established for the location of utility easements within public and private rights-of-way.

### **Historic District Design Guidelines**

Smithfield currently has in place a fairly vigorous set of design standards which are applicable to its identified historic structures. In 1979, the Town established a Local Historic District designed to provide protection against the destruction of historic and architecturally significant areas, buildings, monuments or other features which contribute to the cultural, social, economic, political, artistic or architectural heritage of Smithfield. A Historic Preservation (HP-O) District Ordinance was also adopted in 1979 and established an overlay district within the Town’s existing zoning ordinance that incorporates the boundary defined by the Local Historic District. The Historic Preservation District provides for the review of certain changes that affect

the appearance of buildings located in the Local Historic District (and thus, within the HP-O District) by the Town's Board of Historic and Architectural Review. This district has been augmented by formal design guidelines, *Smithfield, Virginia Historic Design Guidelines*, first published in 1990. In 2006, Frazier and Associates of Staunton, Virginia developed an update of the guidelines. These guidelines stand today as a valuable means of identifying what is valuable and worth preserving in the district. The application of this district is intended to create an atmosphere for compatible growth for future generations, to prevent the intrusion of environmental influences adverse to such purposes and to insure that new structures and uses will be in keeping with the character and scale of the HP-O District. The underlying zoning classifications, however, still govern the basic site features such as setbacks, lot sizes, height and use. A more thorough summary of the Historic District and the applicable design guidelines is provided within the Plan in Chapter VII. *Historic Areas Plan*.

The protection of the Local Historic District has helped the Town to stabilize and improve property values, protect and enhance the Town's attractiveness to tourists and visitors and support and stimulate complimentary development appropriate to the prominence afforded properties included in the district. Benefits attributable to the promotion of superior design and appearance of structures constructed within this district will ultimately promote the public health, safety and general welfare of the citizens of Smithfield.

### **Entrance Corridor Overlay District Guidelines**

In order for the Town to continue its ongoing success in protecting local historic resources and indeed, the heritage of Smithfield, it must respond to the new challenges confronting design issues in and around the Historic District. One of the most pressing of these new challenges focuses upon the impact of new development on the major transportation arteries leading into and out of the Downtown Area. As development pressures continue to increase in the region, additional urban design measures are needed to protect the Town's major entrance corridors. A major emphasis of the development of the 1999 Plan was the recognition of the unique character of the Town's entry corridors and arterial roads which serve as the gateways to Smithfield's historic district, points of tourism or cultural destinations. The Town identified five such major entrance corridors:

1. *U.S. Route 258 from the west;*
2. *State Route 10 Bypass from the north;*
3. *State Route 10 Business from the north;*
4. *State Route 10/U.S. Route 258 from the southeast; and*
5. *Battery Park Road (Route 669) from the east.*

The 1999 Comprehensive Plan concluded that major entrance corridors leading into the Town and to the Downtown Area in particular should be articulated, offering a clear message that one is entering Smithfield. These entrances should offer a contrasting image from the surrounding commercial corridors and countryside. The corridors connecting the gateways and the Downtown should also offer a degree of visual continuity as distinct from their more suburban or rural sectors, thereby enhancing the unique image of the Town.

As a means of effectively protecting its valuable entrance corridors, the Town introduced design control measures for these corridors and gateways in order to stimulate complementary new development which will be compatible with Smithfield's historic character and which will enhance the Town's attractiveness to tourists, visitors and its residents. The recommended *Entrance Corridors Overlay (ECO) District* was established in accord with Section 15.1-503.2 of the Code of Virginia, as amended, to maintain, preserve, protect and enhance the historic character, cultural significance, economic vitality, visual quality and architectural excellence of the Town. The application of this district was intended to insure that the major existing and planned routes of tourist access, as well as other public access to the Town's local historic area are developed and maintained in a harmonious and compatible manner. The EC-O District regulations are designed to promote an atmosphere for compatible growth for future generations, to prevent the intrusion of land use and environmental influences adverse to such purposes, and to insure that new structures and uses will retain the character of both the proposed EC-O District and the HP-O District. Furthermore, the establishment of this new district would fulfill the Plan's goal of recognizing the unique character of the Town's entrance corridors and arterial roads which serve as the gateways to Smithfield's historic districts, points of tourism or cultural destinations.

As development patterns have evolved since the last Plan was adopted, new corridors have emerged as potentially warranting similar entrance corridor regulatory control. Two of these are deemed worth of Town consideration for inclusion as additional corridors to be added to the overlay district. These are:

1. *Great Springs Road from the south; and*
2. *Cary Street from the north.*

Both of these streets link outlying Town areas directly to the Historic District and its entrance corridors. Further, they both provide direct access to strategically located properties boasting significant developable potential lying either in the Town or just outside the Town boundary. Market demand has yet to direct significant new development to these strategic parcels as of the adoption of this Plan; however, it would be wise for the Town to plan for future growth along these corridors and apply its corridor design guideline tools to any future development requests potentially impacting these corridors.

### Establishment of Corridor Design Guidelines

Since the last Plan was adopted in 1999, the Town has also implemented new design guidelines for these identified entrance corridors. The intent of these guidelines is to encourage the improvement of the architectural and visual character of these major corridors, to prevent the intrusion of adverse environmental influences and to create an atmosphere for compatible future growth. Within the guidelines, the Town has established site design, landscape, signage and architectural design guidelines for the Town's major entrance corridors in order to establish a definitive set of measures that property owners and Staff can rely on with respect to the corridors. The main purpose of these guidelines is to improve the function and safety of the corridors, promote their aesthetic qualities and enhance the economic viability of the Town.

The Corridor Overlay Design Guidelines focus attention on the importance of the relationship between the entrance corridors and the Historic District, and specifically upon the role the corridors play in protecting the Historic Area and attracting attention and visitors to it. Within this context, the Guidelines place heavy emphasis on the following objectives outlined for the ongoing role of each entrance corridor:

- *Mark distinct entrance points to the historic area;*
- *Preserve viewsheds and important landmark views;*
- *Provide visual clues which draw visitors to the Historic Area;*
- *Create a strong sense of arrival to the historic area through the use of distinctive signage; and*
- *Achieve consistency in streetscape through simplicity of design and repetition of common landscape and streetscape elements*

The corridor design guidelines also provide specific guidance on the regulation of the following issues:

- *Corridor Regulation and Zoning Considerations*
- *Right -of-Way Design Considerations*
- *Maintenance, repair and new construction within the Corridor Protection Districts*
- *Site Design*
  - A. *Parking Setbacks*
  - B. *Parcel Access and Curb Cuts*
  - C. *Driveways*
  - D. *Site Entrances*

- *Driveway and Parking Lot Design*
- *Parcel Sidewalks*
- *Pedestrian Amenities and Outdoor Dining Areas*
- *Site Lighting*
- *Dumpsters, Equipment and Service Areas.*
- *Landscape Design*
- *Parking Lot Landscaping*
- *Building Perimeter Zones*
- *Subdivision Entrance Landscaping*
- *The feasibility of incorporating a formal greenbelt plan within the Town boundary, to be focused upon the primary entrance corridors*
- *Specific phasing, priority and funding recommendations for entrance gateway improvement projects*
- *Specific phasing, priority and funding recommendations for corridor landscape improvement projects*

The Town should also work with the County to cooperate in the extension of the application of corridor overlay design guidelines to those portions of the identified entrance corridors which extend outside of the Town's corporate limits. As growth pressures continue to press into the County service districts surrounding the Town, it will become increasingly important for the Town and the County to coordinate in the review and regulation of future development which will impact the future form and function of these important gateways and entrance corridors leading to the area "between the bridges" in Smithfield.

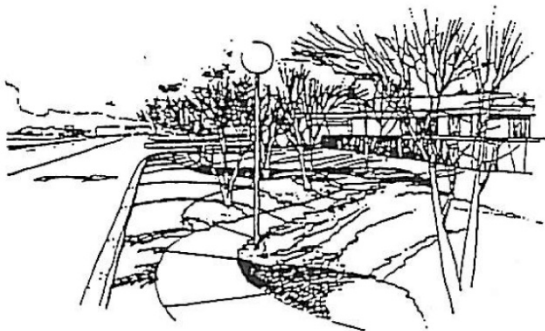


### **Corridor System Options**

The four general categories of “corridor system options” for exurban, suburban and urban streets are presented in tabular form on the following pages. These are to be employed by Town planners, VDOT officials, traffic engineers, transportation planners and urban design professionals for use in undertaking subsequent individual design programs on the Town’s major streets (both old and new).



1. *Exurban*



2. *Suburban*



3. *Urban*

**CORRIDOR SYSTEM OPTIONS**  
**Planning Elements for Smithfield Entrance Corridors**

**I. PUBLIC RIGHT-OF-WAY AND TRANSPORTATION ELEMENTS**

*Corridor System Options*

Palette of Elements	1 Exurban	2 Suburban	3 Urban
A. Arterial Section and Paving	2-4 Lane Roads Graded Shoulder	2-4 Lane Roads Paved Shoulder	2-4 Lane Roads Curb and Gutter
B. Median Design Delineated	Open, Not Delineated No Curb and Gutter	Varies; Delineated No Curb and Gutter	Consistent; Curb and Gutter
C. Intersection Character	Uncontrolled Design Single Turn Lanes	Design Limitations Single Turn Lanes	Strict Controls Multiple At-Grade Lanes
D. Pedestrian Facilities	None	Limited Sidewalks Occasional Paths/Asphalt	Organized Sidewalks Bike Paths/Concrete
E. Transit Facilities	None/Regional Scale	Dispersed Designed Stops	Formal/High Usage Multiple Stops/Terminals
F. Public Signage	Minimal Signage Rusticated Local Signs	Unorganized Non-Unified Design	Organized Unified Design
G. Private Access Control	Uncoordinated Minimal Design Standards	Loosely Coordinated VDOT Standards	Coordinated/Controlled VDOT Urban Standards
H. Storm Drainage	Median Ditches Shoulder Ditches/Swales	Mixed Ditches/UG Structures	Underground Structures
I. Electric/Telephone	Above Ground Overhead	Mixed: Underground and Overhead	Organized: Underground
J. Public Street Lighting	None	Lighting: Density Intersection/Area Lighting	Uniform/Organized Formal Street Lighting
K. Traffic Volumes	Low ADT High PHV LOS	Moderate ADT Adequate PHV LOS	High ADT Stressed PHV LOS
L. Traffic Signalization and Controls	Little or None Institutional Only	Informal Facility Demand Based	Formal/Organized System Flow Based

**CORRIDOR SYSTEM OPTIONS**  
**Planning Elements for Smithfield Entrance Corridors**

**II. STREETScape AND LANDSCAPE CHARACTER**

*Corridor System Options*

Palette of Elements	1 Exurban	2 Suburban	3 Urban
A. Median Landscaping (Public)	Natural/Limited Cultivation Minimal Maintenance	Opportunities for Cultivation Minimal Maintenance	Formal/Highly Cultivated High Maintenance
B. Edge Landscaping (Public)	Cultivate Existing Selective Clearing/Planting	Pockets of Emphasis Add Plantings/Cultivate Existing Planting Beds	Formal/Street Trees
C. Frontage Landscaping (Private)	Limited/Optional/By Owner Informal/Uncoordinated	Occasional/By Owner Limited Coordination	Frequent/Hardscape Required by Ordinance
D. Gateways/Emphasis Areas	Evolve Historically Institutional/Cultural Basis	Private Development Commercial/Market Place	Urban/Formal Themes Driven by Urban Elements
E. Signage (Public)	Minimal Signage Rusticated/Local Flavor	Free Standing Loose Organization	Dense/Cluttered Demand Organization
F. Signage (Private)	Limited Design Control Rusticated/Uncoordinated	Free Standing/Uncoordinated Ordinance Driven	Grouped/Coordinated Ordinance Driven
G. Visual Continuity	Dictated by Landforms, Views Vegetation & Villages	Limited, Difficult to Achieve Dictated by Ordinance	Dictated by Urban Form, Density, & Guidelines
H. Street Furnishings/ Urban Hardscape	None	Disparate; Limited, Private Parks, Institutions	Frequent; Public/Private Transit, Plaza, Parks
I. Lighting	None or Private Security Related	Limited Public; Private Dictated by Marketplace	Formal Public; Private Dictated by Ordinance
J. Open Space	Expansive; Unorganized Driven by Market & Zoning	Fragmented; Unplanned Driven by Market & Zoning	Limited; Planned Driven by Zoning, Public
K. Parking	Private Parking; Unorganized Front Yards	Private; Organization via Market & Zoning	Private via Zoning/\$\$\$ Public via Politics/\$\$\$

**CORRIDOR SYSTEM OPTIONS**  
**Planning Elements for Smithfield Entrance Corridors**

**III. CORRIDOR LAND USE ORGANIZATION AND ARCHITECTURAL FORM**

*Corridor System Options*

Palette of Elements	1 Exurban	2 Suburban	3 Urban
A. Land Use	Large Lots/Mixed Use Uses: Grandfathered	Med. Lot Size/Mixed Use Uses: Zoning Stimulus	Small Lot Size/Mixed Use Zoning & Design Stimulus
B. Parking Organization (Private)	Fragmented; Minimal Naturally Screened/Front Yard	Organized by Use/Visibility Limited Screening	Well Organized/Dense Side or Rear Lot
C. Architectural Character	Local, Very Diverse Unorganized	Franchise Driven Design Market Driven	Perceived Organization Materials, Massing
D. Site Density/Intensity	Low Few Controls/Zoning	Medium Limited Controls/Zoning	High FAR Driven Density
E. Quality of Facades	Range: Age, Economic Vitality	Range: Age, Economic Vitality	Range: Age, Design Guidelines
F. Geometry and Materials	Informal/Unorganized No Guidelines	Semi-Formal/Range Minimal Guidelines	Formal/Masonry Urban Guidelines
G. Adaptability of Structure	Low Code Difficulty	Medium Age, Mass, Site	High Flexible Design
H. Facility Age/ Economic Life	Broad Range (Trailers - Estates)	Short to Medium Term (Shopping Centers)	Medium to Long Term (Urban Core)
I. Use Sustainability (Life Cycle)	Range Dictated by Age, Market	Limited Reuse Potential Dictated by Age, Market	Good Reuse Potential Dictated by Age, Market
J. Historic/Cultural Significance	Rural Heritage Unthreatened	Dictated by Landmarks Threatened	Urban Heritage Controlled
K. Continuity with Adjacent Uses	Low; Broad Diversity Uncontrolled	Clustered; Controlled by Zoning & Ownership	Diversity of Adjacent Uses

**CORRIDOR SYSTEM OPTIONS**  
**Planning Elements for Smithfield Entrance Corridors**

**IV. PUBLIC/PRIVATE IMPLEMENTATION AND FUNDING**

*Corridor System Options*

Palette of Elements	1 Exurban	2 Suburban	3 Urban
A. Zoning and Planning	Unsophisticated Few Design Controls	Strip Frontage Controlled by Site Plan	Urban Core; Extensive Zoning and Design
B. Land Use Management Political Support	Laissez Faire Limited Support	Respond to Stimuli Bureaucratic	Good Leadership Pro-Active
C. Public Infrastructure Improvements	By Locality Limited	By Private Design Per Ordinance	Public & Private Ordinance/Politics
D. Landscape Improvements	Private Only None Required	Private, by Ordinance Public, by Initiative	Private, by Ordinance Public, by Policy
E. Private Building Improvements	Private: Driven by Age, Demand, Code	Private: Driven by Age, Demand, Code	Private: per Need Public: per Initiative
F. Public Project Fiscal Planning	CIP: Major Projects Only (Roads, Schools, Sewer) No Urban Design	CIP: Major Projects Grants: Special Projects Limited Urban Design	CIP: Major Projects Grants: Pro-Active Frequent Urban Design
G. Private Project Fiscal Planning	CIP: None None	CIP: Remote Grants: Limited	CIP: Public Incentives Grants: Sponsorship
H. Special Fiscal Fiscal Planning	Service Districts: Politically Infeasible	Service Districts: Marginally Feasible	Service Districts Frequently Employed
I. Special Planning & Zoning Tools	Corridor Overlay Districts, Design Guidelines, Performance Zoning: Marginally Feasible	Corridor Overlay Districts, Design Guidelines, Performance Zoning: Feasible	Corridor Overlay Districts, Design Assistance Performance Zoning: Feasible; Commonplace
J. Potential to Enhance Underlying Ground Values	Limited Low Demand	Good Pockets of Opportunity	Good to Excellent Strong Market Support

*Chapter IX:*

**ECONOMIC DEVELOPMENT**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter IX:* **ECONOMIC DEVELOPMENT**

### **Introduction**

This chapter provides an update of the 1999 Comprehensive Plan's vision for maintaining and enhancing the economic vitality of the Town. With an emphasis on promoting diversity of its economic base, the 2008 Plan's purpose is to establish a renewed focus on the policies and strategies that the 1999 Plan had established for both new development and redevelopment within the Town. It is recognized that the 1999 Plan created the first contemporary, commonly-held vision for economic development in the Town. In this regard, the prior planning effort marked Smithfield's initial attempt to fully integrate economic development planning with the balance of its comprehensive planning objectives. Since 1999, the Town has made excellent progress in this pursuit.

The 1999 Plan recognized that maintaining a healthy local economy is essential to all other aspects of the community. Economic policy was embraced as the "umbrella" under which the ultimate future land use program for Smithfield should be structured. This set the course for the Plan's recommendations for a proactive "leadership" role, as opposed to "reactionary" role, for Town officials. The 2008 Comprehensive Plan is an attempt to further advance and enhance this effort to best respond to the challenges of a new century.

The findings and recommendations of this chapter are supported by detailed economic and demographic analyses of the Town and region, with the findings of this research summarized in Chapters III, IV and V of the 2008 Smithfield Comprehensive Plan document. This updated analysis has guided the establishment and refinement of the major and minor economic development goals contained in the 1999 Comprehensive Plan. In addition to the specific goals, six major policy categories offer an updated focus on the desired vision, guidance and initiatives for economic development at the beginning of the 21st century. Finally, a strategy for implementation is emphasized which supports an expanded focus on an office for economic development in the Town which would be committed to implementing the pro-active initiatives of this Plan.

### **Basis for Economic Development Planning**

Virginia enabling statutes provide local governments with the legal framework for economic development planning, and the legislation sets reasonably broad powers for the locality to develop plans and establish policies for economic development. As stated by the statutes:



*“The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants.”*

### **The Important Questions**

Economic development planning is *“a process intended to create wealth by mobilizing human, physical, natural and capital resources to produce marketable goods and services”*. The real challenge for the 2008 Comprehensive Plan is to answer the following difficult questions:

*“How do we do this in the 21st Century with dwindling resources, limited geographical area, and strong regional competition? At the same time, how do we do this without compromising the Plan’s goals for the environment, the waterfront, its historic and cultural resources, and transportation facilities in the Town?”*

The Town desires to extend and expand its economic base in a manner consistent with community values. In moving this process forward in the 2008 Comprehensive Plan Update, the Town leadership seeks to expand on the foundation established by the 1999 Plan and to refine Smithfield’s vision for economic growth. This leads to another subset of questions, and the answers to these questions will be fundamental to the Town’s continuing success:

1. *What is the most appropriate level of economic growth and business diversity in Smithfield for 2008-2018 period?*
2. *How much additional land should be reserved within the Town by the Future Land Use Plan for economic development?*
3. *How much land, in addition to that which is contained within the current Town boundaries, is needed to support the area’s “fair share” of regional and state-wide economic expansion?*
4. *To what extent should Town leadership be involved in leading and stimulating economic development?*
5. *How can the Town best attract a larger tourism market through continued downtown revitalization and new waterfront development efforts?*
6. *What is the optimal balance between tourism and conventional industrial enterprise in the Town?*
7. *What efforts must be taken if the Town expects to capture future regional retail and commercial markets?*
8. *How can the Town better organize new and existing industrial land uses for the betterment of the overall community?*
9. *What should the Town’s role be in the redevelopment and revitalization of underdeveloped areas?*

10. *To what level should the Town be involved in the expansion (and possible relocation) of local housing opportunities for the Town's employment sector?*
11. *How can the Town achieve proper balance amongst the often competing goals and policies for the environment, preservation, housing and the economy?*
12. *At what pace should the Town pursue a course of annexation to expand its economic development capacity and to improve its economic position within the region?*

### **Elements of the Economic Development Plan**

In the development of this chapter and supporting chapter of the Comprehensive Plan, the following elements have been considered and incorporated into the economic development strategy for Smithfield:

- *identification of general economic development goals and objectives to guide the growth management process;*
- *economic inventories of existing commerce and employment sectors, with projection of future economic growth;*
- *definition of appropriate economic development land use categories (corridor commercial, waterfront, downtown, residential/office transitional, light industry and heavy industry);*
- *establishment of appropriate economic development densities and intensities for each of the land use categories;*
- *establishment of guidelines for the appropriate mix and geographical locations for economic development uses;*
- *recommendations for transportation and urban infrastructure plans which respond to economic development goals;*
- *recommendations for specific policies, action plans and initiatives related to future economic development activities within the Town;*
- *recommendations for land use initiatives, administrative mechanisms, fiscal programs; and*
- *implementation techniques for managing economic growth.*

### **Framework for Economic Development Planning**

The 2008 Plan attempts to revisit and re-energize the 1999 Plan's approach to economic development within the broader context of its community-wide adopted goals and objectives. This approach involves a heightened awareness of the individual needs of private enterprise as well as the acknowledgement that local government can (and should) play a positive and proactive role in stimulating both the creation and the retention of local enterprise. Thus, the recommended approach presumes that the Town should assume a broader role in the conventional economic development process.

Fundamental to this expanded involvement is the recognition of certain marketplace realities, many of which are carried over from the 1999 Plan. They include:

- *the Town's predominantly single-industry employment sector has evolved from the decision made several decades ago to locate Smithfield Foods in the Town;*
- *the Town has limited economic diversity when viewed by conventional measures, with a disproportionate reliance on its one major industrial employer which has taken on a higher national profile with respect to facility locations and acquisitions;*
- *the Town enjoys a generally stable economic health tied directly to the business cycles impacting the meat processing industry. However, the business model for meat processing is expanding from a regional to a national (and international) focus.*
- *the Town's gross tax base is modest compared to its more urban neighbors in Hampton Roads;*
- *regional and state economic development marketing entities have not marketed the Town as a prime location for substantial industrial enterprises or expanded tourism;*
- *the Town has a limited number of prime sites suitable for substantial conventional industrial development and employment growth;*
- *the Town does not have a competitive advantage in community and regional-level retail shopping and in the absence of the entry of more niche-based shopping opportunities, will continue to lose its regional market share as residential sprawl continues throughout Isle of Wight County and other nearby counties;*
- *citizen attitudes are sensitive to the impacts of altering the prevailing community character and natural environment;*
- *low-paying manufacturing and retail jobs in the Town and region have created wage stagnation relative to the region which detracts from the Town's overall strengths;*

- *the Town has not optimized its “tourism” potentials within the regional marketplace to support the significant efforts made to revitalize the Downtown;*
- *the Town has not optimized the use of its ample water resources and attractive waterfront land areas which hold high potential for tourism-based enterprise; and*
- *the Town does not have sufficient land area within its corporate limits to provide the element of location choice and diversity in order to capture major industries.*

As detailed in **Chapter IV, Economy**, Smithfield’s economic base is and will likely continue to be dominated by the food processing trade sector, with an overwhelming emphasis on existing Smithfield Foods employment and related enterprises. The retail, industrial, service and government sectors account for nine out of every 10 jobs within Isle of Wight and Smithfield. Manufacturing constitutes 59% of the County’s job base. During the decade of the Nineties, retail trade has realized a modest three percent increase while the manufacturing has increased by over thirty percent. The service economy makes up approximately ten percent of today’s employment base in the area. However, this represents a 30.1% increase in employment levels of the past six years. The government employment sector (including local, state and federal offices) creates one out of every ten jobs, but has witnessed a 28.4% increase in the 1990’s. Overall employment levels in the County actually increased 23.8% during the 1990-2000 period.

### **Goals and Objectives for Economic Development**

The economic development goals for the 1999 Comprehensive Plan Update place a priority on the continued enhancement of the Town’s existing industrial base while placing a major focus on the promotion and development of new economic opportunities designed to take advantage of the Town’s water resources in order to promote regional tourism. In expanding on the Plan’s adopted Economic Development goals and objectives, the following statements represent the Town leadership’s “vision” for economic growth in Smithfield:

#### ***Primary Goal for Economic Development***

***Expand the Town’s existing economic base by exploring opportunities for economic development diversification in the areas of tourism and active recreation, as well as retail commerce and industry in order to strengthen the existing economy and generate additional revenue and employment opportunities.***

### ***Planning Objectives and Policies:***

- *Encourage new commercial retail and service development in appropriate areas in order to promote and expand the diversification of the Town's consumer-oriented economic base.*
- *Identify areas suitable for new economic development or the expansion of existing local operations, with an emphasis on long-term planning opportunities for light industrial facilities.*
- *Work with existing businesses and property owners to ensure the continued viability of the Town's existing commercial areas.*
- *Identify areas suitable for redevelopment, particularly along South Church Street and develop specific strategies on a site-by-site basis to encourage such redevelopment.*
- *Identify business linkage opportunities within the existing marketplace, and actively promote Smithfield as an ideal location for the future location of firms and industries that could properly take advantage of these opportunities.*
- *Encourage adaptive re-use within the Town's downtown areas, emphasizing architectural quality and compatibility.*
- *Identify sectors within the local retail marketplace in which local spending is "leaking" to surrounding localities, and actively promote the development of new and specialty retailers to take advantage of market niche opportunities.*
- *Conduct feasibility studies to determine the appropriateness of future annexation as a means of increasing the Town's tax base and limited geographical area remaining for economic development.*
- *Create and budget for a position on the Town Staff devoted entirely to a person to lead economic development, including the active promotion of tourism, recruitment of industry, management of events and volunteerism, strengthening the downtown merchant organization, pursuing grants, and carrying out the initiatives of the Town Manager and Town Council.*
- *Initiate a feasibility and master plan study of the Windsor Castle property for potential future use as a tourism destination, town park, and recreational activity center. Various land use options should be considered within the context of the suitability of the property as a location to serve potential income-generating local and regional demands for expanded parks and recreation uses.*

## **Economic Development Policies and Initiatives**

In response to the goals listed above, a broad range of strategic planning opportunities and implementation policies were evaluated during the Comprehensive Plan Update. These policies explore different perspectives and options for the Town's leadership and expanded involvement in economic development. State and regional coordination is deemed an essential factor in establishing economic policy, as was close cooperation with public and private entities associated with local and regional tourism, industry and other forms of business recruitment.

The following six policy categories explore a range of *recommended activities and initiatives* that are to be employed by the Town in constructing its expanded economic development program to be embraced by the 2006 Comprehensive Plan:

### ***Policy 1:***

**Promote recognition and the active retention of existing businesses in Smithfield, with an emphasis on assisting small businesses and creating expanded employment opportunities.**

#### *Recommended Activities and Initiatives*

- 1.1 Promote new and expanded retail and related business development in the Downtown and waterfront areas of the Town.
- 1.2 Support the redevelopment of underdeveloped properties in the Redevelopment Areas identified in the Land Use Plan. Wherever feasible, undersized lots should be consolidated to allow sufficient acreage for the expansion of existing businesses or the entry of new enterprises into the area that respect the adjacent land uses and meet the goals and objectives established in this Plan with respect to Economic Development.
- 1.3 Coordinate with the Chamber of Commerce, the downtown merchants' association, and other groups in establishing strategies for the retention, expansion and coordination of activities of existing businesses in the Town.
- 1.4 Work with the Chamber of Commerce and other groups in establishing public awareness and awards programs to recognize small businesses within the Town for "excellence" in such topical areas as marketing, business appearance, customer satisfaction, redevelopment and revitalization efforts, signage improvements and advertising.
- 1.5 Continue liaison and coordination with Smithfield Foods, Incorporated to assess direction and impact on the Town of its future industrial growth opportunities.

- 1.6 Establish an Office of Economic Development within the Town to serve, coordinate, promote, and facilitate efforts and programs to support local business.

***Policy 2.***

**Encourage economic development while creating growth management incentives which increase the attractiveness of the Town for new enterprise and which protect the Town's cultural identity, historic character, natural resources and waterfront environment.**

*Recommended Activities and Initiatives*

- 2.1 Utilize the Future Land Use Map of the Comprehensive Plan to promote economic development activities within the Town.
- 2.2 Rezone prime economic development properties identified by the Comprehensive Plan as having the best development potential in the near planning term in order to have adequate inventory of marketable economic development properties.
- 2.3 Establish land use standards and design guidelines for economic development activities which respect the goals for community character and environmental preservation.
- 2.4 Prepare a natural resources master plan and develop an environmental protection program for the Town's sensitive environmental areas.
- 2.5 Implement a comprehensive study of the Town's potential to annex surrounding land to facilitate the above initiatives.
- 2.6 Establish an Office of Economic Development within the Town to serve, coordinate, promote, and facilitate efforts and programs to attract appropriate enterprise.

***Policy 3:***

**Develop tourism as a major, but appropriately balanced, economic development orientation by pursuing programs and initiatives which emphasize continued downtown revitalization, active and passive recreation facilities, and waterfront enterprise development.**

*Recommended Activities and Initiatives*

- 3.1 Direct and support activities in establishing specific strategies and plans for marketing and public relations for future tourism and waterfront development.

- 3.2 Direct and support the State and region promotional efforts and long-range plans initiated to maintain and expand its entertainment, cultural, educational and lodging opportunities.
- 3.3 Promote the Smithfield Center as a regional conference center. Work closely with Smithfield Foods to coordinate conferencing and community promotional activities around its corporate priorities.
- 3.4 Expand the existing lodging presence in Smithfield in order to provide the hotel or motel facilities needed to support the Town expanding tourism and conference activities.
- 3.5 Work with local enterprise, institutions and community groups to define ways to promote entertainment opportunities which are attractive to both citizens and tourists, and to cultivate local “special events” for such activities as festivals, water resource activities, golfing events, arts/crafts shows and other revenue-generating events.
- 3.6 Explore the feasibility of acquiring a suitable waterfront site that would support a public marina offering additional public access to the Pagan River, a much needed asset in the community.
- 3.7 Support a cooperative and creative approach to the development of a waterfront environmental education center in the Smithfield area.
- 3.8 Update the Town’s Waterfront Master Plan. Establish new priorities for waterfront development projects and activities.
- 3.9 Encourage the development of eco-tourism enterprises in the Town, particularly within the Windsor Castle Master Plan. These enterprises could include activities such as kayaking, canoeing, rowing and equestrian tours. Eco-tourism serves as a “clean industry” that would celebrate and promote the preservation of the area’s abundant natural resources, most notably the Pagan River and Cypress Creek.
- 3.10 Encourage the development of heritage-based industries in Smithfield that would attract regional tourists to visit and learn more about the abundant historic and cultural resources preserved in Smithfield.
- 3.11 The Town should develop a plan for the development of appropriate educational markers to be placed in front of participating historic structures and at other key locations within the Town.
- 3.12 Establish an Office of Economic Development within the Town to serve, coordinate, promote, and facilitate efforts and programs outlined herein above.



*Policy 4.*

**Continue to promote the concept of a “new tourism economy” for Smithfield while creating a balanced economy within the resident marketplace. This effort would identify, target and recruit appropriate new businesses and attractions to the Town.**

*Recommended Activities and Initiatives*

- 4.1 Promote the Town as an attractive location for an appropriate balance between tourism-related businesses and conventional employment.
- 4.2 Prepare an economic development strategy and marketing program which emphasizes the strengths of the Town’s economic development climate and identifies opportunities (land, labor, governance, education, taxation, etc.) for new business, emphasizing tourism.
- 4.3 Construct a public relations effort for economic development and increase level of liaison and program activities between the Town and the State’s Director of Economic Development.
- 4.4 Work with the State officials and politicians to target and recruit individual businesses within tourism, conventional industrial enterprise and compatible economic development sectors.
- 4.5 Expand relationship with the community college system for education awareness programs which complement training needs of the local business community.
- 4.6 Promote the development of technology-based curriculum opportunities in the local public primary and secondary schools, as well as in the community college system.
- 4.7 Increase level of liaison and program activities with Isle of Wight and other regional counties’ economic development staffs and Industrial Development Authority’s (IDAs).
- 4.8 Explore the potential to lure technology-based industry into Smithfield, focusing upon small, high-tech start-up firms that would not require a great deal of land initially, but would have a strong potential to expand in the coming years.
- 4.9 Assess opportunities for annexation to obtain adequate land areas for future economic development.

- 4.10 Create, empower, and energize (through coordinated Town support and staffing) an expanded Downtown Property Owners and Merchants Association.
- 4.11 Establish an Office of Economic Development within the Town to support the Council and Town Manager's efforts to coordinate, promote, and facilitate the strategies and initiatives cited herein above.

***Policy 5.***

**Develop specific projects designed for inclusion in the Town's Capital Improvements Plan (CIP) to support existing and future economic development activities.**

*Recommended Activities and Initiatives*

- 5.1 Establish infrastructure initiatives and CIP project funding priorities which anticipate and support private sector requirements for commercial and industrial enterprise.
- 5.2 Coordinate with VDOT in establishing priorities for major transportation improvements in planning areas and corridors targeted for commercial and industrial enterprise.
- 5.3 Seek State and Federal program assistance in planning and funding infrastructure for economic development.
- 5.4 Begin a pre-annexation study process, to be initially implemented by the Planning Commission in conjunction with the update of the 2006 Comprehensive Plan.
- 5.5 Establish an Office of Economic Development within the Town to support the Council's and City Manager's capital improvements planning and programming efforts.

***Policy 6:***

**Provide public support and staffing, fiscal benefits, and other economic incentives in order to attract new, high quality development which is consistent with the Town's emerging economic development goals.**

*Recommended Activities and Initiatives*

- 6.1 Maintain a favorable real estate and personal property taxation policy relative to other jurisdictions competing for new high quality, economic development such as corporate headquarters, R&D facilities, firms specializing in technology advances and software development and light manufacturing industry.

- 6.2 Maintain competitive utility rates and charges for water and sewer availability and connections for economic enterprise.
- 6.3 Establish a pro-active position regarding land acquisition of key economic development properties with prime development potentials. Participate in real estate acquisition opportunities, when feasible, and provide for the land banking of key properties for new high quality development.
- 6.4 On a case-by-case basis, participate in the shared-cost of providing public infrastructure and transportation improvements for selected high quality development.

### **Implementation**

As cited within each of the policy statements, the effective implementation of these six policies affirms the need for a central administrative functionary within Town government to carry out the pro-active tasks imposed by the expanded economic development responsibilities adopted into this Plan. A highly visible and more clearly defined office supporting tourism and economic development should coordinate private sector inquiries for new and expanded business, undertake pro-active measures to cultivate and retain existing enterprise, coordinate with Chamber of Commerce public relations activities, serve as a clearinghouse for governmental and educational programs, and assist Town officials and other agencies in land use planning and capital facilities programming for economic development.

This new focal point for economic development could be organized in one of several ways. It could be enabled in one of three commonly employed ways: (1) as a function of the Town Manager's Office; (2) as a separate Economic Development Office, or (3) as an Economic Development Authority. The first two options are the most feasible at this time for Smithfield. The Council should authorize the Town Manager to hire a new Town staff member who would focus his or her attention solely on implementing the goals and policies identified for the office. This person would be directly accountable to the Town Manager and the Town Council. However, regardless of the organizational alternative that is ultimately chosen, the Town should ensure that the office has access to the proper resources (both human and financial capital) to effectively carry out its role as the proactive focal point for economic development in the Town.

***Recommendation for Immediate Policy Implementation:***

The Town Council shall establish a full-time position and office within the Town government supporting balanced tourism, downtown businesses, and expanded employment-based economic development.

This office would be committed to proactive implementation of the economic development goals, policies and initiatives of this Plan, and fully prepared to assist those seeking to invest in the Town for both new development and redevelopment.

***Initiatives for Implementation***

- Support an Office for Economic Development as an administrative function of Town government, under the direction of the Town Manager.
- Coordinate and facilitate local economic development activities with State, federal and regional economic development agencies.
- Provide an annual review of the Town’s economic development activities to ensure adequacy of staffing, resources and policy effectiveness in implementing adopted economic development policies and initiatives.
- Provide a resource base for small businesses seeking information regarding SBA programs, banking and lending support, business plan development, taxation and business strategy.
- Provide coordination and direction for downtown businesses and community events in pursuit of targeted marketing of the downtown within the State and region.
- Assist in the development of strategic plans for the Town’s capital improvements program, future annexation pursuits, and project-specific support to the Town Manager.

*Chapter X:*

**TRANSPORTATION**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter X:* **TRANSPORTATION**

### **Introduction**

Smithfield is located at the crossroads of two major highways--US Route 258 (West Main Street) and VA State Route 10 (Benns Church Boulevard)--on the periphery of the rapidly suburbanizing Hampton Roads region. The Town has experienced significant traffic growth since the adoption of the 1999 Comprehensive Plan. Within the corporate limits, this expanded traffic has been attributable to the redevelopment of the downtown area and significant development in the John Rolfe and Battery Park South Planning Areas. New development on the outskirts of the Town has also stimulated new suburban traffic patterns. During recent years, regional development has exacerbated traffic carrying capacities within the Town due to the extensive development which has occurred to the southeast of Smithfield and throughout the Hampton Roads area.

When the Town was incorporated in 1752, Smithfield was envisioned to be a 72-lot "new towne" by its founder Arthur Smith. The early street system, confined by its modest "grid" and the constraints of the Pagan River, was characterized by what is referred to today as a "fixed capacity" system. While growth within this former river port town has far exceeded anything which Mr. Smith originally envisioned, this street "grid" remains essentially in place today. Therein lays the problem for today's transportation planners.

The major factors which are expected to influence the local street network in the future are emerging tourism, continued suburban residential growth and expansion of regional employment. With the development of surrounding residential areas and regional industry, future traffic patterns will create increasing burdens on the Town's internal transportation links, particularly those providing for through traffic movements within Smithfield's limited capacity street network. While the Town possesses reasonably good "bypass" traffic carrying capacity, the accommodation of "in-town" vehicular movements is limited by the historically constrained rights-of-way and few opportunities for new alignments. Thus, the challenge to the 2009 Comprehensive Plan Update is not so much that of addressing internally generated traffic volumes, but, rather, that of developing creative responses to best serve the rapidly accelerating regional traffic demands which, if unaddressed, must be accommodated by a Town system of limited capacity and even more limited expansion potential.

This chapter is intended to focus on both the near-term and long-range street improvements needed to promote adequate and safe levels of traffic movements in Smithfield. The study effort has examined (1) existing transportation deficiencies, (2) local and regional demographic transportation growth, and (3) traffic impacts which may be generated by the Future Land Use Plan. In some instances, transportation needs may be revealed for which there exists no readily apparent and feasible, near-term solution. However, it is the aim of this plan to prioritize the most significant transportation deficits in Smithfield and to identify options which the Town can further evaluate and pursue in the coming years.

The findings herein are considered to be conceptual in nature and are intended to set the foundation for subsequent detailed transportation evaluations and traffic studies by the Virginia Department of Transportation and the Town.

This chapter contains the following sections which examine the existing road and traffic conditions, recommended transportation improvements, and implementation opportunities:

- *Influences on Town Transportation Planning*
- *Existing Traffic Impacts*
- *Transportation System Hierarchies*
- *Entrance Corridors*
- *Transportation Goals and Objectives*
- *Supporting Policies and Initiatives*
- *Transportation Improvements Plan*
- *Transportation Project Recommendations*
- *HRPDC 2015 Regional Transportation Plan*
- *Implementation and Financing*
- *Official Map for Transportation*
- *Traffic Impact Assessments for New Development*
- *Pedestrian Facilities and Sidewalks*
- *Bikeways*

## INFLUENCES ON TOWN TRANSPORTATION PLANNING

The unique confluence of Smithfield's regional setting as a (1) major industrial center, (2) historic village, and (3) retail marketplace is recognized by the Comprehensive Plan as a strong asset to the community. The 2009 Plan, by nature of its recommended future land uses, makes a strong commitment to the continued service and expansion of these assets. With this background, the following general historic conditions, trends and observations serve to organize the framework for the recommendations which are to be incorporated into the Transportation Plan:

- *The backbone of Smithfield's historic street system rests on a "new towne" street grid conceived in 1752 which was originally designed to serve transportation movements created by an eighteenth century river port community.*
- *The historic development of travelways outside of the historic Smithfield "new towne" followed agrarian road layouts generally corresponding with the "lay of the land," avoiding the river's edge, marshes and lowlands and running radially from the Town's center.*
- *Recent infill development within Smithfield as well as the rural-to-residential development transition of outlying land around its edges has created geometric and functional constraints for the adequate accommodation of the evolving urban traffic influences within that grid.*
- *To date, the development of outlying country roads focused, for the most part, on modest upgrades of agrarian alignments within existing prescriptive rights-of-way, leaving conditions of substandard horizontal and vertical curvature which do not conform to contemporary road norms.*
- *The expansion of land use activities by the Smithfield Foods operations have created demands on the local transportation system which tax the carrying capacity of the original Smithfield local street infrastructure.*
- *The expansion of the suburban ring around the Hampton Roads area has gradually created regional demographic growth and traffic influences for which Smithfield's local street system was not designed.*
- *The surrounding Isle of Wight County's rapid suburbanization has imposed traffic demand pressures on the capacity and function of town roads. These streets are now called upon to meet expanded intra-regional demands while still serving the primary function of accommodating the needs of relatively low-density development along their contiguous rights-of-way.*
- *Over the past fifteen years, the completion of the Route 10 Bypass arterial, direct industrial access via Berry Hill Road to Smithfield Foods, and other arterial improvements have created greatly enhanced regional "bypass" traffic capacity on Smithfield's westerly edge.*



- *Pedestrian and bicycle demands are creating ever-increasing competition for the same paved surfaces which, in past generations, have predominantly accommodated the automobile. Town streets face the dual pressures of functionally incorporating both vehicular and bike needs, even in cases where insufficient pavement capacity and right-of-way is available.*
- *Due to its geographic size and density, Smithfield does not have the critical mass to make public transportation economically viable.*

## **EXISTING TRAFFIC IMPACTS**

Average daily 24-hour traffic counts were conducted most recently for the major streets and roadways within the Town by the Virginia Department of Transportation in 2007. These counts provide the most current estimate of traffic volumes and serve as a basis for future transportation studies and recommendations. For each street and roadway included in the VDOT traffic analysis study, counts were developed for the total number of vehicles which utilized the roadway traveling in both directions during a 24-hour period based on ADT (Average Daily Traffic). The table on the following page provides a summary of the Town streets with the highest ADT volumes. The subject information for selected roads and streets has been arranged in ascending order with the roadways impacted by the highest ADT at the top of the page. The 24-hour Traffic Volumes indicate that the highest volumes of traffic moving through the Town are found on Route 10 between the Isle of Wight County line and North Church Street, yielding over 21,000 vehicles per day. Historic county analysis shows that the Town's minor arterial streets are handling dramatically higher volumes of traffic than they were a decade or even five years ago. South Church Street and North Church Street have each witnessed an increase of nearly 40% in daily vehicle trips since 1985 according to VDOT traffic counts. West Main Street has experienced an increase of nearly 35% during this same time period. At the same time, Route 258 west of the Bypass/West Main Street interchange has actually experienced a decrease in daily traffic demand.

Future traffic volume projections are not included in this study as they require extensive traffic inventorying, analysis and inter-jurisdictional coordination that extend well beyond the scope of this Comprehensive Plan. Updated projections are being developed; however, by the Hampton Roads Regional Planning District Commission (HRPDC) for many of the major thoroughfares in the region, of which several of the road segments listed above will be included. Initial projections developed by the HRPDC indicate that increased growth pressures in the surrounding region will drive significant increases in daily traffic demand along Smithfield's major arterial roadways, particularly along Route 10, where daily traffic demand is projected to exceed 30,000 vehicle trips by the year 2015. The HRPDC will use the MINUTP

regional travel demand model to update and expand the scope of the 2015 projections included in the 1995 Hampton Roads 2015 Regional Transportation Plan for the region’s major corridors.

MINUTP, which is a specially designed software program that enables transportation planners to estimate travel demand (by hour, up to twenty-four hours) for subject roadways, will incorporate socioeconomic projections and planned roadway improvements in the region into the calculation of projected future travel demands. These projections will be included in a summary report that will be made available by the HRPDC for future reference.

**Table X-1**  
**SMITHFIELD 24-HOUR TRAFFIC VOLUMES\***  
**Town Street Traffic County Road Segment 24-Hour Volume**

1. Route 10 between Isle of Wight C.L. and Church Street	21,077
2. Main Street between Middle Street and Great Springs Road	13,108
3. Church Street between Cedar Street and Cypress Creek Bridge	12,920
4. Route 10 Bypass between South Church Street and Main Street	12,633
5. South Church Street between Talbot Drive and Jordan Drive	11,970
6. South Church Street between Heptinstall Ave. and Battery Park Road	11,155
7. Main Street between Route 10 Bypass and Grace Street	10,155
8. Church Street between Thomas Street and Commerce Street	9,413
9. Route 10 Bypass between Main Street and Cary Street	8,486
10. Main Street between Institute Street and Mason Street	6,539
11. Battery Park Road between South Church Street and Isle of Wight C.L.	6,238
12. N. Church Street between Berry Hill Road and Isle of Wight C.L.	4,801
13. Berry Hill Road between N. Church Street and Pinewood Drive	4,218
14. Grace Street between Institute Street and Mason Street	3,949
15. Jordan Drive between Church Street and Lumar Road	2,760
16. Cedar Street between Mason Street and South Church Street	2,445
17. Moonefield Drive between Lumar Road and Barcroft Drive	2,256
18. Lumar Road between Jordan Drive and Edgewood Drive	2,208
19. Cary Street between Grace Street and Route 10 Bypass	1,776
20. Underwood Street between Cedar Street and Main Street	1,650

\*Counts recorded by the Virginia Department of Transportation (VDOT) in 2007.

## **TRANSPORTATION SYSTEM HIERARCHIES**

This Plan recognizes four general levels of road classifications found in the Town, as well as the distinctive characteristics of travel patterns and capacity requirements related to each. These include:

- A. Major arterials and thoroughfares;
- B. Minor arterial streets;
- C. Local collectors and major residential streets, and
- D. Minor residential streets.

While there are other methods of defining and categorizing transportation systems, this four-tiered classification scheme provides a readily understandable organization of road hierarchies for the 2009 Comprehensive Plan.

### **A. Major Arterials and Thoroughfares**

The major arterial is a multi-lane, high capacity facility with either partial or complete control of access and medians separating opposing traffic streams. The Route 10 Bypass represents Smithfield's only highway which meets the definition and intended function of this roadway classification. The principal objective of the major arterial is devoted purely to traffic movement, with these facilities providing little or no service to directly abutting land. In essence, the intent of the major arterial and thoroughfare is to bring widespread geographical areas closer together in terms of travel time as well as to divert through trips from other principal thoroughfares which provide direct service to major traffic generators. Over time, development pressures will likely be exerted onto Route 10 which could compromise its major arterial function. This should be avoided.

### **B. Minor Arterial Streets**

The second level in the transportation hierarchy--minor arterial streets--focuses on systems to route traffic to and from major arterials or thoroughfares. The minor arterial is intended to handle trips between major traffic generators and to accommodate internal traffic movements (collection and distribution) within a defined urban area. Although their primary function is to move traffic in a relatively unimpeded fashion, minor arterial streets also give access to immediately adjacent lands to the extent compatible with the requirements of through urban traffic movements. Business Route 10, Route 258 and South Church Street are representative of Town streets which provide a minor arterial function. While there exist arterial-level demands for improved traffic movements in and around Smithfield, these movements cannot be addressed with a single, direct "bold stroke" improvement because of the limiting conditions of the built and natural environment, including: (a) insufficient passages within the Smithfield

grid system which would allow for additional direct minor arterial connections through the Town and (b) few, if any opportunities to achieve “through road” alignments within the recently annexed properties. Fortunately, at present, the critical east/west movements do not have volumes which dictate a new in-town arterial alignment corresponding to a direct, through-town “desire line.” However, increased suburban development coupled with the downtown’s expanding popularity for regional tourism could conceivably create minor arterial demands which cannot be adequately handled by the existing collector streets. In strategic locations, lane widening and intersection improvements should be considered to aid in the capacity of these arterials, where right-of-way is available.

### **C. Local Collectors and Major Residential Streets**

Local collector streets in Smithfield serve to distribute traffic between minor arterial streets and activity centers. While their primary function is to collect relatively high volumes of local residential traffic, the local collector (or major residential street) can normally sustain the demands of minor retail, office, and tourism generators along its alignment. Collector streets are traditionally two-lane undivided sections (often with turning lanes), with the relatively unrestricted spacing and configuration of access entrances. New collector roads are normally constructed by private developers in conjunction with land development activities and are governed by Town subdivision ordinances, transportation design standards, and site plan design criteria. The nominal capacity and intended function of residential collectors is realized when system traffic loadings are in the range of 1000 to 4000 vehicle trips per day. Smithfield relies on a disproportionate number of its collector streets to provide minor arterial-level functions between origin/destination points for which no arterials exist. Based on VDOT traffic counts, it is obvious that these nominal collector street capacities are far exceeded in many locations. Within established communities which have evolved from a combination of village and agricultural influences such as Smithfield, collector streets can be segregated by generalized facility age (the “old” and the “new”) and locational sub-categories (the “town-scaled” and the “country-scaled”). Smithfield’s local road network amply illustrates the physical distinction between these sub-categories as well as the design constraints associated with the upgrading of each:

- *Old collector alignments*--as evidenced by Cary Street, Battery Park Road, and Moonefield Drive have the following typical attributes: Older, town-scaled collector alignments usually suffer from an “identity” crisis in that they have been called upon to serve traffic functions which are diverse and competing. Over the years, these streets “matured” ostensibly into a minor arterial function carrying too much traffic and

servicing too varied demands on undersized, and/or under-designed, facilities. Aging collectors (a) have relatively narrow pavements and rights-of-way, (b) are improperly drained and landscaped, and (c) carry more traffic than they should. Representative "old" collector alignments can be either town-scaled or country-scaled, depending upon the nature of the road section design, including pavement width, crown height and the presence of curb and/or gutter.

- *New collector alignments*--as evidenced by John Rolfe Drive and Canterbury Lane, typically (a) have been constructed in conjunction with recent (post-1960's) residential subdivision development; (b) usually include curbing and adequate drainage facilities within appropriately sized road sections; (c) in many cases include sidewalks, although several examples in Smithfield are lacking in this regard; (d) have properly engineered vertical and horizontal curvature; and (e) carry reasonable capacities due to their context within a "planned" subdivision. Roads such as Smithfield Boulevard and Jericho Road present a hybrid collector, possessing both rural and suburban transportation design characteristics. New residential collectors are not usually impacted by adverse land use policy and, in general, adequately serve their intended function for collecting and distributing large volumes of residential traffic.

#### **D. Minor Residential Streets**

The Smithfield transportation system hierarchy also provides for a fourth category of street, the minor residential street. These facilities are often further categorized into sub-collectors, lanes, and places (or cul-de-sacs). A residential "sub-collector" provides access to places and lanes while directing traffic to community activity centers or a higher classification of street. It may be a loop street--such as Jordan Drive, Riverside Drive, Talbot Drive, Magruder Drive and Washington Street - which link into larger, connector streets.

A "lane" and "cul de sac" -- as illustrated by Goose Hill Way or Ledford Lane -- represents two subordinate levels of relatively short residential streets having the primary purpose of conducting traffic to and from residences to other streets within a residential subdivision. Usually, in this level of minor street, there is no through-traffic between two streets of a higher classification. While a sub-collector may experience traffic levels up to 1000 vehicles per day, a place, lane or cul-de-sac is rarely intended to serve more than 100 to 350 vehicles per day.

## ENTRANCE CORRIDORS

A major emphasis of the development of the Comprehensive Plan was the recognition of the unique character of the Town's entry corridors and arterial roads which serve as the gateways to Smithfield's historic districts or points of tourism or cultural destinations. The Plan has recognized five such entrance corridors:

1. *U.S. Route 258 from the west;*
2. *State Route 10 Bypass from the north;*
3. *State Route 10 Business from the north;*
4. *State Route 10/U.S. Route 258 from the southeast; and*
5. *Battery Park Road (Route 669) from the east.*

The intersection of Route 258 and Route 10 Bypass serves as the major gateway into Town from the west, while the South Church Street/Benns Church Boulevard (Route 10 Bypass/Route 258 intersection) forms the primary gateway from the east. It is believed that the Battery Park Road/Nike Park Road intersection will emerge as another primary gateway in the near planning term as future development east of Town will increase vehicle trip demand along this arterial.

As a means of effectively protecting its valuable entrance corridors, the Town introduced design control measures for these corridors and gateways in order to stimulate complementary new development which will be compatible with Smithfield's historic character and which will enhance the Town's attractiveness to tourists, visitors and its residents. The recommended Entrance Corridors Overlay (ECO) District was established in accord with Section 15.1-503.2 of the Code of Virginia, as amended, to maintain, preserve, protect and enhance the historic character, cultural significance, economic vitality, visual quality and architectural excellence of the Town. The application of this district was intended to insure that the major existing and planned routes of tourist access as well as other public access to the Town's local historic area are developed and maintained in a harmonious and compatible manner. The EC-O District regulations are designed to promote an atmosphere for compatible growth for future generations, to prevent the intrusion of land use and environmental influences adverse to such purposes, and to insure that new structures and uses will retain the character of both the proposed EC-O District and the HP-O District. Furthermore, the establishment of this new district would fulfill the Plan's goal of recognizing the unique character of the Town's entrance corridors and arterial roads which serve as the gateways to Smithfield's historic districts, points of tourism or cultural destinations.

As development patterns have evolved since the last Plan was adopted, new corridors have emerged as potentially warranting similar entrance corridor regulatory control. Two of these are deemed worthy of Town consideration for inclusion as additional corridors to be added to the overlay district. These are:

1. *Great Springs Road from the south; and*
2. *Cary Street from the north.*

Both of these streets link outlying Town areas directly to the Historic District and its entrance corridors. Further, they both provide direct access to strategically located properties boasting significant development potential lying either in the Town or just outside the Town boundary. Market demand has yet to direct significant new development to these strategic parcels as of the adoption of this Plan; however, it would be wise for the Town to plan for future growth along these corridors and to apply its corridor design guideline tools to any future development requests potentially impacting the corridors.

## **TRANSPORTATION GOALS AND OBJECTIVES**

Traditionally, transportation planning for Smithfield has placed its strongest emphasis on its major thoroughfares and corridors. The goal of developing an efficient corridor system, consisting of major arterials designed to carry the majority of traffic, has been an essential element of planning for Smithfield over the past twenty years. For example, the added benefit of more efficient handling of traffic on the Route 10 Bypass has been that local streets have been freed from the objectionable aspects of heavy traffic. This has been especially important in view of the limited capacities of Smithfield's downtown streets and other minor collectors to serve multiple purposes.

The Citizens' Survey completed in support of this Comprehensive Plan Update included an opportunity for respondents to list the three most important issues confronting the Town as it enters the Twenty-first century. Traffic was the third most frequently mentioned issue listed by respondents, trailing only "Growth Management-Related Issues" and Water Quality/Cost." Twelve percent of all respondents included this concern as being the most important issue facing the Town. In order to best anticipate movements of citizens, tourists and passers-through in and around Smithfield, the Plan's goals must recognize that attention be given to more than just localized traffic generation and congestion concerns. The reciprocal relationship between transportation and land use planning underlies a set of ever-changing traffic characteristics which must take both local and regional impacts into account.

In establishing transportation goals for the Comprehensive Plan, the “vision” was to seek better ways to guide the location, character and capacity of transportation facilities so as to be compatible and consistent with both the Plan’s land use recommendations and the greater regional influences. While most of the major arterial and corridor improvements have been planned and constructed over the past two decades, the current planning process more closely examines the potential for upgrading segments of the secondary street system as well as opportunities for new collector streets to relieve continued traffic problems which have regional roots.

Smithfield’s transportation planning for the new millennium should encourage optimal community development while allowing for vehicular and pedestrian movements in a safe and efficient manner. The future transportation network should better accommodate the multi-focused pattern of employment, shopping and tourist facilities. At the same time, new transportation improvements should not be implemented which produce detrimental impacts on Smithfield’s stable residential and downtown business areas. Each street improvement should be carefully measured to insure compatibility with the scale and quality of the “Vision for Smithfield.” Towards these ends, the following are the major and minor goals and corresponding objectives which have been adopted to guide the transportation planning process:

**Major Goal:**

*The location, character and capacity of Smithfield’s transportation facilities (including thoroughfares, local streets and parking) should be compatible with the Future Land Use Plan. Planning for future road and street improvements and alignments should be compatible with emerging land uses, and should provide adequate capacities to serve future growth.*

**Planning Objectives and Policies:**

- A. Implement street improvements which are of the appropriate scale and capacity to serve long-range traffic demands, while respecting the environment and scale of surrounding neighborhoods.
- B. Maintain the integrity of Downtown Smithfield by implementing four-way stops, traffic calming strategies, and other traffic safety measures to minimize the impact of traffic in the historic area.
- C. Increase parking capacity in the downtown area by providing for new and/or expanded public parking facilities. As part of this effort, the Town should initiate a study that yields a consolidated downtown parking plan.



- D. Discourage the development of private roads within single-family residential subdivisions.
- E. Establish and reserve new public street alignments and adequate rights-of-way in future development areas.
- F. Establish strategies for transportation implementation and phasing in conjunction with the development of properties.
- G. Promote the use of alternative modes of transportation by encouraging the incorporation of pedestrian and bicycle paths within new developments.
- H. Examine the existing sidewalk system in established neighborhoods and study the feasibility of extending or providing "infill" sidewalks within these areas and adjacent neighborhoods.
- I. Study the possibility of linking a bike trail in Smithfield to the regional bicycle trail system.
- J. Incorporate expanded standards into a Design and Construction Manual for road and drainage improvements.

## **SUPPORTING POLICIES AND INITIATIVES**

Arising from the major transportation goals and objectives, there emerge a number of general policies and supporting initiatives which should guide in establishing priorities for future Town transportation improvements. These include the following:

- **Compatibility with Comprehensive Plan:** To ensure adequate traffic carrying capacities, future transportation improvements should be commensurate with the anticipated development activities proposed in the Comprehensive Plan. The Future Land Use Plan should establish properly planned access points to undeveloped and redeveloping properties.
- **Access to Annexed Areas:** To best access the former annexation areas, proposed future transportation improvements should embrace appropriately scaled collector roads within the annexation areas programmed for development and should not isolate (or "land lock") usable pockets of land.

The reservation of proper access points to existing and proposed transportation facilities should be required via the zoning and subdivision process.

- **Emphasis on the Existing System:** Due to limited rights-of-way and opportunities for new alignments, maximum utilization should be made of existing transportation facilities and the opportunities for the improvements thereof.
- **Sensitivity to Downtown:** To ensure an appropriate scale and a sense of place within the downtown, transportation improvements should be compatible with the preservation and revitalization objectives developed by the Town for the downtown area.
- **Coordination with VDOT and HRPDC:** To better coordinate with VDOT and regional transportation planning processes, the Town should take the lead in promoting contemporary traffic engineering standards and techniques for existing and new improvements, including the innovative street design criteria, channelization of intersections, inclusion of traffic calming measures and integration of pedestrian and bike facilities.
- **Bike and Pedestrian Elements:** To enhance the Town's viability as an inviting center for tourism and to better integrate its existing and planned neighborhoods, the Town should develop a master planned bicycle and pedestrian system in order to properly integrate these facilities into the existing Transportation Plan.
- **Gateway and Corridor Planning:** To create a more attractive "gateway" and "corridor" image for the Town, proposed transportation improvements and new alignments should respect the Town's urban design and corridor enhancement objectives, including the provision of street landscaping, lighting, highway buffers and bicycle and pedestrian facilities.
- **Compatibility with Environment:** Recognizing the vulnerability of the Town's sensitive water resources and natural areas, transportation facilities should avoid, where possible, these areas as well as the disruption of ecological areas which would have a negative impact on the Town's environment.

- **Subdivision and Site Plan Review:** To ensure adequate street planning and design by private development, the Town should carefully evaluate all future residential development proposals in order to provide for appropriate levels of inter-community traffic circulation between residential developments, including the proper locations, alignments and rights-of-way for future roads, and integration of streets and bicycle and pedestrian pathways to ensure that transportation improvements can be implemented with the least public cost. Qualifying site plans (in terms of projected site trips generated) should be submitted with traffic impact analyses to both the Town and VDOT for review in compliance with the Commonwealth’s recently adopted Chapter 527 legislation.
- **Traffic Impact Analysis:** To ensure compatibility with the recommendations of the transportation plan, private development proposals should include traffic impact statements which fully identify the nature of future traffic conditions and analyze the degree of traffic generated by any given proposal.
- **Maintenance and Private Subdivision Streets:** In order to better safeguard Town residents and minimize private maintenance responsibility for single family residential areas, subdivision standards should prohibit the development of private road systems in detached and duplex residential developments.
- **Economics:** To provide equity in the cost of transportation improvements, the transportation plan should be a realistic implementation tool in that it recognizes the need for financial responsibility for improvements as a partnership function—inclusive of the (a) State; (b) Town; (c) business and industry; and (d) the end-users of programmed new development.

## **TRANSPORTATION IMPROVEMENTS PLAN**

The Comprehensive Plan seeks to identify problems and provide for options and opportunities to satisfy the identified needs. This transportation plan offers a series of individual projects for upgrades and new facilities which respond to existing transportation deficiencies as well as traffic demands generated by (a) the Future Land Use Plan, (b) regional traffic growth which will impact the Smithfield road network and (c) existing development within the Town.

An initial task in this process was the evaluation of the Town's existing transportation system. This analysis was conducted by examining the transportation characteristics of each planning area and entrance corridor. Where apparent conflicts and deficiencies were observed, these were categorized and reviewed based on their "transportation fundamentals," including preliminary considerations such as existing roadway geometry, pavement characteristics, current traffic volumes, capacity characteristics as well as other deficiencies related to their physical setting and functional performance expectations.

Based on this analysis, it is apparent that many of the Town's streets and intersections fail to meet contemporary urban design criteria. Some of these roads could not be reconstructed today within their existing right of way and geometric configurations to satisfactorily meet either VDOT or typical urban design requirements. Inasmuch as a practical design "solution" may be physically or economically infeasible, it is important for the reader of this plan to maintain a "balanced view" of the transportation process which takes one from "analysis" to "recommendations" to "implementation priorities."

For the purpose of this plan, several specific opportunity areas were identified within the Town. Each have been identified according to the major existing constraints or transportation problems impacting the Town's transportation network and adjacent land uses and include recommendations for specific future improvements. Prior to implementation, the study areas will require more detailed traffic and transportation analysis before the Town Council establishes its own priorities and budgets to determine what will eventually constitute a multi-year transportation improvements program. While this analysis reveals a local transportation system which has a seemingly broad range of shortcomings, the realization of the appropriate physical remedies to these deficiencies via the Capital Improvement Programming (CIP) process should not be viewed as either an overnight process or altogether politically feasible.

The following section summarizes the most significant areas of transportation concern which respond to the significant “problems and opportunities” identified during the comprehensive planning process. As listed below by location within the Town, each corresponding project for the identified “problem and opportunity” embraces a unique combination of transportation issues within the particular Planning Area or Entrance Corridor.

## **TRANSPORTATION PROJECT RECOMMENDATIONS**

### **1. South Church Street**

Location: South Church Street forms the major, central corridor within the Town. It bisects the Town running from Northwest to Southeast. Currently, South Church Street is a five lane road between the Rt. 10 Bypass and the Battery Park Road, where it then necks down to two lanes into downtown.

#### Key Planning Issues and Needs:

**ISSUE #1:** The proliferation of commercial strip development along South Church Street has created a streetscape that is visually cluttered, poorly defined and uninviting to pedestrian traffic. Commercial development exists along much of the street between the Cypress Creek Bridge and the Route 10 Bypass, and many of the commercial establishments have direct access points to South Church Street. Little distinction is discernible between existing sidewalks, the street and in many instances, commercial parking lots along South Church Street as the street edge is nonexistent in many areas. Vehicles entering and exiting from ill-defined driveways and parking lots create increased congestion and enhance the potential for traffic/pedestrian conflicts and accidents. Furthermore, overhead utility lines and commercial signage dominate the viewshed along the corridor, creating visual obstructions that can often distract visitors and increase traffic and pedestrian safety hazards in the area.

**RECOMMENDATION:** Limiting curb cuts, thereby minimizing entrance points into adjacent land uses, will improve traffic safety along South Church Street. Establishments along the South Church Street commercial corridor should share established more clearly defined vehicular entryways. The Town should proactively work with VDOT to undertake a traffic improvements plan to address the consolidation of commercial entrances, to the extent feasible. Where curb cuts are necessary, they should be marked with a change in materials, color, texture or grade.

**RECOMMENDATION:** Complete the planned widening of the street of South Church Street (Rt. 10) from the intersection with Talbot Drive to the intersection with Battery Park Road. This will include lane widening, the addition of a center turn lane, curb & gutter and sidewalks on both sides of the road. Care should be taken to ensure that the street edge is clearly defined by retaining the curb street where possible and minimizing curb cuts.

**RECOMMENDATION:** Place utilities underground along South Church Street or locate behind buildings if undergrounding is not feasible.

## **2. Battery Park Road**

Location: Battery Park Road bisects the eastern half of Smithfield between South Church Street and Nike Park Road. It provides primary access to all land uses within the Battery Park North and Battery Park South planning areas, as well as to the Gatling Pointe residential community in Isle of Wight County.

### Key Planning Issues and Needs:

**ISSUE #1:** In recent years, an increasing number of Smithfield and Isle of Wight County business persons and residents have been traveling to and from the Peninsula via Battery Park Road, Nike Park Road, Titus Creek Road, Smith's Neck Road and Carrollton Boulevard and the James River Bridge. Battery Park Road forms the principal access point into and out of Smithfield along this "cut through" corridor. As such, the road serves two primary purposes: it serves local trips by area residents and it provides the integral access link for the shortest route for travelers moving between Smithfield and the James River Bridge to the east and the Peninsula beyond. Traffic bottlenecks are also common during peak demand periods at the Nike Park Road/Battery Park Road intersection. As development in the County (i.e., the planned Eagle Harbor project) is completed in the coming decade, traffic demands will only increase along Nike Park Road and Battery Park Road, thereby exacerbating the existing problems. In 2003, the Town commissioned a study of Battery Park Road in order to determine the future improvements needed to the road in order to support local and regional demands. A copy of this study is provided in Appendix III. Recommendations were made regarding future road widening and turn lane improvements.

**RECOMMENDATION:** The Town should implement the road widening and associated improvements included in the Battery Park Road Corridor Study (see Appendix III). The Town should work with VDOT to finalize the future Battery Park Road alignment and width of the

future right-of-way of the recommended road widening. Once this alignment is determined, the Town should incorporate the right-of-way into the Town's planned Official Map. The Official Map will represent all legally established future or proposed public streets, alleys, walkways, waterways and public areas of the locality. Once this alignment is recognized officially, the Town should work to ensure that all established front yard setbacks are measured from the future road right-of-way line (reflecting the proposed 110' right-of-way) to ensure that new development will properly respect the planned highway improvement. As future development and redevelopment proposals for parcels fronting Battery Park Road are put before the Town Planning Commission and Council, the Town would then be able to use tools provided in the Subdivision Ordinance and Zoning Ordinance (specifically in the Site Plan requirements and in the capabilities afforded in the proffer section) to ensure that the future development of the Battery Park Road corridor will serve as an efficient and inviting entrance corridor into the Town. In the event that the owners of one or both of the two industrial parcels wish to redevelop their properties, the Town should work with redevelopers to reserve the necessary right-of-way for the recommended road widening. Thus, it is recommended that any future redevelopment of the parcels under the existing zoning district should comply with the slightly more restrictive minimum front yard setbacks proposed in the land use recommendations for the Battery Park North Planning Area. Currently, the Battery Park Road/Nike Park Road intersection is controlled by a signal light, but a formal traffic study for the intersection has been performed and a roundabout has been approved by VDOT. The roundabout should increase its efficiency as an integral transportation gateway, as well as its safety for travelers and nearby residents.

**RECOMMENDATION:** Using recently received grant money, the Town should assist the county in installing a Bike/Pedestrian Multi-Use Path on Battery Park Road from the intersection of Battery Park Road & South Church Street to the intersection of Battery Park Road & Nike Park Road.

### **3. Main Street/Route 258**

Location: West Main Street shapes historic, Downtown Smithfield. Functionally, it connects the Route 10 Bypass to the downtown area and the Pagan River.

#### Key Planning Issues and Needs:

**ISSUE #1:** There is a shortage of parking spaces in the core downtown area, particularly along Main Street, to serve the needs of shoppers and business.

**RECOMMENDATION:** Investigate the feasibility of constructing a public parking facility primarily targeted for use by those who work in downtown Smithfield.

**ISSUE #2:** Vehicles commonly exceed safe driving speeds along Main Street, particularly in light of the frequently high amounts of pedestrian traffic that impact the Downtown area.

**RECOMMENDATION:** The opportunity exists to introduce traffic calming devices and other measures to remedy this potentially hazardous condition. Examples may include the following: more aggressive enforcement of speed limits, new and improved signage, new stop lights and stop signs, and easily visible crosswalks.

**ISSUE #3:** Road capacity, particularly for turning movements into the Westside Elementary School, is constrained along Route 258. The Town should provide the resources necessary to insure safe vehicular and pedestrian movement into and out of the school and its adjacent fields.

**RECOMMENDATION:** Per VDOT's six-year plan, the Town should support the planned widening of Route 258 from two to three lanes from the school to the Town boundary (and beyond to 0.2 miles west of Route 620).

#### **4. Moonefield Drive**

Location: Moonefield Drive is located in the River Residential Planning Area in the Northeastern portion of the Town.

##### Key Planning Issues and Needs:

**ISSUE #1:** This roadway is not built to contemporary urban design standards. Moonefield Drive is too narrow (20-22') to effectively handle present traffic demands according to local observations and resident concerns.

**RECOMMENDATION:** The Town should conduct a study examining the feasibility of widening Moonefield Drive to allow it to operate as a more effective collector street for adjacent residential neighborhoods. The Town will have to work closely with residents of the community to secure sufficient right-of-way to implement the street widening proposal.



**ISSUE #2:** Through traffic often travels at speeds which threaten the safety of neighborhood residents, especially children.

**RECOMMENDATION:** The opportunity exists to introduce traffic calming devices and measures to remedy this potentially hazardous condition. Examples may include the following: more aggressive enforcement of existing posted speed limits, improved speed limit signage and street lighting, the addition of new stop lights and stop signs if warranted and the introduction of more visible crosswalks.

**ISSUE #3:** Visual clutter along intersections makes turning movements difficult and dangerous.

**RECOMMENDATION:** Enforce signage control measures which regulate the size, placement and appearance of road front signs.

**SPECIAL CONCERN:** Sidewalks and bike trails are seen as being desirable improvements to the roadway which may have an impact on traffic calming and the reduction of thru-traffic speed.

**RECOMMENDATION:** Using the existing available right-of-way along Moonefield Drive, add sidewalks and bike paths on both sides of the road between John Rolfe Drive and Watson Drive as part of the recommended road improvements for this area. These sidewalks and bike paths will offer a direct non-vehicular connection between residents in the Planning Area and Beale Park.

## **5. Cary Street**

Location: Cary Street is located in the Downtown Area in the Northwestern portion of the Town.

### Key Planning Issues and Needs:

**ISSUE #1:** Access to the Route 10 Bypass.

**RECOMMENDATION:** The Town should conduct a study examining the feasibility of introducing an access break along the Route 10 Bypass in order to provide a direct link to Cary Street. The Town should work closely with VDOT and the Commonwealth Transportation

Board (CTB) to evaluate the merits of such an improvement and the various design options available to implement the access break. These options could include an overpass or loop connection, a grade separated interchange or a t-intersection. The Town will have to work closely with residents of the community to secure sufficient right-of-way to implement the street widening proposal should it be deemed a worthwhile improvement and approved by the CTB.

**ISSUE #2:** Through traffic often travels at speeds which threaten the safety of neighborhood residents along Cary Street, along with neighboring Grace Street, especially children congregating at the YMCA facility.

**RECOMMENDATION:** The opportunity exists to introduce traffic calming devices and measures to remedy this potentially hazardous condition. Examples may include the following: more aggressive enforcement of existing posted speed limits, improved speed limit signage and street lighting, the addition of new stop lights and stop signs if warranted and the introduction of more visible crosswalks. Also, the Town should explore the potential incorporation of a parallel road through Sub-Area 5 in the West Main Planning Area as part of the future development of a public park. Such a parallel road would provide a viable alternative to local and through traffic which dominate Cary Street and Grace Street.

**ISSUE #3:** Gaps in sidewalk system in front of County property and YMCA.

**RECOMMENDATION:** Extend sidewalks in this area to complete the local system providing access to public uses in the neighborhood. Extend the sidewalks into the future development of a public park in Sub-Area 5 located across Cary Street in the West Main Planning Area.

## **6. Smithfield Boulevard**

Location: Smithfield Boulevard is located in the southeastern portion of Town, just south of the Battery Park South Planning Area and north of the Waterford Oaks subdivision.

### Key Planning Issues and Needs:

**ISSUE #1:** Smithfield Boulevard serves as a significant roadway connecting residential development with the South Church Street/Route 10 commercial corridor.

**RECOMMENDATION:** Enhancements to Smithfield Boulevard, such as the development of sidewalks and bikepaths and the planting of street trees, would enhance the appearance of this roadway and enable neighborhood residents to walk safely from the residential neighborhoods to nearby commercial establishments along South Church Street, thereby creating a greater sense of community. The road has the necessary right-of-way capacity to support these improvements as its existing pavement covers only approximately twenty feet within the 60' right-of-way.

## **7. Great Spring Road**

Location: Great Springs Road forms the southwestern boundary of the Town in the southern annexation area. Functionally, it connects Route 258 and points southward in Isle of Wight County.

### Key Planning Issues and Needs:

**ISSUE #1:** Great Springs Road is limited by a severely narrow right-of-way and pavement width (approximately 16'). It is too narrow to support both a school bus or an emergency services vehicle and any other vehicle traveling in opposite directions. Even two automobiles passing must use great caution in order to safely avoid one another. The road's extremely high crown further complicates travel along this important connector road between Route 258 and the Cypress Creek community and points southward.

**RECOMMENDATION:** Work with residents along Great Springs Road to secure sufficient right-of-way to allow for street widening (to 24') and the necessary pavement overlay and drainage improvements.

## **8. Jericho Road**

Location: Jericho Road connects the downtown area extending along West Main Street to South Church Street and the Pagan River from the south of Town, looping through the Jericho Planning Area and running adjacent to the Route 10 Bypass.

### Key Planning Issues and Needs:

**ISSUE #1:** Jericho Road has the potential to provide a valuable link, particularly for pedestrians between the Downtown area, Windsor Castle and the newly developed Jericho Estates residential neighborhood. Currently, the entrance to Jericho Road from South Church Street is

poorly marked and the connection to Windsor Castle and points beyond are effectively hidden. This intersection has limited capacity in terms of right-of-way on Jericho Road and sight distance along South Church Street due to the presence of two historic residences located on each side of the intersection and the proliferation of mature street trees and on street parking along this section of the street.

**RECOMMENDATION:** Jericho Road in the Downtown area and adjacent to Windsor Castle is an important, historic road, and as such, maintaining its character is an important consideration in the 2009 Comprehensive Plan. The road is designed as a rural, historic lane, and the Town would like to preserve it in its present state. Improvements to the northern entrance of Jericho Road at South Church Street should be implemented as part of the Town's plans to introduce a public park in the area in order to increase visibility and utilization of this connector by tourists wishing to see the Windsor Castle area with its view to the Pagan River. These improvements should focus on improving pedestrian linkages as opposed to promoting increased vehicular traffic as Jericho Road does not have the capacity to support increases in vehicular traffic demand nor future widening improvements. Recommended improvements to the intersection include providing adequate lighting to avoid pedestrian/vehicular conflict, incorporate improvements into the planned addition of a sidewalk along the south side of South Church Street and establish a distinction between the sidewalk and the street by retaining the curb strip and incorporating a brick paver for the sidewalk consistent with the historic paving reflected on Main Street.

## **9. Route 10 (Business)**

Location: Route 10 (Business) is the major entrance corridor into Smithfield from the north. It provides primary access to the meat processing plants in the Smithfield Industrial Planning Area.

### Key Planning Issues and Needs:

**ISSUE #1:** Traffic congestion at the Smithfield Foods plant is a major point of concern among Town residents and Smithfield Foods employees. Many pedestrians converge at a single destination during specific times as employees change shifts and typically cross Route 10 Business from the parking lot to the manufacturing facilities in large groups.

**RECOMMENDATION:** Promote the Route 10 Bypass as the primary entrance into Smithfield while encouraging all thru-traffic to avoid Route 10 Business if possible. This strategy would effectively limit the Route 10 Business route to trucks and employee traffic at the Smithfield

Foods packing plants. Reduction in traffic volumes minimizes the potential for traffic accidents as employees walk from the parking lots to the packing plants.

**RECOMMENDATION:** Build upon the existing traffic calming devices by implementing additional devices or other transportation design measures to reduce the potential for accidents involving employees traveling to and from the manufacturing facilities from the parking lots across Route 10 Business. Such devices may include increased signalization, improved signage and lighting, and a pedestrian tunnel or overpass that would allow employees to avoid walking in the direct path of oncoming vehicular traffic.

### 10. Unpaved Roads

**ISSUE #1:** Presently, a handful of roads in the Town remain unpaved and have poor surface and drainage characteristics. The most notable of these include the following:

**Table X-2**  
**PRIORITY PAVEMENT IMPROVEMENT RECOMMENDATIONS**

Street Location

- *Cedar Street Parallel to Bypass in Jericho Planning Area (south of Jericho Rd.)*
- *Pole Road between Sub-Areas 2 and 3 in the West Main Planning Area*

Utilization of these roads is currently limited due to the nature of their construction. Standing water resulting from improper drainage often creates difficulties during storm events. The Town's level of urgency with respect to paving and otherwise improving these roadways varies for the two locations according to the anticipated trip demand for each and its projected future role in the Town's transportation network. The unpaved streets above are listed in order (from highest to lowest) of their relative priority level for improvement as established by Town Staff. Cedar Street and Pole Road will be improved in coordination with the future development of Sub-Area 4 of the Jericho Planning Area and Sub-Areas 3 and 4 in the West Main Planning Area, respectively. It is anticipated that these areas will be developed within the next ten-to-fifteen years.

**RECOMMENDATION:** The Town should undertake a paving program to upgrade these roadways to contemporary standards thereby improving the character of the neighborhoods they presently serve and to provide the necessary infrastructure capacity to properly serve

planned future development. It should be emphasized that the paving must be accomplished within the context of provision of adequate right of way, improved drainage (ditching), upgraded base materials and utility adjustments.

## **HRPDC 2015 REGIONAL TRANSPORTATION PLAN**

In May 1995, the Hampton Roads Planning District Commission (HRPDC) completed a regional transportation plan for the Hampton Roads area which addresses a twenty-five year planning period (1990-2015). The Hampton Roads 2015 Regional Transportation Plan includes both long range and short-range strategies and actions, with projected fiscal requirements that will lead to the development of an integrated intermodal transportation system aimed at facilitating the efficient movement of both people and goods. Although the 2015 Plan focuses primarily on regional transportation issues which impact the more intensely developed urban areas to the east and south, it does address several long-range considerations and recommendations for transportation systems in and around the Smithfield area. For the most part, these recommendations are consistent with those described in the preceding section. From a more regional perspective, the 2015 Regional Transportation Plan discusses several regional transportation programs that will ultimately have a direct impact on Smithfield's transportation network. Included among these programs are the HRPDC's Transportation Demand Management study and the Regional Bikeway Plan. It is recommended that the Town lobby with the HRPDC to allocate more resources to studying transportation issues in and around the Smithfield area in the upcoming planning period. Given the recent growth trends impacting the Town and Isle of Wight County and the new development planned for the area, especially the Cypress Creek and Eagle Harbor communities, it is hoped that the HRPDC will realize that transportation issues relating to the increased travel demands associated with this unparalleled growth will be of primary importance to the future of not only Smithfield and surrounding Isle of Wight County, but also to the regional transportation network.

## **IMPLEMENTATION/FINANCING**

In pursuing an effective implementation program, the range of transportation improvements proposed herein will require a carefully devised combination of public and private funding strategies. Transportation facility implementation must be viewed in the context of Town comprehensive planning objectives and growth management policies. Fundamental to the success of these strategies will be the ability of the Town to provide strong leadership in: (a) land use decision making level (i.e. rezonings and plan approvals) and (b) the coordination of sub-regional transportation issues with Isle of Wight County. In taking the next steps toward

coordination with the VDOT planning process and establishing CIP priorities during the ensuing years, the Town Council must further prioritize projects on the basis of: (a) the anticipated or actual phasing of new growth in the community, (b) existing impacts on public health and safety, (c) public support, (d) the protection and/or enhancement of the community's economic base, (e) physical and engineering feasibility of project development, (f) the availability and distribution of financing, and (g) special circumstances related to joint public/private development opportunities.

### **OFFICIAL MAP FOR TRANSPORTATION**

The General Assembly has established that the Official Map for a community is to be used "as an important planning implementation tool in the Commonwealth." State enabling legislation has strengthened the status of the Official Map in this regard. This map is used to officially recognize, designate, and establish the geometric requirements for improvements for public lands and facilities within a locality. Further, the Official Map is to be founded on the elements of a Comprehensive Plan relating to those facilities which have been recommended. If Smithfield's transportation goals and objectives for the future are to be realized, an Official Map is one of the initial steps to be taken by Town Council in that pursuit.

Pursuant to the adoption of the Comprehensive Plan, the Town should initiate the preparation of an Official Map for the purpose of establishing alignments for required rights-of-way related to the implementation of road improvements recommended therein. As the implementation of the transportation plan proceeds, the Town should endeavor by use of the Official Map to (a) publicly acquire, (b) publicly reserve, (c) accept by gift and/or (d) negotiate the private reservation/construction of road improvements designated thereon. The map should recognize both (1) additional rights-of-way to improve existing street deficiencies and (2) future rights-of-way for new Town streets required to service the Future Land Use Plan. Alignments for future roads where development pressures may be imminent should be given high priority by the Town with respect to official mapping.

### **TRAFFIC IMPACT ASSESMENTS FOR NEW DEVELOPMENT**

In the growth management process, transportation issues normally reach their point of "maximum controversy" at the time when new development proposals are submitted to the Town. More often than not, land development proposals are presented for appropriately zoned parcels for which only subdivision and/or site plan approval is required. Usually, at this stage, substantive discussion of transportation issues and concerns is diluted given the ministerial nature of plat and plan approvals. In the past, the Town has a relatively narrow platform on

which to engage the developer on subjects such as (1) existing street deficiencies, (2) Comprehensive Plan traffic and transportation recommendations, (3) coordinated on-site circulation systems, (4) coordinated off-site improvements, and (5) fiscal and financial obligations to implement necessary and essential improvements in conjunction with development activities. The planning and development of future new residential streets within Smithfield will be primarily a responsibility of private landowners and developers as new subdivisions are undertaken. It shall be incumbent upon the Town to assure that new residential developments are designed to ensure and promote:

- (a) *properly-scaled internal hierarchies of street layouts,*
- (b) *pavement widths and right-of-way improvements compatible with density levels,*
- (c) *adequate access to collectors and minor arterials,*
- (d) *contemporary residential street geometry and intersectional design criteria,*
- (e) *sufficient on-street and off-street parking to serve residents and guests,*
- (f) *high quality street signage, signals and lighting provisions,*
- (g) *sidewalks and accommodation of pedestrian needs,*
- (h) *special vehicular movements, such as fire equipment and snow plowing, and*
- (i) *incorporate street plantings and other buffer-oriented landscaping.*

One step in the right direction has been the integration of transportation impact evaluations into the Town's growth management process. This process, as envisioned during the early stages in the development of the 1999 Comprehensive Plan, was adopted with the 1998 update of the Town's Zoning Ordinance. The Town established a process by which the developer will be held more accountable to the public sector in the analysis, planning, and construction of road improvements which are necessitated by one's development proposal. Under the system, traffic impact standards will be applied to all new land development programs. All proposed development must submit a Traffic Impact Assessment (TIA), prepared by a registered professional engineer. In addition, TIA studies may also be needed where constraints are present on the existing roadway system or where the proposed development would require modifications to the off-site roadways in the area.

Per the recently adopted Commonwealth of Virginia Chapter 527 legislation, the Town should expand the scope of the traffic impact assessments for new development to incorporate additional VDOT review and comment. In new rezonings, qualifying site plans and comprehensive plan amendments submitted to the Town for review, a traffic impact analysis shall be submitted by the applicant in conformity with the new Virginia State law 527 (Senate Bill 699, Chapter 527 of the 2006 Acts of the General Assembly). The TIA shall analyze the traffic impacts associated with the new project in accord with the Chapter 527 guidelines for



VDOT review. Per this new law, VDOT will provide an advisory review. The Town will receive the VDOT findings and, in a case-by-case basis, will review the impacts associated with each proposal. If the projected future traffic projections allowing for the site-related traffic and background traffic growth in the vicinity of the site indicate that any impacted intersection will operate at a level of service (LOS) of “D” or worse, then the applicant must provide the improvements indicated in the TIA and supported by VDOT review in order to enable that the LOS is acceptable at full build-out (i.e. LOS of “C” or better). The improvements must be in accord with current and applicable VDOT standards and all associated costs, including any right-of-way acquisition must be borne by the applicant or the applicant’s agent or partnering landowners.

### **PEDESTRIAN FACILITIES AND SIDEWALKS**

The relatively compact scale of the downtown area has allowed for the incorporation of pedestrian walkways for recreational and necessary movement between home, workplace, schools and shopping facilities. Unfortunately, the existing Town sidewalk network fails to extend in any systematic way beyond the Downtown Area. The vast majority of the existing residential communities in the Town lack sidewalks, walking paths or bikepaths. As a result, few physical pedestrian connections are made between residential subdivisions. Residents who wish to walk for exercise purposes or to do their small goods shopping or to visit friends and neighbors must do so in the street or in residential yards. This presents safety hazards for pedestrians and drivers alike. When effectively employed, pedestrian facilities provide increased community benefits in the form of physical linkages between neighborhoods, reduced air pollution, reduced traffic congestion and automobile fuel savings.

During the development of this plan, the Town has established the development of a formal sidewalk system as a fundamental goal. As a component of the Comprehensive Planning process, the existing sidewalk system was analyzed and a recommended sidewalk improvement plan was developed to complement and enhance the existing system in order to provide a more comprehensive pedestrian system that provides direct linkages between residential neighborhoods and connects residential subdivisions to neighborhood commercial areas, public spaces and parks. The plan also incorporates improvements designed to connect historic resources within the Historic Area as a means of promoting tourism within the Town.

The Town’s existing sidewalk system is focused on streets in the Historic Area and along its major commercial corridors. It has been developed in a piecemeal fashion over the years, and as a result, is loosely connected and does not function as a truly integrated transportation

system. Several of the sidewalks in the Town are not clearly defined from the street edge and thus, can only loosely be defined as sidewalks (the walkways along South Church Street between Battery Park Road and the Cypress Creek Bridge are the best example of this phenomenon). A summary of existing sidewalk locations is presented below (these locations are summarized graphically in green on the attached “Sidewalk and Bikeways Plan” on page 33):

**Table X-3  
EXISTING SIDEWALK LOCATIONS**

- *West Main Street (sidewalks located on both sides of the street between the South Church Street intersection and the Smithfield Middle School*
- *Cedar Street (south side of the street between South Church Street and Drummonds Lane)*
- *South Church Street (both sides of the street between W. Main Street and the Cypress Creek bridge)*
- *Commerce Street (west side of the street only)*
- *Cary Street (east side of the street between West Main Street and the Goose Hill subdivision)*
- *Riverview subdivision (Washington, Riverview and James streets)*
- *James Street (both sides of the street)*
- *Institute Street (one side of the street near Town Hall)*
- *Grace Street/Thomas Street*

In 2006, the County initiated a Bicycle and Pedestrian Improvement study for the County. This study focused attention on needs throughout the County for integrating pedestrian and bicycle access in a logical system and plan for the entire County, focusing its energies on providing reasonable access in the more urban portions of the County. The Town should integrate future recommended bikeway and sidewalk improvements within the Town in conjunction with the Proposed Improvements for Bicycles and Proposed Improvements for Pedestrians prepared for Isle of Wight County by Toole Design Group, and the sidewalk plan presented herein attempts to do just that.

The Town’s sidewalk plan includes specific recommendations for new sidewalk construction. The plan is summarized graphically along with recommended bikeway improvements in a map entitled “Sidewalk and Bikeway Plan” found on page 33. A summary of recommended improvements is provided in the table presented on the following page. Special emphasis has been placed upon the three major transportation project recommendations pertaining to

sidewalks discussed earlier in this plan (i.e. the planned improvements to Battery Park Road and South Church Street). Each sidewalk improvement recommendation is listed according to its priority level as assigned by the Town Planning Commission and Staff based upon perceived need, funding availability and physical feasibility (i.e. sufficient right-of-way availability). Unless otherwise noted, all sidewalk improvements should be constructed on one side of the road only, and each recommended sidewalk improvement should incorporate at least a 5' right-of-way for the paved sidewalk section. Brick pavers should be used within the Historic District where appropriate and financially feasible.

**Table X-4**  
**SIDEWALK IMPROVEMENT PLAN**

**Summary of Recommended Improvements**

These locations are summarized graphically in red on the “Sidewalk and Bikeways Plan” map on page 33.

- South Church Street--extend sidewalk on both sides of the street between Battery Park Road and the Cypress Creek bridge as part of planned improvements described earlier in this plan.
- Battery Park Road/Route 704--construct sidewalk along the full length of Battery Park Road from South Church Street to the Nike Park Road intersection and continuing on northward to connect to the Gatling Pointe subdivision in the County
- Moonefield/John Rolfe Drive--construct sidewalk from Battery Park Road to extend to the Pagan Road intersection.
- Smithfield Boulevard--construct sidewalk along Smithfield Boulevard from South Church Street to the street terminus beyond Barclay Crescent
- Cedar Street--extend existing sidewalk on Cedar Street in conjunction with planned road improvement plan and continue along Jericho Road to create a pedestrian “loop” designed to connect Windsor Castle and the proposed Town public park with the Downtown area; explore a possible pedestrian connection from Jericho Road across the Route 10 Bypass overpass to connect to the Cypress Creek development, and from the terminus of Drummonds Lane to connect to the Historic District.

- Lumar Road--construct sidewalk along Lumar Road to connect South Church Street to the planned sidewalk improvement along John Rolfe Drive (this improvement should include a short sidewalk improvement along the Jordan Drive segment connecting South Church Street and Lumar Road)
- Waterford Oaks area--incorporate sidewalks into the existing internal street system in the Waterford Oaks subdivision to allow residents safe walking opportunities between residences and to nearby shopping and eating establishments.

The underlying economic reality of the proposed recommendations will be implicit in the future planning for pedestrian and bicycle infrastructural improvements in Smithfield. Each recommendation is provided with the assumption that it will be the Town's responsibility, coupled with necessary financial input from the affected property owners to retrofit existing developed neighborhoods and Town-maintained streets with sidewalks and/or bikeways, but it should be the developer's responsibility to finance and/or construct the recommended improvements within undeveloped areas planned for future development. In addition, planned major street improvement projects should include sidewalk facilities whenever possible. Town sidewalk construction should be included in the annual operating budget and should be given more consideration and a higher priority in the development of the Town's Capital Improvements Program.



## **BIKEWAYS**

The Future Land Use Plan recognizes the need for an integrated bikeway system in and around the Smithfield area. As part of the County's ongoing Bikeways and Pedestrian Pathways study being developed in consultation with Toole Design, formal bikeways and path systems are being planned comprehensively for the first time in the Smithfield area. For the most part, the County's philosophy towards integrating bikeway facilities into the existing County road system has been to recommend introducing "share the road" signs as opposed to proposing significant lane construction expenditure. The Town supports this ongoing effort and seeks to integrate the improvements recommended by the plan.

It is incumbent on the Town to establish and implement its own bikeway network to integrate with and complete the network within this context of "regional" support. In doing so, it is important to consider the unique classifications of bikeways and their impact on the built environment. For the purposes of the Town's bikeway planning efforts, the Town defines the three major classifications and types of bikeways which are commonly employed in planning suburban and urban bike networks as follows:

**Multi-Use Trails** are constructed physically separate from the highway. They may either be developed in a separate right-of-way, or easement, apart from roads and streets, or as a path within the road right-of-way, but physically separated and protected from motor vehicle traffic. These facilities are usually eight to twelve feet wide and are designed to accommodate two-way bicycle traffic.

**Shoulder Bike Lanes** are constructed adjacent to traffic lanes and are generally delineated by pavement markings. These lanes are typically three to five feet wide paved shoulders. Shoulder bike lanes can also be separate lanes between the travel lanes and on-street parking areas in urban areas. To accommodate two-way traffic, these bike lanes must be constructed on each side of the road. Shoulder bike lanes provide wider right hand travel lanes and are considerably less costly than the multi-use trails. Shoulder Bike Lanes can often be constructed in conjunction with highway widening projects. When preparing the detailed implementation plans for the bikeway network, conflicts may arise in the establishment of shoulder bike lanes, particularly in developed areas. These potential conflicts include right-of-way width (particularly for streets having curbs and gutters), on-street parking, intersection design and open space and landscaped areas adjacent to the street.

**Shared Roadways** are travel lanes that are shared by all users of the roadway. Occasionally, the travel lanes are widened to 14 or 15 feet rather than the standard 12 feet, but often signage is the only accommodation. There are no bikeway pavement markings associated with these facilities, and the roadway is simply signed as a bicycle route. If implementation studies indicate that shoulder bike lanes cannot be constructed in certain areas, shared roadways would be the most appropriate designation, and it is possible that in certain instances restriping could allow wider curbside travel lanes providing more room for motorists and cyclists. Typically, shared roadways are only designed on roadways with very light traffic and in developed areas where other modes are not feasible. They are easy to develop and are much less costly than multi-use trails or shoulder bike lanes and can significantly improve bicycle mobility.

Extending beyond the improvements listed in the County's ongoing Bike and Pedestrian planning effort, the Town should attempt to locate new bikepaths along strategically selected minor arterials, local collector roads and minor residential streets in order to establish a sound bicycle network. This network should correspond with the Town's sidewalk plan to enable the Town to provide better physical linkages between existing neighborhoods and schools, recreation areas, community centers and commercial areas.

Ideally, bikeways should mirror or complement sidewalk placement where feasible, with sidewalks on one side of the street and a separate multi-purpose trail on the other or side-by-side placement depending upon right-of-way accessibility and the proliferation of curb cuts along the street. Development in the three newly annexed areas in the Town should consider the implementation of bikepaths and lanes as part of its open space and street design strategies. Specific recommendations for bikepath improvements are summarized in the table on the following page. Except where otherwise noted, each improvement should include at least a five foot right-of-way for a shoulder bike lane on one side of the road only.

### **Summary of Recommended Improvements**

These locations are summarized graphically in purple on the “Sidewalk and Bikeways Plan” provided on page 34. As part of these improvements, the Town intends to integrate all future recommended bicycle pathway improvements called for in the “Proposed Improvements for Bicycles” exhibit prepared for Isle of Wight County by Toole Design Group.

- *Route 10 Bypass*--shoulder lanes should be added to both sides of the limited access highway enabling easy and safe access on all on- and off-ramps; given the existing width of the bridge over Cypress Creek, this improvement must necessarily include a measure to cantilever across the bridge to allow the additional space needed for bike lanes; it is recommended that the Town apply for ISTEA funding to complete the project
- *Cedar Street/Jericho Road*---bikeway improvements should mirror the recommended sidewalk improvements for the Cedar Street/Jericho Road loop; access should also be reserved to allow an extension of the bikepath from Jericho Road across the Route 10 Bypass overpass connecting to the Cypress Creek subdivision and beyond to the bikeway improvements recommended for Great Spring Road
- *Cary Street*---add bikeway improvement along Cary Street from West Main Street to the YMCA and Sub-Area 5, where a public park is planned.
- *John Rolfe Drive/Moonefield Drive*--add bikeway improvement along John Rolfe and Moonefield from Battery Park Road to Azalea Drive
- *Battery Park Road*--bikeway improvements should mirror the recommended sidewalk improvements along Battery Park Road and extend to the Gatling Pointe subdivision. Using recently received grant money, the Town should assist the County in installing a Bike/Pedestrian Multi-Use Path on Battery Park Road from the intersection of Battery Park Road & South Church Street to the intersection of Battery Park Road & Nike Park Road.
- *Smithfield Boulevard*--bikeway improvements should mirror the recommended sidewalk improvements along Smithfield Boulevard
- *South Church Street* --construct bikeway lane adjacent to existing sidewalks to connect recommended paths on Battery Park Road, Smithfield Boulevard and the Bypass



- *Great Springs Road*--add bikeway improvement along Great Springs Road to connect to Route 258 and to allow logical extension of a rural path into Isle of Wight County
- *Route 258 West*--add bikeway improvements along Route 258 West from the bypass intersection to Waterworks Road
- *Waterworks Road*--extend bikeway improvements along Waterworks Road to connect to the Town-owned lake in the County

### **TYPICAL STREET SECTIONS RECOMMENDED FOR FUTURE ROAD IMPROVEMENTS**

Several examples of typical street sections are provided on the following pages in order to provide examples as to the different options available for future road improvements. It is recommended that future road improvement plans incorporate design aspects of one or more of these examples into its final design solution in order to appropriately respond to the needs expressed by the Smithfield community for better pedestrian and bicycle access and increased efficiency in the Town's transportation network.

#### **VILLAGE STREET SECTION**

The Village street section illustrated here assumes a pedestrian oriented environment characterized by low design speeds, on-street parking, sidewalks, crosswalks, pedestrian and street lighting and street tree plantings. A thirty (30) foot pavement width is recommended to accommodate two travel lanes, each eleven (11) feet in width and on-street parking along one side of the drive at eight (8) feet in width. On street parking is vitally important to the village concept, providing access to streets accented by retail uses. As an alternative to on-street parking, bicycle lanes may be designated along each side or one side of the village street. Street trees installed in a planting strip along either side of the road offer shade to both the sidewalk and to parked cars, as well as contribute to a pedestrian scale for the village. Additional streetscaping and landscaping enhance the pedestrian environment by providing opportunities to gather with others, to walk and to shop in pleasant surroundings.

#### **TYPICAL ROADWAY SECTION with Alternate Bicycle Lane**

This section depicts typical conditions for a rural stretch of highway with allowances for future turn lanes, travel and bicycle lanes. Such a street section illustrates immediate opportunities for street tree placement, within the right-of-way, and immediately visible from the highway, yet

out of the way of future improvements. The proposed 30 foot setback for street trees is less than the 37 feet recommended by VDOT for travel at 55 mph, but falls within the acceptable range for roads traveled at 50 mph or less.

When future widening and roadway improvements do occur, it is recommended that a designated bicycle lane be incorporated. Roadway design criteria should meet current VDOT Roadway Design Specifications.

*Chapter XI:*

**HOUSING**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter XI:* **HOUSING**

### **Introduction**

Establishing a comprehensive housing policy within the Comprehensive Plan requires careful attention to the goal of providing opportunities to meet local housing needs within the context of the adopted “vision for Smithfield.” As in most growing communities, large pockets of high density, multi-family housing are counter balanced in Smithfield by a number of affluent single family neighborhoods. While high-income retirees are drawn to the region for its quality of life, the non-specialized employment demands for relatively lower income wage earners within the Town place pressure on both the local and regional housing markets to provide for low and moderate cost housing for its workforce. While this demand continues to evolve, the Town’s supply of land suitable for residential housing is rapidly dwindling, leaving few tracts available to absorb the predicted demands for the next twenty-five years. Thus, key decisions regarding residential land use allocations must be tested against a highly constrained set of real estate resources.

In addressing issues related to future housing needs in most communities, the marketplace generally works well in meeting demand for medium and higher income residents. The private sector normally provides an adequate supply of housing for all but low and moderate income sectors, as defined by HUD, the United States Department of Housing and Urban Development. Both the public and private sectors generally acknowledge that public intervention is often required to adequately meet the needs of this housing group. Conventional economic wisdom and recent locally-focused housing analysis reveals that without some form of housing intervention, low and moderate income families will remain virtually shut-out of the local detached residential housing market. While Smithfield currently has a relatively abundant supply of low and moderate income housing at high densities, a need clearly exists to provide single family housing for those who make the Town their place of employment. Unfortunately, recent residential market dynamics have exacerbated affordability gaps in the region, making affordable single family residential opportunities all but unachievable for those earning low to moderate incomes in Smithfield.

Relative to this planning process, the Town recognizes its responsibility to sensitively blend the apparent incongruity between:

- (1) fulfilling the housing demands created by the Town's relatively low and moderate wage earners who wish to make Smithfield their place of residence; and
- (2) the Town's objective of carefully managing any future additions to its current, disproportionately large supply of high density, multifamily housing stock relative to neighboring municipalities within the Southern Hampton Roads area.

The 1998 Comprehensive Plan Update included specific land use objectives seeking to prohibit the additional construction of multi-family housing within the Town limits in response to the perception that the Town was oversupplied with apartment units relative to the local marketplace. That Plan Update focused its energies relating to multifamily uses specifically on the promotion of retirement housing and assisted living. The Current Plan softens this stance towards multifamily apartment units a bit. While the Town does not encourage the development of such units throughout the Town, it is willing to consider market-driven multifamily apartment communities in appropriately zoned locations in Smithfield, so long as the project provides affordable workforce housing opportunities within a development which upholds the high design standards outlined for new construction in Smithfield. Concurrently, the Town continues to support and encourage the development of assisted living and retirement communities at appropriate locations within the Town boundaries.

While the Town provides its "fair share" of multi-family housing on a regional basis, it has been unable to provide sufficient owner-occupied, affordable single family detached housing to local hourly wage earners desiring to live within the Town boundaries. In addressing this issue, housing policy needs to extend beyond traditional low income housing approaches which are heavily weighted towards high-density rental projects, direct housing subsidies and other governmentally-supported fiscal programs. Because these mechanisms have been unsuccessful in most small communities, the question of "how can we do it better" is very difficult to answer. Supply and demand analyses alone cannot adequately direct housing policy. This is the challenge facing Smithfield today, and it is the intent of this Plan to provide the foundation for a successful approach to serving the housing needs of its citizenry.

### **Workforce Housing and Affordable Housing**

HUD defines housing affordability based upon the relationship of family income to the area's median family income (AMFI) and the percentage of income spent on housing. Following this

definition, affordability ranges are typically determined by calculating total housing costs, including either rent or combined Principal, Interest, Taxes, and Insurance (PITI) expenses, that equal slightly less than 30 percent of a family's gross income for those making equal to or less than 80 percent AMFI.

In 2006, the Area Median Income (AMFI) for the Hampton Roads region was \$60,300 for a four-person household. Area Median Family Income is the average income for a family within a given metropolitan area. AMFI is used to gauge eligibility for many housing-programs (e.g., a participant must have income less than 80 percent of AMFI to qualify for certain aid). While HUD surveys only entire metropolitan areas in calculating AMFI on an annual basis, Smithfield's estimated Median Family Household Income was slightly higher (\$64,781) in 2006. This is a substantial increase from the estimated \$53,906 median family household income reflected in the 2000 census. Families earning less than 80 percent of AMFI (approximately \$51,824 in Smithfield) and spending more than 30 percent of their gross income on housing are considered cost-burdened. Those spending less than 30 percent are by definition affordably housed, but may be occupying unfit units.

For the sake of the Comprehensive Plan, workforce housing shall be generally defined as housing that is affordable to those between 60 and 120 percent of the area median family income (AMFI) in the Smithfield community. More specifically, workforce housing as it applies to Smithfield is defined by four principal factors:

1. *Affordability.* No more than 30% of household income should be allocated to housing costs (typically defined as Principal, Interest, Taxes, and Insurance, or PITI for home purchase or alternatively, rent plus all housing related utilities for rental opportunities).
2. *Home Ownership.* Ideally, workforce housing shall be provided as for-sale, single-family homes for sale at market prices which are affordable to working members of a community. However, workforce housing shall not be limited to owner-occupied dwelling units. The Town acknowledges that rental opportunities, within detached, attached and multi-family dwellings, provide a valuable component of workforce housing stock in a community. That being said, the primary initiative within the Town will focus upon owner-occupied opportunities given the existing oversupply of multifamily dwelling units in the Town relative to its regional neighbors in the market.
3. *Vital, Modest Wage Earners.* Workforce housing shall be provided to vital members of the community workforce, including police officers, teachers, nurses and medical technicians, as well as wage earners at critical economic development uses operating within the Town (i.e. the packing and processing plants).
4. *Proximity.* Such housing opportunities must be located close to employment centers, allowing for realistic transportation costs for commuting Town workers.

### **Isle of Wight County Task Force on Work Force Housing**

Since the last Plan Update was completed, an alarming trend has been witnessed in the Smithfield community: new housing built in the area is not affordable for most people who work in the Town. In response to the recognition of this growing problem in the larger Isle of Wight County marketplace, a group of concerned community leaders in the County joined together in late 2006 to establish the Isle of Wight County Task Force on Workforce Housing. The Task Force was established to examine the ongoing issues related to the growing imbalance between the limited supply of housing that is affordable to those working in the County and the steady demand for such residences.

After spending several months studying the issue extensively, the Task Force came to the conclusion that “in recent years new housing built in Isle of Wight County is not affordable for practically anyone who actually works within the County.” (*Final Report of the Isle of Wight County Task Force on Workforce Housing*, April 2007, Page 2) The Task Force defined the current County workforce, defined as those who “teach our children, protect our homes and businesses, maintain our roads and streets, staff our stores and offices, till our fields, and work in our manufacturing plants”, to total nearly 12,000 people. (*Final Report*, Page 2) As of February 1, 2007, the Task Force estimates that a family earning Isle of Wight County’s median income could only afford to buy approximately 11 percent of the houses currently listed on the Multiple Listing Service: in effect, they could only choose from among 35 homes listed. The remaining 89 percent of homes listed were generally unaffordable to approximately half of all County residents. Clearly this represents a major ongoing policy issue for the County and for the Town, particularly given its long-standing role as a host for relatively higher residential densities given its supporting utility and transportation infrastructure. Not only does this issue pose significant implications for housing prices and affordability in the coming generation, but also for land use policy.

In its analysis, the Task Force provided a very valuable and thorough look at the important issue of workforce housing affordability. With the help of David Rusk and Tom Doerr of the Innovative Housing Institute, the Task Force has introduced a variety of specific and logical recommendations outlining how the County and the Towns of Smithfield and Windsor could attack this issue and promote the development of new, affordable work force homes in the community. These recommendations included a range of specific changes proposed for the land use and zoning policies of the County and Towns of Smithfield and Windsor. In addition, the Task Force has also recommended changes in fee and tax policies; the provision of direct

subsidies for both the “supply side” (i.e. housing production) and “demand side” (i.e. buyer/renter assistance); and the introduction of policies to preserve the existing stock of older, workforce housing. (*“Final Report,”* Page 5)

Summing up its thorough analysis of the issue, the Task Force finds only one basic solution for the ongoing workforce housing affordability crisis in Isle of Wight: *“the County and the towns must amend their land use and zoning policies to allow, encourage, and even require more intensive use of residential land.”* (*“Final Report,”* Page 5)

Within the context of this Plan, it is important to understand that the Task Force focused its analysis on the larger Isle of Wight County market; however, much of the final analysis and recommended objectives are applicable to Smithfield. And with respect to its summary final solution, the Town embraces this stance and has attempted to speak to it directly via this Comprehensive Plan Update by initiating changes in the future land use plan and in the recommendations for zoning ordinance modifications provided herein.

Several members of the Task Force participated in the numerous public work sessions held as part of the development of the Comprehensive Plan Update. Their participation was particularly informative and extremely helpful in shaping the development of this new Housing chapter. While not every Task Force recommendation has been incorporated into the Plan Update, much of the final analysis and recommended objectives presented in its Final Report are applicable to Smithfield and are embraced herein.

The Isle of Wight Task Force on Workforce Housing’s recommended program projects that if its comprehensive recommendations are implemented, it would produce 100 to 150 new, affordable homes a year within the County for the local workforce. This is a logical and realistic goal for the community. Within this established goal, it is hoped that the Town could provide 15-25 of these new dwelling units each year, given its limited land availability and land use policy objectives.

### **Housing and the Comprehensive Plan**

While this Plan is not intended to fulfill the purpose of a comprehensive housing plan for Smithfield, it does provide the analysis essential to identify key housing issues as well as access the critical demographic and economic influences which will impact housing in the future. It is hoped that the Plan will augment the ongoing work by the Isle of Wight County Task Force on Workforce Housing by doing the following:



1. Echoing and supporting those objectives, initiatives, and implementation strategies outlined by the Task Force which the Town has determined to be appropriate for Smithfield;
2. Develop a base analysis of the housing market which is focused more specifically on the Town and its particular strengths, opportunities, needs and role within the overall regional housing market;
3. Outlining the specific areas within the land use plan where additional workforce housing opportunities could be logically introduced and supported by the necessary community infrastructure; and
4. Introducing recommendations for specific measures (i.e., Zoning Ordinance modifications) which could further the goals and objectives outlined by the Task Force.

In addition to these pursuits, this section will focus upon the following fundamental study tasks related to housing:

1. Evaluation of range of options for major housing goals for the Town.
2. Assessment of existing housing supply and demand patterns.
3. Projection of future housing supply and demand patterns.
4. Refinement of major housing goals and objectives based on demographic and economic analysis.
5. Establishment of policies and initiatives to direct general planning and land use decisions related to housing.
6. Preparation of a Future Land Use Plan which designates and allocates areas for future housing.
7. Preparation of an implementation strategy for housing policy, including both public and private sector programs.
8. Preparation of recommendations for growth management for the physical development of housing and neighborhoods.

## **HOUSING GOALS AND OBJECTIVES**

As related to the process above, the following set of major Housing Goals were subjected to continued revision and refinement during the planning process and have been adopted into the Comprehensive Plan. The statements represent a generalized vision for housing within the

Town and are addressed more specifically within subsequent sections of this chapter as well as in the individual Planning Area summaries.

**Major Goal Statement:**

**Provide for a wide variety of housing options for all Smithfield residents with an emphasis placed upon quality site planning in future residential development areas.**

**Planning Objectives and Policies**

- A. Adopt a pro-active housing program which targets and promotes opportunities for the improvement of substandard dwellings. Identify housing funding sources and grant opportunities that may be available to Smithfield residents.
- B. Identify threatened neighborhoods and reverse their decline by proactive enforcement of building codes and focusing rehabilitation efforts in these areas.
- C. Encourage the continued development of nursing homes, adult care centers, assisted living facilities, and other housing types which provide amenities that are attractive to retirees.
- D. Identify and promote new development opportunities for single family detached residential units including creative use of cluster development, new urbanism design concepts, and “smart growth” practices which enable the most efficient use of undeveloped land, while also enabling the preservation of sufficient open space.
- E. Recognize the disproportionate allocation of multifamily housing within the Town and limit future development within this sector of the housing market. Insure that any and all future development of multifamily housing adheres to strict design standards established in the Town Zoning Ordinance and serves to provide affordable housing opportunities. Make necessary adjustments to existing zoning districts if and where appropriate.
- F. Promote the implementation of new zoning or updated zoning districts that provide incentives which encourage the development of affordable workforce housing opportunities in the Town.

- G. Play an expanded role in the coordination and facilitation of low and moderate income housing development and redevelopment by private sector and institutional sector participants (such as Habitat for Humanity) within the Town.
- H. Coordinate with Isle of Wight County in their ongoing effort to develop an affordable workforce housing initiative.

**Smithfield Housing Market Needs Assessment**

Total housing units in Smithfield have grown substantially since 2000. It is estimated that 285 new housing units have been added between 2000 and 2006. This represents an increase of almost 11% during this time period. The ratio of home ownership to renters has remained relatively constant during this time.

**TABLE XI-1**

**Total Housing Units  
Estimated Housing Units by Occupancy: 2000-2006  
The Town of Smithfield, VA**

	<b>2000</b>	<b>%</b>	<b>2006</b>	<b>%</b>
<b>Total Units</b>	2,521	100%	2,806	100%
Owner Occupied	1,677	67%	1,838	66%
Renter Occupied	761	30%	844	30%
Total Vacant	83	3%	124	4%

*Sources: 2000 US Census and Claritas MarketPlace*

**TABLE XI-2**

**Total Housing Units  
Estimated Housing Units by Occupancy: 1980/1990/2000  
Isle of Wight County, VA**

	<b>1980</b>	<b>%</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
<b>Total Units</b>	7,660	100%	9,753	100%	12,066	100%
Owner Occupied	5,457	71%	7,181	74%	9,153	76%
Renter Occupied	1,589	21%	1,851	19%	2,166	18%
Total Vacant	614	8%	721	7%	747	6%

*Sources: 1980, 1990, 2000 US Census and Isle of Wight County Comp. Plan*

Isle of Wight County has experienced a significant amount of residential construction over the past twenty-five years. During this period, the County has witnessed a modest increase in the percentage of owner-occupied units. Statewide, approximately 70% of all housing units are owner-occupied. So, the County exceeds the State average by a healthy amount.

**TABLE XI-3**

**Housing Units**  
**Estimated Housing Units by Units In Structure: 2006**  
**The Town of Smithfield, VA**

	Total	%
1-Unit Attached	162	5.8%
1-Unit Detached	1,993	71.0%
2 Units (Duplex)	35	1.2%
3 to 19 Units (Multi-family)	417	14.9%
20 to 49 Units (Multi-family)	8	0.3%
50 or More Units (Multi-family)	82	2.9%
Mobile Home or Trailer	109	3.9%
Boat, RV, Van, etc.	-	0.0%
Total:	2,806	100%

*Source: Claritas MarketPlace*

Nearly 18% of all housing units in Smithfield are multi-family in nature. The vast majority of these units are garden-style apartments. In Isle of Wight County as a whole, multi-family units constitute less than 5% of all housing units. Manufactured or mobile homes account for nearly 18% of all dwelling units in the County.

**TABLE XI-4**

**Housing Units**  
**Estimated Housing Units by Units In Structure**  
**Isle of Wight County, VA**

	1980		1990		2000	
	Total	%	Total	%	Total	%
1-Unit	6,234	81.4%	7,145	73.3%	9,252	76.7%
2 Units (Duplex)	183	2.4%	122	1.3%	92	0.8%
3 to 4 Units (Multi-family)	33	0.4%	131	1.3%	185	1.5%
5 or More Units (Multi-family)	191	2.5%	275	2.8%	401	3.3%
Manufactured Homes (new)	1,012	13.2%	1,998	20.5%	2,136	17.7%
Other	7	0.1%	82	0.8%	--	--
<b>Total:</b>	<b>7,660</b>	<b>100%</b>	<b>9,753</b>	<b>100%</b>	<b>12,066</b>	<b>100%</b>

*Sources: 1980, 1990, and 2000 US Census and Isle of Wight County Comp. Plan*

TABLE XI-5

**Building Permits**  
**Estimated Building Permits for Isle of Wight County 2000-2006**  
**Isle of Wight County, VA**

<b>Housing Type</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>Total</b>
Single Family	227	260	334	370	417	534	615	2,757
Multi-family	0	0	0	0	228	0	0	228
Mobile Home*	119	70	66	56	95	49	57	512
Demolition	(22)	(44)	(27)	(28)	(29)	(21)	(23)	(194)
Net Total Additional Homes**	324	286	373	398	711	562	649	3,303

\* Includes single- and double-wide mobile homes

Assumes that all demolitions represented housing units, although this is slightly  
 \*\* unrealistic.

Sources: *Isle of Wight County Task Force on Workforce Housing, April 2007*

Of the 642 total affordable rental housing (multi-family) units recognized by Isle of Wight County and its Department of Social Services in the County Comprehensive Plan, 522 of the total units (or 88% of the total) are located within the Town of Smithfield. According to the County's Comprehensive Plan, there have been three housing complexes built to accommodate low income elderly residents of Isle of Wight County since 1990. Covenant Place, built in 1990 was built in the Town, while Springdale Apartments (Phases I and II) was constructed in Windsor.

**TABLE XI-6**

**Household Income**

	2000		2006		2011	
	Census	%	Estimate	%	Projection	%
<b>Total Household Income</b>	2,419	100%	2,682	100%	2,841	100%
Income Less than \$15,000	466	19%	445	17%	431	15%
Income \$15,000-\$24,999	334	14%	299	11%	274	10%
Income \$25,000-\$34,999	249	10%	245	9%	275	10%
Income \$35,000-\$49,999	300	12%	342	13%	326	11%
Income \$50,000-\$74,999	497	21%	482	18%	440	15%
Income \$75,000-\$99,999	321	13%	364	14%	392	14%
Income \$100,000-\$149,999	246	10%	439	16%	517	18%
Income \$150,000-\$249,999	6	0%	66	2%	182	6%
Income \$250,000-\$499,999	-	0%	-	0%	4	0%
Income \$500,000 or more	-	0%	-	0%	-	0%
 Average Household Income	 48,288		 59,063		 67,308	
 Median Household Income	 43,023		 50,543		 56,519	

Source: *2000 Census and Claritas  
MarketPlace*



**TABLE XI-7**

**Smithfield Housing Cursory Market Analysis  
The Town of Smithfield, VA**

	2000	2006	2020
Household Projection			
Population	6,324	6,776	8,267
Group			
Population	- 111	- 107	- 100
Household Population	6,213	6,669	8,167
Average Household Size	/ 2.55	/ 2.49	/ 2.4
Number of Households	2,436	2,678	3,403
Housing Unit Production			
Occupied Units	2,444	2,806	3,456
Vacancy Rate (estimate)	3%	4%	4%
Vacant Units	77	124	135
Total Housing Units	2,521	2,682	3,321
Residential Unit Demand Projection			
Change in Number of Occupied Units (2000-2020)			1,012
Change in Number of Vacant Units (2000-2020)		Less:	<u>58</u>
Total: Aggregate Household Demand (2000-2020)			954
Planning Timeframe		/	<u>20</u>
Average Annual Housing Demand (in Dwelling units)			48

Source: 1990 Census, 2000 Census, Claritas & Cox Company Projections

### **Smithfield Housing Demands: 2020**

Projections reveal that there will be cumulative demands for 1,012 new residential units over the next decade and a half, excluding institutional and group quarters. This represents an average of approximately 48 units annually (see Table 7). The impact of this “pure demand” would increase the existing housing stock from 2,521 to 3,321 units (an increase of 31%) over the projection timeframe. However, if vacancy rates increase over time, this could impact the demand projections substantially. Also, note that assumptions on no net housing replacements add a further downward influence on the projected housing demand. Clearly, demand for new housing units is cyclical, as evidenced by the building permits granted in the Town in the past two years. In 2007, the Town granted approximately 100 zoning permits for new residential units; in 2008 only 51 were granted. Even with the variability witnessed during various points in the residential market cycle, the Town is convinced that the estimate of approximately 48 new dwelling units demanded per year is a realistic and conservative long term projection for the Town for planning purposes.

### **Considerations for Low and Moderate Income Housing**

In assessing the proper direction for housing policy for the Town, consideration should be given to the special treatment of low and moderate income housing. While this consideration does not necessarily involve new Town-initiated programs and expanded fiscal responsibility, it is important that community-wide attention to these issues be acknowledged in the Plan. The establishment of low and moderate income housing initiatives are sensitive to the following considerations:

- *supporting opportunities for low and moderate income housing ownership;*
- *increasing low and moderate income, detached housing supply;*
- *prioritizing locally-controlled housing programs to first meet the needs of Town residents and persons employed in the Town;*
- *expanding growth management tools to better ensure safe and efficient housing and neighborhood development;*
- *allocating adequate land areas on the Future Land Use Plan to satisfy both housing needs and planning policy;*
- *establishing a program that insures that whenever a mobile or manufactured home is demolished in the Town it is replaced with a modern affordable workforce housing unit;*

- *privately initiating the Community Land Trust as a means of ensuring that housing remains available for low and moderate income families; and*
- *insuring that the current stock of both public and private multi-family rental housing receive proper maintenance and management to safeguard the health and welfare of residents.*

### **Considerations for Elderly Housing**

Given current demographic influences, elderly housing issues also draw special attention in this planning focus. There has been a dramatic increase in the number of retirees migrating to the Smithfield area, and as such, the Plan calls special attention to the needs of the increasingly aging society in the region. Projections for the region indicate that demand for adequate and affordable housing for the elderly, including nursing homes, assisted living and other life-care facilities; will increase significantly over the next two decades. In this regard, local and regional housing initiatives should incorporate the following considerations:

- *respond to the housing demand sector which serves the unique requirements of the disabled and others with special needs;*
- *promote the continued use of accessory apartments (“mother-in-law” apartments) where appropriate;*
- *coordinate with institutions and other entities responsible for development of assisted living, nursing home, and independent life-care projects; and*
- *encourage new housing in areas of the Town which provide safe and convenient pedestrian and mass transit access to community services.*

### **OTHER RELATED HOUSING ISSUES**

In addition to the above, a broad range of general planning issues and considerations have been identified, which are intended to serve as the Town’s foundation for adequately directing and organizing initiatives and strategic plans for housing. These issues take on both a local and regional context and give rise to concerns which may extend beyond the scope of this Plan and traditional Town initiatives. The adopted Housing Goals call for plans, policies, strategies and initiatives which should ultimately be linked to key issues such as:

1. community density, character and ambiance;
2. housing supply and growth;
3. housing and neighborhood land area allocation;
4. housing quality and adequacy;
5. health, safety and welfare issues; and
6. regional housing issues.

### **1. Social and Housing Equity Issues:**

- An adequate distribution of safe and properly located housing should be available to all Town households at reasonable costs.
- There should be no racial, ethnic, age and/or disability status discrimination in the type and availability of housing opportunities within the Town.
- The Plan should allocate areas for well-planned neighborhoods for low and moderate income housing.

### **2. Health, Welfare and Safety Issues:**

- The Town should initiate a proactive housing inspection and code enforcement program for all residences, targeting substandard dwellings with substantial code deficiencies.

### **3. Town-wide Housing Density, Character and Ambiance:**

- Future housing stock should be predominantly single-family detached and attached, with an additional focus on assisted living and nursing care facilities.
- The outlying jurisdictions should absorb a greater percentage of the region's high density housing.
- Housing and neighborhood qualities are a function of ownership patterns and home ownership programs should be supported.
- Neo-traditional single family neighborhoods, developed at appropriate densities, should be encouraged in order to provide an excellent alternative to high density, multi-family projects.
- A sliding scale of performance-related density bonuses for projects incorporating affordable workforce housing opportunities and clustering of new homes should be promoted for implementation via new Zoning Ordinance districts.

#### **4. Housing and Neighborhood Planning - Quality of Life Issues:**

- New housing projects should be properly related to other community facilities and public transportation;
- Services for housing and neighborhoods should be efficiently organized and located in close proximity to the residents;
- The values of existing and new housing and neighborhoods must be safeguarded;
- Public safety in critical “at risk” housing areas should be protected by increased local police support and other community safeguards;
- Housing conditions should be annually accessed and protected; and
- Crowding is an often hidden community concern and should be carefully monitored and controlled.

#### **IMPLEMENTATION**

As the Town has developed this Update of the Comprehensive Plan, it has become evident that housing, and more specifically, providing sufficient housing opportunities for Smithfield’s workforce, has quickly evolved into one of the most critical issues facing the Town as it plans for its future. What has also become clear as the Town has continued through this planning process is the consensus among Town leadership that the community should tackle these issues via a combination of zoning ordinance refinements and the introduction of an aggressive housing policy. In doing so, the Town should be mindful of the implication of the new Cash Proffer policy and its practical impact on the affordability of workforce housing. The introduction of this new policy will only serve to exacerbate the challenges facing lower and moderate income workers in Smithfield as the proffer amount is passed along to consumers in the price of newly constructed homes. The Town should be mindful of this implication and allow for the waiver of the recommended cash proffer amount to all affordable units provided within newly proposed projects as part of rezoning requests.

It is recommended that the Town focus its future efforts to address housing issues on two specific tracks: (1) through revisions to the Zoning Ordinance that recognize "smart growth" principles and new urbanism and incorporate housing-related, performance-related density bonuses rewarding the incorporation of affordable workforce housing units, and (2) the creation of a separate Housing Policy to be based on the strategies outlined within this chapter of the Comprehensive Plan. The two approaches need to combine to achieve the following objectives:

1. Incentivize the development of affordable housing via bonus provisions and incentives to be incorporated into the Town's Zoning Ordinance.
2. Promote mixed residential uses of medium density, including SFD and Townhouses, within the same project.
3. Encourage new urbanism and neo-traditional forms of residential projects.
4. Relax certain site development standards and criteria for projects that include adequate levels of affordable housing.
5. Create a "master strategy" for defining and negotiating proffers and conditions to be attached to rezoning applications.
6. Create opportunities for an expanded Smithfield housing policy that, in combination with zoning policy, results in an expansion of the Town's affordable housing base.

More specifically, the Town should seek to implement the following initiatives impacting affordable workforce housing in the community:

1. Establish specific annual targets (i.e. 15-25 dwelling units per year) for single family attached housing production that is affordable to the Town's workforce, and encourage landowners seeking to develop property in the Town to apply for zoning districts which enable such development.

2. Encourage new residential subdivisions to incorporate affordable workforce housing units (i.e. attached residential dwelling units) contiguous to single family detached lots within the same neighborhoods and communities.
3. Promote the integration of accessory apartments into new residential communities. These apartments could be located inside of the principal single family structure, attached to the structure, over a garage, or in a separate, but connected building.
4. Introduce the update of two separate Zoning Districts as a means of responding to the recommended Workforce Housing Unit (WHU) zoning laws as authorized by Virginia statutes (section 15.202305) in order to provide incentives for the production of such housing. The updated drafts of two existing zoning districts, the S-R (Single Family) and the NU-R (formerly the A-R Residential District) should be reviewed in light of the above objectives. Following the Commonwealth's legislative recommendation, these districts should allow for an increase of up to 30 percent in the developable density (above the by-right density cap) by special use permit, provided that up to 17 percent of the total units approved, including the optional density increase, to be affordable dwelling units, as defined in the Ordinance. In the event that a 30 percent increase is not achieved, the percentage of affordable dwelling units required shall maintain the same ratio of 30 percent to 17 percent. Additional details on the two updated zoning districts are included in the "Implementation" chapter.
5. Revise the existing N-R, Neighborhood Residential and DN-R, Downtown Residential zoning districts to enable and encourage affordable housing via special use permit. The permit conditions shall include the same 30 percent density increase with the corresponding 17% affordable housing production as described in 4. above.
6. Waive cash proffers as recommended in its Cash Proffer policy for all proffered affordable or workforce housing units incorporated into a rezoning application plan.
7. Waive sewer and water tap fees levied on any new affordable or workforce housing unit constructed in the Town.
8. Join Isle of Wight County in funding a Workforce Housing Trust Fund via an automatic allocation of a set percentage of property transfer fees/recordation fees per the recommendation of the Task Force on Workforce Housing. This Fund could receive other grants and private contributions; share in the equity windfall of future market-rate sales of non-price controlled affordable and work force housing units; and serve as a

legal trustee of “soft” second mortgages that can be administered to members of the local workforce seeking to qualify for home purchases in the County. In addition to being a source of cash subsidies as needed to lower production costs (i.e., the “supply side” of the work force housing market equation), the Workforce Housing Trust Fund would provide buyer and renter subsidies (i.e., the “demand side” of the equation) in the form of down payment assistance, closing cost assistance, lower interest mortgages, rent subsidies, direct purchase of workforce housing units, etc.

9. Support the County (via annual funding) in the creation of the position of “Housing Officer” within the Isle of Wight County government whose primary function would be to oversee all aspects of the workforce housing program (short of zoning administration).
10. Establish employee housing assistance programs in order to facilitate the process of Town employees finding affordable housing opportunities within the Town they serve. These programs shall include forgivable down payment loans, lower-interest mortgages, and financial education workshops designed to help employees understand the mortgage application and underwriting process.
11. Foster the maintenance of the existing workforce housing stock through “sensitive code enforcement” wherein zoning inspectors and the recommended County Housing Officer approach owners of deteriorating properties with offers of access to community (i.e., Workforce Housing Trust Fund) financial resources which could be made available to assist the owners in making any necessary upgrades to the property.
12. Encourage the recommended County Housing Officer to make available (via the Workforce Housing Fund and federal, state and other local funds) flexible loans or grants to lower income home owners for the purposes of making necessary renovations to their properties, provided they qualify as workforce housing dwelling units.
13. Encourage the recommended County Housing Officer to initiate a pro-active relationship with the owner of each subsidized housing project in Smithfield in order to stay apprised of the owner’s intention for the project and to coordinate the strategy of maintaining the property within the community’s workforce housing inventory should the owner seek to cancel its subsidy contract.



Given the Town's reluctance to actively promote higher density, multi-family development (besides assisted living and nursing home projects) due to the abundance of apartments and mobile homes located in the Town, the expectations for the pace of the implementation of the strategies outlined in this chapter must be realistic. Scores of additional housing opportunities for the Town's workforce will not be created overnight by means of a single, large project under this strategy. Instead, it is hoped that additional affordable opportunities will be introduced into the marketplace on a project-by-project basis. While this does not represent a "quick fix" to an important problem facing the Town, it does reflect a comprehensive, realistic approach in which new developments are encouraged to integrate the much needed housing opportunities within projects that meet the high expectations held for new communities in Smithfield. The Isle of Wight Task Force on Workforce Housing's recommended program projects that if its comprehensive recommendations are implemented, it would produce 100 to 150 new, affordable homes a year within the County for the local workforce. This is a logical and realistic goal for the community. Within this established goal, it is hoped that the Town could provide 15-25 of these new dwelling units each year. This range is realistic, given the Town's limited land availability and land use policy objectives.

It's obvious that the benefits of this approach will take time to become visible to the community, but it's equally obvious that the longer the community postpones taking steps to address the issue, the more pronounced the affordability gap for those earning low and moderate incomes in Smithfield seeking local residences will become. The housing policies and implementation strategies introduced in this chapter provide an important initial step by the Town to address this important issue.

*Chapter XII:*

**FACILITIES & INFRASTRUCTURE**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter XII:* **FACILITIES & INFRASTRUCTURE**

### **Introduction**

The Facilities and Infrastructure Chapter attempts to summarize the existing public services provided by the Town to its citizens. Included in the summary is a general analysis of the efficiency of the systems and public infrastructure used by the Town to help provide these services. This analysis will incorporate several recommendations aimed at improving public service delivery in four major categories: Community Facilities, Public Utilities, Stormwater Management, and Open Space, Parks and Recreation. This chapter includes a separate summary and analysis section for each of these four categories in the following sections.

### **COMMUNITY FACILITIES**

Community facilities consist of all public buildings, utilities, services and lands serving Smithfield area residents. One of the main functions of local government is to provide police and fire protection, water and sewer services, parks and recreation facilities and other services needed by the community. It is the responsibility of the Town of Smithfield to provide these services within the bounds of its legal authority and its financial capability. The following paragraphs briefly summarize existing conditions of community facilities in the Town with a few general forecasts.

#### **Government Facilities**

The Town's governmental facilities are currently divided between several buildings in the Downtown area. The Town Manager's and Town Clerk's offices are located at 315 Main Street. Old Town Hall, a two-story building located at 310 Institute Street, houses the Town's administrative offices, including the Treasurer's Office, Information technology, and the Department of Planning, Engineering and Public Works. Public Work and Utilities crews work out of the Town Operations Facility at 292 Cary Street. The Smithfield Police Department is located along the South Church Street entrance corridor at 1613 S. Church Street. The emergency location for central dispatching for all emergency services in the county (including police, fire and rescue) is based at Town Hall. The Town's primary fire station is located on Grace Street. As the Town's population continues to grow, more space will be needed to

accommodate additional personnel and equipment. The Town should continue searching for feasible sites in the Downtown Area that would be suitable for the construction of a new Town Hall.

### **Smithfield Center**

All Council and Planning Commission meetings are held at the Smithfield Center. One of the premier conference and community event centers in Hampton Roads. The Center is a Town-owned building offering multi-purpose space for community events. The Center opened on November 30, 2000. Since the grand opening, the Center has hosted numerous events including parties, weddings, trade shows and business and governmental meetings. The Center was completed at a cost of approximately \$2.6 million, funded jointly by the Town, Isle of Wight County, and Smithfield Foods, Inc. The Town should continue to maintain and make upgrades when necessary to enable the Center to remain a modern facility and a competitive site for regional and community events.

### **Police**

The Smithfield Police Department consists of one Chief of Police, and twenty-one (21) uniformed officers. The Chief of Police reports directly to the Town Manager. Clerical and dispatching duties are performed by a support staff of four (4). State police standards recommend a proportion of 2 officers to every 1000 residents in urban areas. Staffing levels in Smithfield currently meet this recommendation. The Town's police force is supplemented by approximately six (6) state troopers assigned to the Smithfield vicinity; the nearest state police facility is based in Southampton County.

The Town of Smithfield itself does not operate a jail. Isle of Wight County and the Cities of Franklin and Suffolk contribute funds to a regional facility located in Suffolk. The present facility is currently filled to its design capacity (150 inmates). A new addition to the jail is currently under construction in Suffolk at the crossroads of Routes 10 and 460.

The Town police department utilizes twenty-two (22) patrol cars. Replacement of police vehicles will be necessary on an occasional basis as dictated by mileage and circumstance. An enhanced E-911 system compliments and accompanies the Police Department's communication operation.

### **Fire Protection Services**

The Smithfield Volunteer Fire Department provides fire protection to the Town of Smithfield and its surrounding environs. The Department, which was established in 1939, currently has a 40+ member crew. The Department's service area covers approximately 165 square miles, and includes the Town as well as those adjoining areas of Isle of Wight County lying north of the Isle of Wight Courthouse, west of Benn's Church and southeast of the Wrenn's Mill Subdivision. The Department coordinates its service with the volunteer fire departments in the Towns of Carrollton, Rushmere and Windsor.

The Town's primary fire station is located on Grace Street. The station is owned by the Town, while all of the fire fighting equipment is owned by the Department. The Town of Smithfield, Isle of Wight County and the Department itself jointly fund the Department's activities. The Fire Department maintains three engines/pumper trucks, one support rescue truck, one elevated rescue platform truck, one brush truck, one support vehicle, two rescue boats and two support cars for use by the Chief and his assistant.

#### *Hydrant Location and Testing*

The Town of Smithfield maintains a total of approximately 210 fire hydrants in Smithfield for firefighting purposes. These hydrants provide coverage throughout the Town. All of the Town's fire hydrants are tested on an annual basis, and they are maintained by the Smithfield Public Utilities Department.

#### *Community Involvement*

The Smithfield Volunteer Fire Department Fire promotes fire education and safety within the community by giving demonstrations to area schools and civic groups. In addition, each year the Department observes Fire Prevention Week by having its officers visit the local elementary schools. The Department also conducts fire inspections of homes and commercial establishments upon request and provides recommendations regarding fire safety on an advisory basis.

### **Emergency Medical Services**

The Isle of Wight Volunteer Rescue Squad was established in 1968, and it provides emergency medical services to the Town and the northern half of Isle of Wight County. Approximately 50 volunteers serve as rescue squad members. The Isle of Wight Rescue Squad is housed in a modern four-bay rescue squad facility located on South Church Street. The Smithfield rescue squad is one of two in the County and receives financial support from both the Town and the

County. The other rescue squad in the County is located in the Town of Windsor and provides services to that town and the southern half of the County.

### **Medical/Health Facilities**

The Isle of Wight County Health Department maintains a large, modern health facility on Grace Street in Downtown Smithfield. At present, there are no hospitals in Smithfield or Isle of Wight County; the nearest hospital facilities are located in Suffolk, Franklin and Newport News. The Town is home to two privately operated medical centers, the Smithfield Medical Center and the Riverside Health Center both of which are located on South Church Street. There is also a mental health center, a physical therapy center and a nursing home/convalescent center located within Smithfield.

In the Citizens' Survey completed as part of this Comprehensive Plan Update, citizens were asked what additional health care/medical services not currently offered in Town would be most desirable in Smithfield. The most frequently cited responses were as follows:

- |      |  |           |
|------|--|-----------|
| 1).  | 24-HR EMERGENCY & MEDICAL SERVICES/URGENT CARE | (258-41%) |
| 2).  | NEW LOCAL HOSPITAL                             | (83-13%)  |
| 3).  | OPHTHALMOLOGIST OFFICE (EYE CARE CENTER)       | (30-5%)   |
| 4).  | OUTPATIENT CARE/CLINIC                         | (25-4%)   |
| 5).  | DENTIST  | (19-3%)   |
| 6).  | PEDIATRICIAN                                   | (14-2%)   |
| 7).  | OBGYN  | (9-1%)    |
| 8).  | CANCER CENTER/TREATMENT                        | (5-1%)    |
| 9).  | GENERAL MEDICAL DIAGNOSTIC CENTER              | (4-1%)    |
| 10). | DOC-IN-A-BOX                                   | (4-1%)    |

A clear void exists in the current health care marketplace for a 24-hour urgent care facility. Within the upcoming planning period, urgent care facilities and nursing home facilities in the region will be an important consideration of health care providers, consumers and policy makers. The Town's elderly population is expected to mirror regional and national demographic trends, and will continue to increase at a rate faster than any other age group. Several assisted living projects have been developed in the Town over the past decade in response to the growing demand of elderly housing. The Future Land Use Plan attempts to encourage and facilitate this ongoing trend by encouraging the development of elderly housing and assisted living communities within several vacant, developable tracts of land in the Town.

## **Public Works**

The Town of Smithfield's Departments of Public Works and Public Utilities are administered by individual superintendents who report directly to the Director of Planning , Engineering and Public Works. The Departments are responsible for the following major tasks, many of which are sub-contracted to the private sector:

- *Street repair and maintenance;*
- *Maintenance, repair and installation of street signs and parking signs;*
- *Snow removal;*
- *Installation, maintenance and repair of water and sewer lines, and lift and pump stations;*
- *Maintenance and repair of all Town buildings and structures;*
- *Mowing along all Town street right-of-ways and Town grounds;*
- *Maintenance and repair of all Town vehicles and equipment; and*
- *Meter reading, and Miss-utility markings.*

The Town also perform daily facility checks and maintains a complaint and request log to ensure expedient and effective handling of these requests. At present, Public Works and Public Utilities have fourteen (14) full-time equivalent employees. These departments also own and maintain a wide variety of service vehicles and other assorted equipment, including portable generators, a mudhog (water leak pump), jackhammers, several trucks, a backhoe/trencher, compressors, welding machines, several tractors, several sewer pumps and numerous lawnmowers.

## **Solid Waste Collection and Waste Disposal**

The Town of Smithfield's contracted refuse collection and disposal services are financed entirely from its general fund without assessment of service fees. The Town offers three basic types of services to its residents:

- *Twice weekly pick-up and disposal of residential refuse;*
- *Twice weekly pick-up of yard debris (grass clippings and small brush); and,*
- *Bi-weekly curbside pick-up of recyclable materials including paper, glass, cardboard and aluminum.*

In addition, Town residents may request special pick-ups of oversized refuse and debris for a small fee. The Town also provides some seasonal curbside leaf collection. Although the Town does not provide refuse collection services to Town businesses, it does collect recyclables from businesses at no extra cost. The Town's refuse collection and disposal services are provided through a private hauler. The curbside pickup of recyclable materials is provided by the Southeast Public Service Authority (SPSA). Both the solid waste and the recyclable materials are transported to the regional landfill which is owned and operated by the SPSA. SPSA's landfill is located in Suffolk on Route 58 about 20 miles from the Town limits.

### **Telecommunications**

Recent advances in telecommunications technology have dictated the need for local communities to plan for the siting of telecommunications towers to provide private regional service to local residents. While the Town owns no such towers and does not provide telecommunications services of this nature, it will become increasingly important for the Town to include the consideration of tower siting strategies in its future land use planning efforts. The Town's recently revised Zoning Ordinance prohibits any telecommunications tower from being located within five hundred (500) feet of a residential district unless an applicant clearly demonstrates by providing coverage/interference and capacity analysis that the location of the antenna is necessary to meet the frequency reuse and spacing needs of the wireless telecommunications facility and to provide adequate coverage and capacity to areas which cannot be adequately served by locating the tower(s) in a less sensitive area. Tower(s) or structures supporting telecommunication antenna(s) or otherwise conforming to all the applicable provisions of this Ordinance are permitted subject to approval of a special use permit in the following zoning districts when the tower(s) are considered an accessory use: Office Transitional, Light Industrial and Heavy Industrial. The Town prefers that communications towers be located in rural areas away from development and should include multiple uses on the same site as approved by the Town Staff. Thus, telecommunications towers, including cellular telephone relay stations and towers should be designed, arranged and located so as to accommodate future multiple uses (i.e. digital, analog and cellular facilities) within the same site. Also, the identified facilities should include space for additional expansion and location of new towers on the site.

### **Public Library**

The Smithfield Branch of Isle of Wight Libraries is located in the old Smithfield High School building on James Street. The first floor adaptive reuse of this building was undertaken in 1989 in conjunction with Community Development Block Grant (CDBG) improvements in the adjacent Riverview neighborhood. The Smithfield library presently has over 12,000 volumes available for checkout with a variety of other reading programs and services offered. It offers



seating space capable of supporting thirty-five (35) users and also includes several community meeting rooms. The library has experienced strong growth in circulation in recent years, which is largely attributable to the accessibility and excellent design of the facility. The remainder of the old school facility, still owned by Isle of Wight County, includes a classroom extension facility for Paul D. Camp Community College and the Smithfield YMCA.

**School Facilities**

Residents in the Town of Smithfield are served by the Isle of Wight County Public School System. Hardy Elementary School (Grades K-3) is located within the Town limits, while Carrollton Elementary School (K-3), Smithfield Middle School (Grades 4-7) and Smithfield High School (Grades 8-12) are located in the County outside of the Town's existing corporate limits. Each of these schools are currently operating within design capacity; however, the Isle of Wight County School System has requested that the Town consider the future expansion needs of the Middle School located on Route 258 West in its land use planning efforts. Ideally, the school would expand its current campus onto the adjacent vacant parcel located directly behind the existing building. The Town has incorporated this request into the Future Land Use Plan as is discussed in the summary of the West Main Planning Area in the Future Land Use Plan chapter and as is reflected on the Future Land Use Plan Map.

In the Citizens’ Survey conducted in support of this Comprehensive Plan Update, citizens were asked to list the additional services which currently are unavailable in Smithfield would be most desirable to be provided by the Town. The following services were most frequently mentioned:

- 1). TRASH SERVICE (EXPAND ALLOWED ITEMS, PICK-UP TIMES ETC.) (8%)
- 2). IMPROVED EMERGENCY SERVICES (6%)
- 3). RECYCLING (EXPAND/INC. ITEMS PICK UP) (4%)
- 4). WATER QUALITY & RATES (3%)
- 5). ADDITIONAL TRAFFIC LIGHTS-SPECIFIC LOCATIONS MENTIONED (3%)
- 6). INCREASED PUBLIC TRANSPORTATION OPPORTUNITIES (2%)
- 7). EXPAND, REFURBISH AND CLEAN SIDEWALKS (2%)
- 8). HIRE ADDITIONAL POLICE OFFICERS/EXPAND SERVICES (2%)
- 9). CLEANER STREETS (2%)
- 10). NONE (2%)
- 11). MOVIE THEATER (1%)
- 12). NEW LOCAL HOSPITAL (1%)
- 13). DRAINAGE IMPROVEMENTS (1%)
- 14). INCREASED DAY CARE OPPORTUNITIES (1%)

## **PUBLIC UTILITIES**

### **Water**

The Town of Smithfield has owned and operated a public water system since 1905. Water is available to almost every resident and business in the Town, and over 98% of them are currently connected to the Town's system. Since 1985, the Town has sold water wholesale to the County for use by those residences and businesses located just outside the Town limits. The Town of Smithfield obtains its water solely from five underground wells which draw groundwater. These wells are located in the following places:

- *Cary Street;*
- *West Street (Jersey Park);*
- *Jefferson Drive;*
- *Mercer Street; and*
- *South Church Street*

The current maximum potential output of these wells significantly exceeds the average daily demand, 0.83 MGD, consumed within the Town. The Town's current maximum permitted output from the wells is 1.24 MGD. Because of this excess water capacity, the Town has sold water since 1988 and currently sells water wholesale to Isle of Wight County, and more specifically Gatling Pointe (0.15 MGD).

### **Water Storage**

The Town's water storage system includes three water towers and one hydro-pneumatic tank with a combined storage capacity of 625,000 gallons. The location and storage capacity of each tank is summarized below:

Location Capacity:

<i>Wilson Road</i>	<i>150,000 gallons;</i>
<i>South Church Street</i>	<i>400,000 gallons;</i>
<i>Cary Street</i>	<i>70,000 gallons;</i>
<i>Pinewood Drive</i>	<i>5,000 gallons; and</i>
<i>Battery Park Road</i>	<i>500,000 gallons (under construction)</i>

A 500,000 gallon water storage tank is currently under construction on Battery Park Road adjacent to the proposed Mallory Pointe subdivision. The existing tank and wells are planned to be shut down once the reverse osmosis plant is completed, online and functional (see details in the following section). At that time, the tanks and wells will be used as reserve storage for emergency (fire coverage) use.

### **Water Distribution**

The Town's existing water distribution system extends to almost all of the developed areas of the Town, and consists of approximately 32 miles of water line with pipe sizes ranging from two inches to twelve inches in diameter. The Town's system consists primarily of six-inch lines in the residential areas and eight-inch lines in the industrial and commercial districts. The water system is divided into two zones: the West Zone and the East Zone. The West Zone services historic Smithfield and the other non-historic parts of the Town west of Cypress Creek. The East Zone serves the more recently developed parts of the Town east of Cypress Creek.

Currently, there are 2,918 connections to the Town's water system. Over 90% of these are residential taps. The principle industries in the Town, Smithfield Packing and Smithfield Foods, are not connected to the Town's distribution system, but do rely on six private wells. Town policies and guidelines for water services are established in the Town Code. Water billing and administrative tasks are performed by the Town Treasurer's Department in conjunction with the Hampton Roads Utility Billing System. Bills are distributed every two months. Water lines also extend from the Town's public water system into some portions of the County. Various lines are operated by the County and the County School Board. In March 1988, the Town entered into a Utilities Agreement with the County. This agreement was amended in 1998. Pursuant to that agreement, the Town sells water wholesale to the County for distribution through the extensions to the Gatling Pointe and Gatling Pointe South subdivisions along Route 704, as well as to Smithfield High School located south of Town along Route 10. The Town sells to the County an average of 0.18 million gallons per day. The Town charges the County a separate rate.

The Town of Smithfield entered into a Consent Order with the Virginia Department of Health in 2004 for an agreed upon plan of action to reduce the naturally occurring levels of fluoride found in our public water system's deep wells. The town contracted with the engineering firm of Buchart Horn, Inc. of Baltimore, Maryland to find an appropriate fluoride removal solution. Upon the completion of their Preliminary Engineering Report, Buchart Horn, Inc. recommended that the town construct a Reverse Osmosis membrane technology Water Treatment Plant. The VDH has concurred with the engineer's recommendations, and the town

proceeded to drill a new production well in 2005. Construction is scheduled to begin in 2009 on the facility adjacent to South Church Street. It is scheduled to be completed by 2010, and will serve the entire town and some outlying areas.

Other system improvements that will be required include a new water storage tank to be located along the Battery Park Road corridor, which is scheduled to be completed in the fall of 2009. Additional “looping” projects are under construction and planned to improve water pressure and fire flow throughout the system. As a result the town’s utility rate structure was amended in 2005 and the town has issued a general obligation bond in order to pay for these required improvements.

In November 2005, the Town began the process of upgrading its water withdrawal permit from the Virginia Department of Environmental Quality. Shortly thereafter, the Town received a technical response from DEQ requesting additional information; Buchart Horn has provided DEQ with this information. In 2006, the Town adopted formal water conservation policies that will be required under the new permit.

### **Water Master Plan**

In conjunction with the development of the Town’s Comprehensive Plan Update, the Town of Smithfield commissioned AES Consulting Engineers to develop a Utility Master Plan to provide a schedule of recommended water and wastewater infrastructure improvements. This master plan incorporates the present and future needs of the Town by developing a separate master plan for both water and sewer services. With respect to water service specifically, the master plan delineates a schedule for the development of the water component of this plan. As a precursor to the development of this schedule, the consultants analyzed and evaluated the existing system using Hasted Methods and WaterCad software (a system modeling program). The consultant found the Town's water system to be in satisfactory condition overall; however, the evaluated data also revealed potential system needs that the Town of Smithfield should address. These needs are summarized below and are described in more detail in the final Master Utility Plan report prepared for the Town (the Plan is available for review in the Town Manager’s office). In addition to these specific problems, the master utility plan advises the Town Staff to maintain its vigilant monitoring of Town water system demand levels as development occurs within the recently annexed areas.

#### Recommended Water System Improvements:

- *Looping the system at several locations;*
- *Upgrading several water lines;*

- *Installation of new water meters;*
- *Installing a Fluoride treatment system; and*
- *Install an additional water storage tank.*

### **Sewerage**

Currently, there are approximately 2,766 connections to the Town's sewer system, representing approximately 95% of the Town. The remaining 5%, approximately 125 residences and businesses are not served by the Town wastewater collection system and use private septic systems. The Town of Smithfield also provides domestic and industrial wastewater collection throughout the entire Town as well as in certain portions of the County. Sewer services are available to almost all of the residences and businesses within the Town. The Town of Smithfield's current sewerage system consists of approximately 33.9 miles of sewer lines and 17.8 miles of force mains. The system uses a combination of gravity and force sewer mains. In addition, the system uses twenty-seven lift stations to assist the gravity mains, due to the flat topography, which complicates sewerage throughout the Town and the region. The pipelines are predominantly 8-inch lines; however, there is a 16-inch line on Battery Park Road in anticipation of future development. The Town's sewage collection system is maintained by the Town's Public Utilities Department.

The March 1, 1988 Utilities Agreement between the Town and the County, referred to in the section above, provided that the Town could own and operate extensions of its sewer system in the County. Those customers in the County who are served by the Town's sewerage system are located primarily in the Gatling Pointe subdivisions. The Town served these areas of the County through 5.8 miles of Town-owned sewer lines and 1.9 miles of Town-owned force mains, until the 1998 annexation. These lines are now owned and maintained by Isle of Wight County. Sewage billing and administrative tasks for customers in the Town as well as the County are performed by the Town Treasurer's Department in conjunction with the Hampton Roads Utility Billing System.

### **Septic Tank Pump-Out Program**

Under mandate of the Virginia Chesapeake Bay Preservation Area Program, the Town of Smithfield is implementing a Septic Tank Pump-Out Program. The program is authorized by the Commonwealth of Virginia, under Code Section 9VAC 10-20-120.7, and the Town of Smithfield, under Section G:2.d. of the local Chesapeake Bay Preservation Overlay District Ordinance. The program aims to preserve and enhance the quality of Chesapeake Bay waters by requiring routine pump-outs of on-site septic systems. Septic systems that are overloaded with solids, leaking, flooding or otherwise impaired are known to contribute pollutants to the ground and surface waters that discharge into the Bay.

The new Septic Tank Pump-Out Program is intended to promote routine maintenance to extend the life of on-site septic systems, which is of benefit to the Bay, as well as the homeowner. All on-site sewage disposal systems not requiring a Virginia Pollution Discharge Elimination System (VPDES) permit shall be pumped out at least once every five years. In 2008, the estimated cost of a Septic Tank Pump-Out ranged from between \$250 and \$350.

Key points of the Septic Tank Pump-Out Program are as follows:

- *It applies only to those properties that contain on-site septic systems and are located within the Town of Smithfield;*
- *Septic systems will be tracked via a database set up by the Town in cooperation with property owners;*
- *The program will be implemented in September 2008; and*
- *Once notified by the Town to register affected septic systems, property owners will have two years to have the initial Septic Pump-Outs performed, and then all following pump-outs will be required to be performed every five years.*

### **Sewage Treatment**

Prior to July 1996, the Town operated its own sewage treatment facility, which handled an average flow of .425 million gallons of sewage per day from residents within the Town and in limited areas in the County. On July 10, 1996, the Town discontinued use of its facility and connected to the new sewage collection line installed by the Hampton Roads Sanitation District (HRSD) along Routes 17 and 10 in the County and the Town. All sewage collected by the Town is now treated by HRSD. Currently, it is estimated that the Town has an average flow of approximately 0.7 mgd and peak flow of approximately 1.76 mgd.

### **Sewer Master Plan**

The Sewer Master Plan prepared by AES Consulting Engineers as part of the overall Utility Master Plan provides an inventory of existing wastewater facilities and a recommended schedule of sewer infrastructure improvements. Additionally, projected costs, funding opportunities and strategies for anticipated capital maintenance are included in the final adopted report, which is available for review in the Town Manager's office. The consultant's analysis of the collected sewerage data was evaluated using multiple computer spreadsheets. These spreadsheets analyzed the existing utilities, such as the gravity system, the force main and the pumping stations.

A check for Inflow and Infiltration was also incorporated into the analysis. Although this was a non-detailed analysis, it generally assessed problem areas. After conducting several rounds of analysis of the comprehensive wastewater system, the consultant concluded that the Town's wastewater system is in satisfactory condition overall. Nevertheless, several improvement projects were recommended in the master plan. A summary of these improvements are provided below.

#### Recommended Sewer System Improvements

- *General improvements to pumping station buildings; including wetwell ventilation repairs and electrical junction box installations;*
- *A comprehensive Inflow and Infiltration analysis;*
- *HRSD flow Monitoring and evaluation;*
- *One additional connection to HRSD; and*
- *Complete filling of lagoons at former waste-water treatment plant.*

## **STORMWATER MANAGEMENT**

Storm or surface runoff is stormwater that moves along the ground by gravity and flows into streams, rivers, ponds, lakes and oceans. Almost all site development projects affect runoff in some way as they typically result in the remodeling and sculpting of the earth's surface as well as changes in surface character. These changes may significantly alter stormwater runoff patterns in terms of rate, volume and direction. Thus, the continuing urbanization of watersheds presents a myriad of potential problems. Construction activities can generate sediment and nutrient loading issues at several times the normal rate. Impervious pavements increase both the volume of stormwater runoff and the magnitude of peak flood flows. Furthermore, runoff from urban areas is often highly polluted with nutrients, oils and toxic metals. The net result of these problems is that water quality may be seriously degraded, property damage may be excessive and in many instances the aesthetic quality of natural areas can be destroyed.

Stormwater management consists of basic principles and techniques used to respond creatively to these and other problems posed by development in the natural environment. The proper design of any management system requires an interdisciplinary approach, including professional expertise in ecology, engineering, hydrology and landscape architecture. The contemporary approach regarding stormwater management is to develop a comprehensive, integrated approach which addresses the effects of storm runoff on water quality in addition to volume and rate of runoff.

## **Regional Hydrologic Characteristics**

Smithfield lies within the Atlantic coastal plain of Tidewater Virginia, on the higher ground of an escarpment adjacent to a navigable river. The land rises rather steeply from an elevation a few feet above sea level at the marsh's edge to broad flat plains ranging from 20 to 40 feet above sea level. The highest elevations occur in the far western area of Town, generally increasing as one moves inland from the Pagan River.

Generally, the topography is characterized by relatively flat peninsulas of land formed by rivers, streams, creeks, and tidal shorelines that cut and erode the land, causing sandy and marshy areas, wetlands and areas subject to frequent flooding and tidal action. These wetland and marsh areas are recognized as vitally significant components of environmental systems, contributing to water filtration and purification, shoreline stabilization and serving as breeding grounds for various forms of wildlife.

In the vast majority of the Town, land generally drains well. However, much of the upland areas located in the Battery Park North and Battery Park South Planning Areas are so flat that storm water tends to drain slowly. Soil conditions in this area further complicate drainage and also pose considerable shrink swell soil problems. Serious flooding in the Town is confined to the lower elevations, usually from high tides associated with tropical storms. Cedar Street and Great Springs Road have also suffered flooding during significant rain events.

### **Watershed**

Smithfield lies within the James River drainage basin. The confluence of the Pagan and the James River is approximately 4 miles northeast of the Downtown Area. The James River ultimately flows into the Chesapeake Bay about 30 miles to the east at Hampton Roads.

### **Floodplains**

Floodplains are defined as areas exhibiting a 100 percent probability of being flooded over a 100-year span; or conversely, a 1 percent chance of being flooded in any year. Federal Emergency Management Agency (FEMA) requirements prohibit development within the floodway (water channel) and strongly discourage development in the areas adjacent to the 100-year floodway fringe. The Town of Smithfield has adopted a Floodplain Ordinance that identifies a formal flood plain district. The basis for delineation of the Flood Plain District is the 100-year floodplain elevations or profiles contained in the Flood Insurance Rate Map prepared by FEMA in 2002. Prior to the adoption of the Floodplain Ordinance, some flood-prone areas in Smithfield were developed for urban purposes, most notably on Commerce Street and on South Church Street near the edge of the wetlands. Steep slopes (those exceeding 15%) in Smithfield occur predominantly along the major creeks and tidal marshes.



Embankments above the Pagan River and Mount Holly Creek are the steepest in the Town, while more gradual relief is found adjacent to Cypress Creek, Moone and Jones Creek. In the outlying areas, most residences are sufficiently set back from creek embankments; however, accessory and water-dependent uses (garages, boathouses, walkways) are often built adjacent to banks and waterways. Few developed areas infringe upon steep slopes. The few exceptions are found in some of the older residences along Main Street and south of Cedar Street above Little Creek. Bluffs and steep slopes of any kind have unusual development problems and should be avoided.

### **Water Quantity Issues**

A variety of changes in stream hydrology result from new development. One such change is its effect on the quantity of stormwater runoff flowing downstream. As land is developed, the area of imperviousness almost always increases. This increase accelerates the runoff of rainfall and increases the peak rates of flow. If measures are not taken during the design of stormwater management facilities, this increased rate of flow can cause downstream flooding, erosion and sedimentation problems. The use of properly designed stormwater management facilities can provide a solution to these problems. However, many areas exist within the Town where development has occurred without consideration of these problems. The Town does have an Erosion and Sedimentation Control Ordinance that should limit these problems in the future, however. The ordinance requires all developers to convey runoff to adequate channels, or to prevent an increase of runoff from their properties.

### **Water Quality Issues**

Another troubling change in stream hydrology commonly caused by new development is the degradation of the quality of stormwater. Pollutants are accumulated on paved and other impervious surfaces and are flushed from these surfaces during a storm; therefore, developed areas aid in the collection and concentration of pollutants. They also provide new sources for pollution, as contaminants may be released through corrosion, decay and automobile fuel or oil leaks. Developed areas also contribute herbicides, pesticides and fertilizers into the environment which further degrade the quality of water in adjacent streams, ponds and lakes.

As a means of removing pollutants caused by urban development, Best Management Practices (BMPs) have been introduced as a major component in stormwater management practices. BMPs are measures that have been developed to control, store and/or treat stormwater runoff from developed areas for the purpose of reducing flooding or removing pollutants while maintaining or enhancing environmental quality. The effectiveness of BMPs to remove pollutants depends on the removal mechanism used, the fraction of the annual runoff that is

effectively treated and the nature of the pollutant being removed. With thoughtful site design, regular maintenance and creative landscape architecture, most BMPs can be not only efficient and utilitarian, but also an attractive (or at least unobtrusive) addition to any community. In evaluating the BMP options for the Town, care should be taken to implement BMPs that would provide the desired level of pollutant removal and ensure compatibility between the natural and human environment. The proper control of these pollutants will help preserve the quality of water in every watershed in the Town.

### **Existing Manmade Stormwater Management Facilities**

Installation of curbs, gutters and storm drainage is governed by the Town's Subdivision Ordinance which encourages the installation of a drainage system in all new Town subdivisions to insure adequate drainage of surface and storm water. All plans and specifications for installation and construction of storm drainage systems, including culverts and catch basins, must be approved by the Planning Commission. Unfortunately, many of the older subdivisions in the Town, such as Grimesland, Red Pointe Heights and the Moonefield community were developed without these manmade drainage systems. As a result, flooding is a major problem in many of the established neighborhoods. Given the limited land available within the small lots of these communities, there is little in the way of economically feasible alternatives that the Town may implement to alleviate these existing problems. The Town should ensure that the new regulations regarding curb and gutter included in the revised Zoning and Subdivision Ordinances are implemented so that the Town may avoid suffering from these same drainage problems in future developments.

All costs of storm drainage, curb, gutter, and sidewalk improvements are the responsibility of the subdivider for a new development unless the Town Council directs that the subdivider is responsible for only a portion of the costs. Before filing the application for a final subdivision plat, the subdivider must either install the improvements or execute an agreement and post a bond to cover the estimated costs of the improvements.

The Town Subdivision Ordinance also encourages the installation of curbs, gutters and sidewalks, in subdivisions where such improvements are warranted. Such improvements must conform to the specifications of the Virginia Department of Transportation (VDOT) and the Town. The Town has successfully obtained Community Development Block Grants (CDBG) to provide curbs, gutters and sidewalks to the existing subdivisions of Lakeside and Jersey Park development which are lower-income neighborhoods located off West Main Street/ Route 258 West. Similar improvements were made within the Rising Star community located off Battery Park Road.

In 2007, the Town adopted a comprehensive Stormwater Management Plan. The Plan defines the Town's new comprehensive approach to managing stormwater runoff in order to maintain the environmental balance of the region. The objective of this plan is to provide a comprehensive and unified framework for stormwater management which follows the Comprehensive Plan, complies with all regulations and includes location-specific recommendations that translate into a Capital Improvement Program that will benefit the entire Town. The plan addresses water quantity and water quality issues as defined above, as well as offering detailed recommendations regarding the proper implementation of Best Management Practices useful in protecting the environment from the impact of future development. The Plan focuses upon establishing economically feasible solutions, if any are indeed available, for improving drainage in the numerous older residential subdivisions in Smithfield that suffer from flooding during even minor storm events. As outlined in the Planning Area summaries in the Future Land Use Plan chapter, the most critical areas in need of analysis are the neighborhoods located within the Pagan Pines and Battery Park North Planning Areas.

#### **Storm Water Management Facilities Maintenance Program**

At the recommendation of the Chesapeake Bay Local Assistance Board and in order to remain in compliance with the tenets of the Commonwealth's Chesapeake Bay Preservation Act, a Storm Water Management Facilities Maintenance Program was implemented by the town in 2008. This program requires the owners of all such structures to enter into an agreement with the Town of Smithfield. The agreement requires the annual inspection of and the proper maintenance of existing and future storm water management structures within the town limits.

## RECOMMENDED FUTURE STORMWATER MANAGEMENT IMPROVEMENTS

Decisions the Town makes now regarding stormwater management issues will have a direct effect on future water quality, storm drain performance and system condition. In response to the issues addressed in this section of the Plan, the Town should implement the following projects:

1. *Develop a Stormwater Management Design Manual.* The Town should develop this manual as a means of aiding developers and Staff in their interpretation of proper engineering techniques and design details encouraged in the Storm water Management Master Plan. The manual, which would complement the Town's existing Construction Design Standards Manual, would eliminate any confusion over the Town's future expectations with respect to modern design standards.
2. *Introduce a Stormwater Management Ordinance to aid in the implementation of the strategies recommended in the Stormwater Management Plan.* A Stormwater Management Ordinance should be introduced to augment the existing Chesapeake Bay Preservation and Sedimentation Control ordinances that govern stormwater management requirements. This recommended ordinance should be designed to help prevent illicit discharges and dumping into storm drains. The ordinance would grant the Town the legal tools needed to implement the strategies outlined in the Comprehensive Stormwater Management Plan. These tools include the prohibition by law of putting any gasoline, oil, antifreeze or other pollutants into the storm system. It also prohibits anyone from putting anything in the gutter, ditch, storm drain or other drainage way that impedes or interferes with the free flow of stormwater. Chlorinated swimming pool water also cannot be discharged into the Town storm drain system.
3. *Implement a new Stormwater Management Facility Inspection Program.* Stormwater management facilities require regular maintenance to ensure that the facilities operate properly. It is recommended that the Town obtain a maintenance agreement from the owners of private BMP structures to ensure that the BMPs are properly maintained. The maintenance requirements for a regional BMP facility include periodic inspection, landscaping maintenance, trash and debris removal, pipe and outlet structure cleaning, sediment removal and dam maintenance. The Town should inspect all private BMP structures that have a maintenance agreement at least once a year.

4. *Foster a regional stormwater approach going forward emphasizing regional BMPs over small, on-site facilities in an attempt to protect water quality.* Best Management Practices (BMPs) are required by the Chesapeake Bay Preservation Area ordinance as a way to reduce nonpoint source pollution while providing effective stormwater management. As dictated by the ordinance, a BMP for a specific new development site should be designed to control runoff, maximize pollutant removal and integrate with the natural and built landscape to the highest degree possible. Included in this design scheme should be a consideration for maintenance requirements, costs and responsibilities. Through proper planning and sound design, stormwater management facilities can serve multiple uses, provide community and aesthetic amenities, create safe environments and reduce overall development costs. In many cases, regional Town-owned BMP's are preferable to the small, on-site facilities. Often times, smaller structures have a greater chance of performance failure due to poor construction practices or a lack of maintenance. Moreover, large BMPs serve a larger drainage area and are usually more cost effective to construct and maintain than several smaller on-site BMPs. Large BMPs also have greater potential to control downstream flooding and other water quantity problems caused by development. BMP selection criteria include stormwater management objectives, water quality objectives and appropriateness to specific site conditions, including climate, soils, topography, proposed and existing land use and surface cover. The suitability of recommended BMPs is strongly correlated to the engineering properties of the site's soils. Since many of the traditional BMP measures incorporate infiltration and detention facilities, geotechnical evaluations must focus on the soil's inherent permeability ratings, hydrologic groupings and drainage characteristics.

## **OPEN SPACE, PARKS AND RECREATION**

Public recreation facilities and programs administered by the County are available to the residents of the Town. Smithfield residents have access to a wide variety of park and recreational facilities, both within the Town itself and in sites located throughout Isle of Wight County and the greater Tidewater region. Nevertheless, the Town remains ever mindful for opportunities to acquire land for parks and recreation, open space, and public access to the water. The Town has set aside funds in the current CIP to enable the future acquisition of land suitable for any or all of these purposes it becomes available. The following section provides a brief summary of the existing recreational facilities, both public and private, in the area and offers several implementation recommendations concerning future parks and recreation planning.

## **Town Public Recreation Facilities**

Two major parks are located within Town limits: Riverview Park and Westside Elementary School Park. Several other smaller public parks are also located within the Town's limits. Residents of the Town and the County all use these facilities free of charge, the one exception being fishing in the town lake.

### *Riverview Park*

Riverview Park is a relatively new park located adjacent to the Smithfield library at the old Smithfield High School site on James Street in the Riverview neighborhood. The park covers over 27 acres and offers lighted tennis courts, a baseball field, picnic area, exercise court, a walking/jogging trail and open space. There is a handicap-accessible playground area for the children and a senior citizens recreation area with a shelter and gazebo. The facility is owned and maintained by Isle of Wight County.

### *Westside Elementary School Park*

The Westside Elementary School Park is located off West Main Street adjacent to the school facility. This park offers basketball, baseball and soccer fields.

### *Jersey Park Tot Lot*

The Jersey Park Tot Lot is located on Windsor Avenue in the Jersey Park neighborhood. The park includes playground equipment, a picnic shelter, a sand volleyball court and horseshoe pit. The facility is open during the daylight hours and is owned and maintained by the Town of Smithfield.

### *Robert S. Clontz Memorial Park*

Robert S. Clontz Memorial Park is equipped with a gazebo, picnic tables and fishing pier for those who enjoy the natural beauty of the outdoors. It is located off North Church Street on the northern bank of the Pagan River. The park is named after a noted artist who resided in Smithfield.

### *Pinewood Heights Tot Lot*

An additional neighborhood-scaled playground is located on Pinewood Drive.

### *Fishing Lake*

The Town of Smithfield owns a 4.5-acre lake located off Waterworks Road. Daily or annual permits are required for fishing; they can be obtained at the Town of Smithfield Treasurer's Department for a nominal fee.

## **County Public Recreation Facilities**

### *Carrollton Nike Park*

The Carrollton Nike Park is located on Route 699 (Nike Park Road) east of Smithfield. It provides several recreational opportunities, including baseball, softball, basketball, tennis, soccer, playgrounds and picnicking facilities. The park is managed and maintained by the County's Public Recreational Facilities Authority. Approximately half of the site is developed, leaving the remainder overlooking the river. It is owned and maintained by the County of Isle of Wight.

### *Smithfield High School*

Smithfield High School, located off Route 10 south of Town, has a myriad of ball fields, tennis courts, basketball courts and playing fields. It is owned and maintained by the County of Isle of Wight. As is the case with several other public schools designed for the multi-use of recreational facilities, the recreational facilities are utilized by the School Board during regular school hours, extra-curricular activities included, and by the Public Recreational Facilities Authority (for sponsored recreation programs) at other times.

### *Public Boat Ramp*

The nearest public boat ramp is located on Jones Creek in Rescue. There is also a ramp at Tyler's Beach near Rushmere. The Planning Commission and the Town Staff has identified the provision of a public boat ramp in the Town as a high priority.

## **Private Recreational Facilities**

### *Beale Park*

Beale Park, located on Moonefield Drive at the corner of Lumar Road, is also within the Town's limits. Beale Park has tennis courts, a baseball field and a swimming pool. The park is operated by the Smithfield Recreation Association (SRA), which is a private community athletic association. Membership in the SRA is open to all residents of the Town, provided that citizens pay an annual membership fee. However, the swimming pool has a separate restricted membership with a current waiting list.

### *Private Marinas*

Privately-operated marinas are located on South Church Street at the Smithfield Station complex and on Jones Creek in the community of Rescue in Isle of Wight County.

### **Recommended Parks and Recreation Facilities Improvements**

As part of the development of its Comprehensive Plan, Isle of Wight County has completed an inventory of existing recreation areas and facilities in the entire County, including Town facilities, as well as an analysis of this supply relative to projections of facility demand through 2010. This analysis concludes that the County is well-equipped to meet future demand with the exception of one or two areas of significant concern. Specific County-wide parks and recreation concerns listed in the Isle of Wight County Comprehensive Plan focus on limited public waterfront access and the lack of active recreation field space availability.

Similar needs and desires for additional opportunities have been expressed repeatedly by Town residents during public work sessions and in the citizen surveys distributed as part of the development of the Town's Comprehensive Plan. In the Citizen's Survey conducted as part of the Comprehensive Plan Update, only 28% of those surveyed responded that existing parks and recreational facilities in the Town adequately serve the community's needs. Thirty-eight percent of those responding disagreed or strongly disagreed with this statement. When asked what additional recreational facilities would be most desirable in the Town, the respondents listed the following most often:

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| 1). PARK/PLAYGROUND/FIELDS (14%)  | 7). TENNIS COURTS (4%)          |
| 2). HIKE, BIKE, WALK TRAILS (14%) | 8). BASEBALL FIELDS (3%)        |
| 3). MOVIE THEATER (14%)           | 9). YOUTH, TEEN, YMCA CLUB (2%) |
| 4). BOWLING ALLEY (9%)            | 10). PICNIC AREA (2%)           |
| 5). SWIMMING POOL (8%)            | 11). BASKETBALL COURT (1%)      |
| 6). BOAT RAMP/ACCESS (4%)         | 12). AMPHITHEATER (<1%)         |

Further, eighty-three percent of the respondents agreed or strongly agreed that the protection and preservation of the Town's waterfront areas are high priorities, and should be a major goal for future land use planning in Smithfield. This represented the fourth strongest response measured in the entire survey. Also, the absence of direct access and linkage between historic and prominent tourist areas with spaces suitable for public recreation has been frequently mentioned during Comprehensive Plan public work sessions as a missing economic development opportunity in the Town.



### *Windsor Castle Park*

In response to these needs expressed via both formal County study and citizen input during the Comprehensive Plan Update, the Town adopted the Windsor Castle Park Master Plan in 2008. The town's adopted master plan, prepared by the LandMark Design Group, provides for passive recreational use on the site, being sensitive to the state historic conservation easement which has presently been placed on 42 acres of the overall property including the private home and outbuildings.

As part of the master plan, extensive trails will encompass the property affording the public the opportunity to experience the diversity of the site from woodlands, agricultural fields and marsh. The Town has also placed a major emphasis on incorporating a master trail and pedestrian plan into the surrounding area (identified in the Land Use Plan as Sub-Area 2 of the Jericho Planning Area). The trail system also includes proposed pedestrian boardwalk connections to other areas within the historic district. A kayak and canoe launch is planned along Cypress Creek and equestrian trails are included as well on a portion of the park. Opportunities exist to integrate public open spaces and park facilities, both active (potentially in later phases) and passive into the Sub-Area. A master trail and pedestrian plan should be implemented to link these open spaces and park facilities with the historic Windsor Castle site, and beyond to South Church Street and the Downtown Area via thoughtfully planned pedestrian linkages.

This plan should be carefully integrated with the preservation of key portions of the Windsor Castle estate. The preservation of key portions of the Windsor Castle estate could provide a significant impetus towards meeting the Town's established goals of boosting tourism in the area and providing more public open space for its citizens. The proposed design and phasing of improvements should be done in close coordination with the Virginia Department of Historic Resources, Virginia Marine Resources Commission, US Army Corps of Engineers, Isle of Wight County Wetlands Board and the town's appointed boards and citizens. See the Jericho Planning Area land use summary for more details.

### *Cary Street Park*

The Town supports another new park location in Sub-Area 5 within the West Main Planning Area. The site is located between the Route 10 Bypass and Cary Street. Given the location of this Sub-Area within the Town (more specifically its proximity to other Town and County park facilities and the Luter Family YMCA and its potential for accessibility to the Route 10 Bypass) and its ideal topographic attributes, Sub-Area 5 holds strong potential to serve as the requested new Town park facility. It is recommended that the park include soccer, baseball and softball fields, basketball and tennis courts, bicycle and walking trails, and ample open space. Strong

pedestrian and bicycle linkages (via sidewalks and dedicated bicycle paths) connecting the park to the adjacent Luter Family YMCA across Cary Street should be included in the future master plan for the park. Ideally, the entrance would be located directly across Cary Street from the Luter Family YMCA in order to build upon the outstanding services provided in the youth and family-oriented facility, and to provide cross-linkages between the two uses.

#### *Beale Park Extension*

The Town supports the logical extension of Lumar Road to the south of its existing boundaries. As part of this plan, Lumar Drive should be extended to provide suitable access to this southern property.

#### *Active Recreation Facility Needs*

Even with the announcement of the master plan for the future use of the Windsor Castle property as public park space, the Town should continue to explore adding a new facility to its existing portfolio of recreational areas. The Town has prepared a concept plan to add new recreation facilities on the Town's old Sewage Treatment Plant property adjacent to Cary Street. Plans for the new facility include softball and baseball fields on the site where the old sewage treatment plant lagoons are located.

Citizens have also mentioned that the Town needs to identify additional opportunities for public boat landings. The Town should explore the feasibility of acquiring the vacant lots adjacent to the Pagan River off Riverview Avenue, and constructing a public boat ramp offering direct access to the river. If economically and environmentally feasible, this site could provide a valuable resource to the community. Special care must be taken to ensure that such a project abide by all Chesapeake Bay Preservation Act requirements, especially those concerning shoreline erosion, water quality impacts and public water access.

*Chapter XIII:*

**IMPLEMENTATION**

**ADOPTED  
AUGUST 4, 2009**

## *Chapter XIII:* **IMPLEMENTATION**

### **Planning/Implementation Linkages**

The adoption of this Comprehensive Plan serves as only one element of a continuous growth management process for Smithfield. In pursuit of a "growth by design" policy, land use implementation responsibilities must be intelligently shouldered by both the public and private sectors alike. This process must be carefully orchestrated over an extended timeframe inasmuch as development occurs incrementally. The Plan serves as the urban design framework around which relevant future land use decisions are based. Its implementation must be directed by growth management tools -- zoning, subdivision and site plan ordinances, architectural and entrance corridor design guidelines, etc. -- which are fully integrated into the Plan's "vision" for the Town. The concept of "linkage" between the Plan and those tools has been a dominant planning theme in this Plan. The Comprehensive Plan is intended to capture a vision of the future of the Town of Smithfield. As such, it provides a basis for a wide variety of public and private actions and decisions which should be undertaken in the Town over time. The Plan shall serve as a dynamic document designed to provide flexibility and adaptability to change in the coming years as the community continually evolves. The Plan provides general guidelines and recommendations for Town leadership with regard to its implementation of long range planning goals and objectives in its day-to-day regulatory, management and service operations, as well as its capital improvement programming.

It is hoped that the Town Staff and the Town's elected and appointed decision-makers will refer to the Plan as part of their ongoing decision-making and planning processes so that issues will be evaluated with respect to their long-range impact upon Town residents and businesses, Isle of Wight County and its residents and existing land uses, public utilities, finances and transportation systems. The Future Land Use Plan element provides a specific conceptual future development pattern for the Town. This established pattern should not be viewed as being "etched in stone". Local market conditions and citizen values with respect to growth management, economic development and environmental conservation may change over time in response to evolving economic and political pressures. The Plan must subsequently be responsive to these changes. Hence, it should be updated every five years as required by State

Code in order to allow the Town Council and Planning Commission an opportunity to reassess its vision for the future and respond to these changes as they occur. Therefore, the Plan is not a document which encourages regimentation. Instead, it should serve merely as a guide designed to encourage future patterns of development which, in turn, provide for orderly and efficient levels of community growth within the social, political, economical and historical context that defines Smithfield and makes it so unique to Tidewater.

The real impact of the Comprehensive Plan will ultimately be measured by the degree to which the Plan's implementation recommendations are translated into reality. These recommendations, no matter how carefully crafted, can have little impact on guiding future growth and development in the Town in the absence of future implementation by Town leadership. The following is a summary of the major implementation recommendations outlined in the 2009 Smithfield Comprehensive Plan.

### **ZONING ORDINANCE RECOMMENDATIONS**

Of the various legal devices available for implementation of the Plan, zoning will probably receive the most attention during the coming years and will reach most pervasively into the lives of Town residents. While the truth of this is more obvious with respect to the overall distribution of land uses and the protection of natural resources, zoning can also be useful in many small ways to improve the quality of development. The extent to which zoning can improve living conditions and guide the growth of the Town in accordance with the Comprehensive Plan will be largely dependent upon the attitudes and interests of the people of Smithfield as expressed by themselves and through their enforcement. The problems will be varied since Smithfield is an attractive community with the potential for different kinds of development. But if the people of Smithfield truly desire an orderly, efficient land use development pattern which channels development into designated areas and protects valuable water resources and sensitive environmental areas, then zoning is available to implement a program which will accomplish these objectives. In concert with the update of the Comprehensive Plan in 1999, the Town substantially revised its Zoning Ordinance. Drastic changes were made to the Ordinance in order to properly regulate land use in the three annexation areas brought into the Town earlier that year, as well as to aid in the implementation of the recommendations of this Plan. Several existing zoning districts were modified and three new districts were written to more efficiently guide new development in rural areas of the Town. Modern standards in lot configuration, design, site planning, stormwater management, net developable area calculation and slope regulations were also added to the Ordinance in an attempt to properly implement the land use recommendations incorporated into the Future Land Use Plan. Over time, it has become clear that additional modifications to the Zoning Ordinance are necessary.

As part of the current Comprehensive Plan Update, a key theme has been the encouragement of the construction of additional affordable housing opportunities within the Town. During this Comprehensive Planning process, the Town has made it clear that it is willing to consider applications incorporating affordable housing via conditional use permits. Advancing this implementation strategy, the Comprehensive Plan also includes recommendations for the modification of two existing zoning districts (the S-R, Suburban Residential and A-R, Attached Residential) in the Town Zoning Ordinance. These modifications are intended to incentivize the development of affordable housing via bonus provisions and other design-related incentives. They also serve to promote mixed residential uses of medium density, including single family detached homes and townhouses, within the same project. Further, provisions were added to this and another overlay district to be discussed in the following section to encourage new urbanism and neo-traditional forms of residential projects. As part of this strategy, certain site development standards and criteria for projects were relaxed for projects that include adequate levels of affordable housing.

The following provides a summary of the basic content of the revised districts and includes examples of how the bonus density provisions may be employed:

#### **New Urbanism Residential (NU-R) District**

The New Urbanism (NU-R) district would expand and/or replace the “vision” for medium density housing in the existing A-R, Attached Residential district. In concept, the NU-R zoning district would establish a mixed-use residential district to accommodate new dwellings within subdivisions that are organized around the principles of neo-traditional and “smart growth” forms of development. The new district would provide for single family as well as attached residential dwellings such as townhouses, row houses, multiplex dwellings, duplexes and other similar forms of residential units that are complementary to new urbanism forms of residential development. The district shall encourage mixed residential product choices, as well as appropriate levels of owner-occupied, affordable residences within this district. The major changes in the district relate to incentives for subdividers to build affordable dwelling units. This is done through a system of scaled-density bonuses. As an incentive to developers to seek density bonus provisions for affordable units, greater bonuses (i.e. higher density) can be granted in return for the development of greater levels of affordable housing. Also, as a disincentive for developers to default to the baseline density project, it is recommended that the current 8 du/nda by-right density be reduced to 6 du/nda.

This reduction in base density creates a still marketable, but relatively low density attached housing opportunity in Smithfield. It is anticipated that by lowering the base density and significantly increasing the bonus density, developers will be adequately incentivized towards the production of affordable housing. The following summarizes the density bonus recommendations:

1. By-Right Density:

Existing: Eight (8.0) dwelling units per net developable acre.

Recommended: Six (6.0) dwelling units per net developable acre.

2. Density Bonus for Affordable Housing: For qualifying affordable dwelling unit subdivisions and development two density bonus scales are recommended for residential projects:

*Level 1 Density Bonus for NU-R District:* Twelve (12.0) dwelling units per net developable acre for subdivisions and developments that incorporate a minimum of twenty percent (20%) affordable dwellings units.

Example: Applying the density bonus provision for 20% affordable units, a 50 acre (nda) project at 12.0 du/nda would yield 600 dwelling units. To qualify for this bonus, 120 affordable units would be required to be designated by lot location on the general development plan. This would yield the following mix of units:

*Market rate housing: 480 dwellings*

*Affordable unit housing: 120 dwellings*

*Total residential units: 600 dwellings*

The 20% bonus provision would allow the developer to build 180 additional market rate dwellings than what would be permitted under the by right subdivision density.

*Level 2 Density Bonus for NU-R District:* Ten (10.0) dwelling units per net developable acre for subdivisions and developments that incorporate between ten and nineteen percent (10%-19%) affordable dwellings units.

Example: Applying the density bonus provision for 10%-19% affordable units, a 50 acre (nda) project at 10.0 du/nda would yield 500 dwelling units. To qualify for this bonus, a minimum of 50 affordable units would be required to be designated by lot location on the General Development Plan.)

This would yield the following mix of units:

*Market rate housing: 450 dwellings*

*Affordable unit housing: 50 dwellings*

*Total residential units: 500 dwellings*

The 10% bonus provision would allow the developer to build 150 additional market rate dwellings than what would be permitted under the by right subdivision density. No density bonus would be allowed for subdivisions and developments with less than ten percent (10%) affordable dwelling units.

The NU-R District is intended for “mixed” residential products to be located within master planned cluster subdivisions. Unlike the revised S-R District that serves only detached housing, the NU-R District will serve a full range of attached and detached housing needs in Smithfield. However, apartment buildings and mid-rise housing products would not be permitted in the district, with those units being reserved for the MF-R District. In addition, provisions for waivers and modifications to certain site development standards, yard and setback requirements for Affordable Housing are introduced into the NU-R District. These would give developers the opportunity to reduce overall site development costs in projects meeting qualifying affordable unit counts.

### **Suburban Residential (S-R) District**

The Suburban Residential (S-R) District, as originally drafted and adopted, established a zone for single family detached residences at subdivision densities which are compatible with the Comprehensive Plan's goals for low to medium density residential developments in Smithfield. The average density of three units per acre established the S-R District as the Town's low-to-medium density district for detached residences. In order to fulfill the Town's goals for the development of new affordable, workforce housing throughout Smithfield, subdivisions incorporating minimum levels of affordable residential units would be entitled to receive a density bonus. In addition, affordable housing would be strongly recommended for inclusion in any S-R district rezoning or special use permit application.



The outline on the following page summarizes the density bonus recommendations for the amended S-R district:

1. By-Right Density:

Conventional Subdivisions:

Existing: Three (3.0) units per net developable acre.

Recommended: No change proposed

Cluster Subdivisions: (Cluster subdivisions will be permitted as a by-right development.)

Existing: Four and One-half (4.5) units per net developable acre.

Recommended: Four (4.0) units per net developable acre.

Employing a “carrot and stick” approach, as an added incentive to developers to seek density bonus provisions outlined below for affordable units, a disincentive for subdividers to default to the baseline density project could be introduced into the S-R district by reducing the current cluster density of 4.5 du/nda density to 4 du/nda. This reduction in base density would create a still marketable, but relatively low density attached housing opportunity. By lowering the base density and significantly increasing the bonus density, developers will be incentivized towards the production of affordable single family, detached housing.

2. Density Bonus for Affordable Housing:

Level 1 Density Bonus for S-R District: Five (5.0) dwelling units per net developable acre for subdivisions and developments that incorporate a minimum of fifteen percent (15%) affordable dwellings units.

Example: Applying the density bonus provision for 20% affordable units, a 50 acre (nda) project at 5.0 du/nda would yield 250 dwelling units. To qualify for this bonus, 38 affordable units would be required to be designated by lot location on the General Development Plan. This would yield the following mix of units:

*Market rate housing: 212 dwellings*

*Affordable unit housing: 38 dwellings*

*Total residential units: 250 dwellings*

The 15% bonus provision would allow the developer to build 12 additional market rate dwellings that what would be permitted under the cluster subdivision density and 62 additional market rate dwellings that what would be permitted under the conventional subdivision density. This provides a very attractive increase in market rate units to offset any reduction in profit margins that might accompany the affordable housing units.

*Level 2 Density Bonus for S-R District:* Four and one-half (4.5) dwelling units per net developable acre for subdivisions and developments that incorporate between ten and fifteen percent (10%-15%) affordable dwelling units.

Example: Applying the density bonus provision for a subdivision with 10%-15% affordable units, a 50 acre (nda) project at 4.5 du/nda would yield 225 dwelling units. To qualify for this bonus, a minimum of 23 affordable units would be required to be designated by lot location on the General Development Plan. This would yield the following mix of units:

*Market rate housing: 202 dwellings*  
*Affordable unit housing: 23 dwellings*  
*Total residential units: 225 dwellings*

The 10% bonus provision would allow the developer to build 2 additional market rate dwellings than what would be permitted under the cluster subdivision density and 52 additional market rate dwellings than what would be permitted under the conventional subdivision density. No density bonus would be allowed for subdivisions and developments with less than ten percent (10%) affordable dwelling units. The S-R district is targeted for detached housing and is not intended for “mixed” residential products.

### **Traditional Neighborhood Overlay Option**

Within this Comprehensive Plan Update, the Town seeks to emphasize the need for and indeed, encourage new development of traditional neighborhood development and “smart growth” in Smithfield. This approach to land development represents a departure from the traditional suburban interpretation of zoning practices in that it promotes compact, mixed-use development with an urban scale, massing, density and infrastructure configuration. Such

projects should integrate diversified uses within close proximity to one another as well as within the same buildings, where appropriate. The dominant goal for this new initiative is to provide the urban infrastructure and amenities which are essential to establishing a community which provides economic opportunity within the context of social, physical and environmental sustainability. Key to the successful implementation of these types of neighborhoods are the encouragement of pedestrian movement and inviting public open spaces which so often enable the civic interaction deemed critical to vibrant neighborhoods.

The Town should seek to introduce and adopt a new "Traditional Neighborhood Overlay Option" zoning district to implement this significant urban design objective. This overlay district would enable applicable projects to be submitted and considered for approval as a land use option within any of the Town zoning districts pursuant to the additional regulations and enhanced design criteria established in the proposed Ordinance. Each proposed "Traditional Neighborhood Overlay Option" project shall be guided by the appropriate land use planning designation included in this Comprehensive Plan, and shall be governed by the overlay requirements included in the proposed overlay district, the underlying zoning districts, a submitted Master or General Development Plan, a submitted Code of Development, and the applicant's proffers which may be attached thereto.

Projects to be considered as a "Traditional Neighborhood Overlay Option" shall promote compact, mixed-use development with an efficient town or village scale, massing, density and infrastructure configuration which integrates diversified uses both within close proximity to each other and within individual buildings, where appropriate. The dominant goal for the "Traditional Neighborhood Overlay Option" is to clearly define and establish the foundational infrastructure and urban design elements within the context of social, civic, economic, and environmental sustainability. The *Urban Design* chapter contains additional detail on this recommendation, including further defining the recommended guiding principles and components of a suitable code of development, which will be central to the implementation of future Traditional Neighborhood Development-style communities in Smithfield.

The Town wishes to promote this type of development, and has identified strategic locations within the Town where this type of development would be most appropriate. The Land Use chapter provides more detail on the locations of these proposed undeveloped properties. The approach to "Traditional Neighborhood Overlay Option" development represents a departure from the traditional interpretation of zoning practices in that it promotes compact, mixed-use development with an urban scale, massing, density and infrastructure configuration. Each project should integrate diversified uses within close proximity to one another as well as within the same buildings, where appropriate. The dominant goal for the "Traditional Neighborhood

Overlay Option” is to provide the urban infrastructure and amenities which are essential to establishing a community which provides economic opportunity within the context of social, physical and environmental sustainability.

“Traditional Neighborhood Overlay Option” projects may be submitted as a land use option within any of the Town zoning districts pursuant to the additional regulations and enhanced design criteria established in the proposed overlay district. The overlay shall augment the regulations contained in the land area governed by underlying conventional zoning districts per the current Town Zoning Ordinance. Each proposed “Traditional Neighborhood Overlay Option” project shall be guided by the Town’s Comprehensive Plan and shall be governed by the overlay requirements described in the *Urban Design* chapter, the underlying zoning districts, a Master Plan, a Code of Development, and the applicant’s proffers which may be attached thereto. Prior to zoning amendment approval, a “Traditional Neighborhood Overlay Option” project must be recognized by the Planning Commission and Town Council as compatible and consistent with the Comprehensive Plan’s designations for neighborhoods and other development areas. The Town Council, upon recommendation by the Staff and Planning Commission, may consider and approve any applicant’s request to employ the “Traditional Neighborhood Overlay Option” for application to a specific property or properties.

Projects to be considered as a “Traditional Neighborhood Overlay Option” shall promote compact, mixed-use development with an efficient town or village scale, massing, density, and infrastructure configuration which integrates diversified uses both within close proximity to each other and within individual buildings, where appropriate. The dominant goal for the “Traditional Neighborhood Overlay Option” is to clearly define and establish the foundational infrastructure and urban design elements within the context of social, civic, economic, and environmental sustainability. Applications to be considered under the “Traditional Neighborhood Overlay Option” shall integrate into its Code of Development and General Development Plan the following principles:

- *Thematic, Axial, and Socially Functional Centers;*
- *Open Space and Recreation;*
- *Interconnected Streets, Sidewalks, and Pedestrian Network;*
- *Mixed Uses;*
- *Building Placement and Scale that is Sensitive to and Appropriate to Smithfield Architecture;*
- *Incorporation of Alleys and Minor Streets;*
- *Relegated Parking;*
- *Variety of Housing Types;*

- *Appealing Streetscapes;*
- *Transportation and Pedestrian Options;*
- *Architectural and Landscape Designs that are Responsive to the Unique Character and Tradition of the “Smithfield Style”;*
- *Market Feasibility*

### **Mixed Use (MU) District**

This Comprehensive Plan expands upon the promotion of mixed use development within the Town beyond the Downtown waterfront area to suitable locations elsewhere in Smithfield. The redevelopment and infill development of the Downtown Waterfront Area over the course of the past decade has witnessed the successful integration of a mix of diverse uses in the area. The Town seeks to encourage the integration of appropriate uses in other locations in the Town. As part of this philosophical change, the Town has modified the mixed use land use designation in the Plan to expand the types of allowable mixed uses and areas where it shall be encouraged beyond that which has been successfully implemented in the Downtown Waterfront Area. Another way the Town should formally seek to encourage mixed-use development would be to develop a formal Mixed Use (MU) Zoning District. Such a new district would expand upon the NU-R mixed use concept to encourage the incorporation of more commercial uses and greater residential densities within the new developments. This new district should outline the allowable uses, the appropriate settings, the design guidelines, planning “geometries” and other form-based code guidelines which should govern all future mixed use developments in the Town. The Ordinance should include clear and well-defined guidelines which establish the Town’s expectations for mixed use development, while also enabling design flexibility so that the new developments may best respond to the site conditions and marketplace to create meaningful and dynamic new communities.

Each of these recommended Ordinance revisions specifically address objectives pertaining to the provision of additional affordable and workforce housing opportunities in the Town per the Housing Policy chapter of this Comprehensive Plan. It is hoped that these changes will initiate the implementation phase of this important new addition to the Comprehensive Plan. Further, over the course of the past nine years since the new Zoning Ordinance was adopted, the Town Staff has identified several specific areas within the Zoning Ordinance which need some tweaking in order to allow the Town to better respond to everyday land use, zoning, site plan and subdivision-related issues. Recommendations for modifications to several districts will be made on the heels of the Comprehensive Plan Update, and the Town will proceed with a public review of these recommended changes.

## **Zoning Map**

Changes to the Town's Zoning District Map should be generally consistent with the Future Land Use Plan. Within the overall pattern of land use established by the Plan, there is nonetheless, considerable room for variation between the Plan and the Zoning Map. The land use categories need not be identical and the one need not be amended every time the other is changed. Nevertheless, given the fact that the Zoning Map was revised during the 1999 Comprehensive Planning Process, great care was taken by the Planning Commission to ensure that the map followed the land use allocations recommended at that time in the Future Land Use Plan.

The timing of a rezoning change to best implement a land use change will require repeated judgments by the Smithfield Planning Commission and the Town Council. In addition, the system of review of individual projects by special use permit process or by means of special exceptions will require separate decisions based on the guidelines of the Plan and the Zoning Ordinance and existing conditions of the location where the change is proposed. An important part of Smithfield's continuing planning effort will be the recommendations of the Planning Commission regarding proposed changes, the continuing effort to keep these changes within the overall perspective of the Comprehensive Plan and the continuing effort to study and adjust implementation devices and programs which can assist with accomplishment of the goals and objectives of the Comprehensive Plan.

Several changes have been made to the Future Land Use Map as part of this Comprehensive Plan Update process. However, the Town does not believe it is necessary to update the Town Zoning Map at this time as part of the Comprehensive Planning process out of acknowledgement of the Town-wide zoning changes made during the 1999 Comprehensive Plan Update.

## **OFFICIAL MAP**

If the Town is to strengthen its posture in planning for (and reserving) rights-of-way for future public roads, infrastructure and facilities, as well as improving the existing street network and community facilities, an Official Map should be prepared. The Official Map is a means by which proposed roads and infrastructure may be mapped and the rights-of-way and easements reserved for future acquisition. In satisfying the requirements of the Virginia enabling law, an Official Map must be based on an aerial and/or field-survey which establish the metes and bounds of the proposed improvement. To establish such areas for reservation and acquisition, any given public improvement which qualifies for official mapping would have to be planned

to a "preliminary plan and plat" level of detail. For transportation projects, any Official Map effort should be accompanied by a detailed traffic improvement plan for the Town and should address those specific high-priority projects which are most strongly held to be in the public interest but where right-of-way reservation could otherwise be problematic.

## **SUBDIVISION ORDINANCE**

The regulations of the Town's Subdivision Ordinance are primarily concerned with the platting of lots; the layout of streets; the location of public spaces and construction of public improvements associated with the process of subdividing land. In addition, the Ordinance contributes to the maintenance of clear and accurate land records. Subdivision Ordinances also typically respond to the need to protect the floodplains, wetlands and other sensitive environmental areas. These environmental issues and conservation matters are intricately associated with the Comprehensive Plan and its policies on the overall pattern of growth and the prospects of expenditures for public facilities. The Town's Subdivision Ordinance was also significantly revised in concert with the development of the Comprehensive Plan. Modern provisions for required subdivision improvements, subdivision design standards and plat and plan requirements were incorporated into the Town's Ordinance, as were new checklists which will help streamline the subdivision application and review processes. The Town's Ordinance also incorporates greater detail on design standards for both public and private streets, as well as conditions relating to when other public improvements (such as sidewalks and curb gutter) would be required.

## **INTER-JURISDICTIONAL COOPERATION**

The concept of "regionalism" in planning is widely promoted within the Town and surrounding jurisdictions. Regional approaches to schools, libraries, parks and recreation programs have been successfully orchestrated and implemented by and between the Town and Isle of Wight County. In the coming years inter-jurisdictional cooperation will need to focus more intensively on planning with respect to environmental and transportation issues.

### **Regional Plans and Activities**

Current and future planning efforts for the Town of Smithfield will be largely influenced by the planning activities of neighboring jurisdictions. Isle of Wight County, of which Smithfield is an integral part, has its own planning agenda and Comprehensive Plan. Since development-related issues often impact Town and County residents alike, it is in the best interest of both jurisdictions to coordinate their planning efforts whenever possible, and to seek common ground and solutions to development-related problems as they arise.

In addition to Isle of Wight County, the policies and plans of other regional jurisdictions and agencies will influence Smithfield's future growth. These range from the broad, physical planning efforts undertaken by the Hampton Roads Planning District Commission to the more specific site plans of local industries and regional utility districts (HRSD). A brief review of the most significant planning efforts and activities which may affect recommendations contained in this Comprehensive Plan for Smithfield is outlined below.

### **Isle of Wight Comprehensive Plan**

Isle of Wight County has recently updated its Comprehensive Plan, adopting the current version in October 2008. The County Comprehensive Plan sets forth a site-specific growth management strategy for the urbanizing, rural and environmentally sensitive areas of the County. Its land use prescription for the urbanizing portion of the county adjacent to Smithfield should be of the greatest interest to Town leaders, businessmen and citizens. The County is currently in the process of completing a master plan for the Route 58 corridor.

### **Development Service Districts**

The Isle of Wight Land Use Plan Map indicates designation of three strategically located Development Service Districts which generally coincide with portions of the major transportation corridors and potential future Hampton Roads Sanitation District (HRSD) sewer service areas. Areas designated as Development Service Districts generally have served and are expected to continue to serve as the principal residential, commercial and employment centers of the County. These areas comprise the most suitable locations for future growth and development. Growth in and around these areas will prevent the outward sprawl of development into other County areas, and concentrate future residential growth in areas where residents can be economically provided with utilities, services and employment. In addition, the impact upon the County road system will be minimized since families will have the opportunity to be located physically close to the jobs and services which they require. These considerations, plus the need to preserve the open character of the County's outlying rural areas, indicate that the areas designated as Development Service Districts should accommodate most of the County's residential, commercial and industrial growth through the year 2030.

Most of the land directly east of Smithfield, from the town limits to the Suffolk city line (Rescue and Battery Park excluded), has been designated as part of the "Northeast Development Service District". One of three such growth districts in the county, the Northeast Development District is further recognized as having the strongest potential for extensive urban development. In support of this growth, the Land Use Plan calls upon the county to be "proactive with respect to infrastructure" by encouraging the provision of central water and sewer facilities, either through



public initiative or through private development interests. The balance of the land surrounding Smithfield in the County has been planned for Rural/Agricultural Conservation use, which is consistent with the Town Plan's Community Conservation land use classification.

For many years, the lack of centralized sewage facilities has hindered the county's growth plans. It now appears, however, that with construction of the HRSD pipeline (1995), public sewer can feasibly be provided to much of the Northeast Development District over the next five to fifteen years. Such a scenario of course, is contingent on the timely completion of the regional interceptor and agreeable arrangements between HRSD, the County and private development interests in regard to construction of pump stations, trunk lines and laterals. Beyond the specifics of Isle of Wight's Land Use Plan, other goals and objectives are stated that pertain directly to the future Smithfield. These include the following:

- Coordinate County growth management plans with the plans and policies adopted for the Town of Smithfield.
- Extend Hampton Roads Sanitation District (HRSD) sewer line within the designated Development Service Districts to accommodate economic development.

As a priority, HRSD sewer service should first be extended into the Northeast Development Service District. Smithfield and Isle of Wight share a great number of common goals with respect to environmental quality, housing and community development. In the years ahead, many planning-related decisions will impact residents of both the County and the Town. It is therefore of utmost importance that the two entities cooperate on inter-jurisdictional issues and work together. Specific opportunity areas where Smithfield and Isle of Wight County can effectively plan together are outlined throughout this document and should serve as a basis for closer ties with Isle of Wight County.

### **Septic Tank Pump-Out Program**

Under mandate of the Virginia Chesapeake Bay Preservation Area Program, the Town of Smithfield is implementing a Septic Tank Pump-Out Program. The program is authorized by the Commonwealth of Virginia, under Code Section 9VAC 10-20-120.7, and the Town of Smithfield, under Section G:2.d. of the local Chesapeake Bay Preservation Overlay District Ordinance. The program aims to preserve and enhance the quality of Chesapeake Bay waters by requiring routine pump-outs of on-site septic systems. Septic systems that are overloaded with solids, leaking, flooding or otherwise impaired are known to contribute pollutants to the

ground and surface waters that discharge into the Bay. The new Septic Tank Pump-Out Program is intended to promote routine maintenance to extend the life of on-site septic systems, which is of benefit to the Bay, as well as the homeowner. All on-site sewage disposal systems not requiring a Virginia Pollution Discharge Elimination System (VPDES) permit shall be pumped out at least once every five years. In 2008, the estimated cost of a Septic Tank Pump-Out ranged from between \$250 and \$350.

Key points of the Septic Tank Pump-Out Program are as follows:

- *It applies only to those properties that contain on-site septic systems and are located within the Town of Smithfield;*
- *Septic systems will be tracked via a database set up by the Town in cooperation with property owners;*
- *The program will be implemented in September 2008; and*
- *Once notified by the Town to register affected septic systems, property owners will have two years to have the initial Septic Pump-Outs performed, and then all following pump-outs will be required to be performed every five years.*

### **Annexation Analysis**

Based upon the physical planning and market analysis completed as part of the Comprehensive Plan Update, it has become apparent that the Town's available land area to meet future demands is severely limited. There will be deficits over the next 20-30 years in both residential and nonresidential categories. The draft Projections (Chapter V) and the Economic Development (Chapter IX) of the updated 2009 Plan reveal that Smithfield will have a significant short fall in land availability which could limit the Town's ability to compete for its "fair share" of economic development opportunities over the next 20-30 years. In turn, the recommended Goals and Objectives (Chapter 3) incorporates language that supports beginning the time-consuming study process leading to a future annexation. If annexation is to be pursued on a sound foundation, it should originate in the body of the Town's comprehensive planning efforts.

During the course of the Comprehensive Plan Update, the Town has indicated that the comprehensive planning process should logically dovetail into a companion analysis of land use assessments and feasibility analysis outside the current Town boundaries. The proper approach to this would be to initiate a preliminary study that would be a "companion study" carried out following the Comprehensive Plan process, with the key findings and recommendations to be incorporated into a formal Town strategy document which could ultimately serve as an addendum to the Comprehensive Plan.

In the outline that follows, the range of recommended major study tasks that should be incorporated into any "kick off" investigations of potential future annexation territory are outlined. The resulting analysis would aid the Town in its long term decision as to whether and/or when to begin discussions with the County about future annexation. Should the Town determine that such a course of action would be worthwhile and in the best interest of Town residents, this study would serve as a logical basis for information required by the Commonwealth's three judge Annexation panel. Given the limited real estate locational opportunities within the Town when compared to the projected long-term demands for enterprise within the overall regional employment market, the Town would benefit by formally addressing each of the following study tasks:

*Task 1: Assessment of Peripheral Land Areas: Topography, Natural Features and Environmental Analysis.*

*Task 2: Assessment Update of “Target Study Area’s” Physical Conditions, Existing Land Use, Transportation Infrastructure, Community Facilities, and Public Infrastructure.*

*Task 3: Assessment of “Targeted Study Area’s” Economic, Population, Housing, and Demographic Characteristics.*

*Task 4: Conceptual Land Use Opportunities and the Future Land Use Options for the “Targeted Study Area”.*

*Task 5: Strategic Planning Analysis for Annexation.*

### **Highway Corridor Overlay Districts**

In order for the Town to continue its ongoing success in protecting local historic resources and indeed, the heritage of Smithfield, it must respond to the new challenges confronting design issues in and around the Historic District. One of the most pressing of these new challenges focuses upon the impact of new development on the major transportation arteries leading into and out of the Downtown Area. As development pressures continue to increase in the region, additional urban design measures are needed to protect the Town’s major entrance corridors. A major emphasis of the development of the 1999 Plan was the recognition of the unique character of the Town’s entry corridors and arterial roads which serve as the gateways to Smithfield’s historic district, points of tourism or cultural destinations. The Town identified five such major entrance corridors:

1. *U.S. Route 258 from the west;*
2. *State Route 10 Bypass from the north;*
3. *State Route 10 Business from the north;*
4. *State Route 10/U.S. Route 258 from the southeast; and*
5. *Battery Park Road (Route 669) from the east.*

As a means of effectively protecting its valuable entrance corridors, the Town introduced design control measures for these corridors and gateways in order to stimulate complementary new development which will be compatible with Smithfield’s historic character and which will enhance the Town’s attractiveness to tourists, visitors and its residents. The recommended Entrance Corridors Overlay (ECO) District was established in accord with Section 15.1-503.2 of the Code of Virginia, as amended, to maintain, preserve, protect and enhance the historic character, cultural significance, economic vitality, visual quality and architectural excellence of

the Town. The application of this district was intended to insure that the major existing and planned routes of tourist access as well as other public access to the Town's local historic area are developed and maintained in a harmonious and compatible manner. The EC-O District regulations are designed to promote an atmosphere for compatible growth for future generations, to prevent the intrusion of land use and environmental influences adverse to such purposes, and to insure that new structures and uses will retain the character of both the proposed EC-O District and the HP-O District. Furthermore, the establishment of this new district would fulfill the Plan's goal of recognizing the unique character of the Town's entrance corridors and arterial roads which serve as the gateways to Smithfield's historic districts, points of tourism or cultural destinations.

As development patterns have evolved since the last Plan was adopted, new corridors have emerged as potentially warranting similar entrance corridor regulatory control. Two of these are deemed worthy of Town consideration for inclusion as additional corridors to be added to the overlay district. These are:

1. *Great Springs Road from the south; and*
2. *Cary Street from the north.*

Both of these streets link outlying Town areas directly to the Historic District and its entrance corridors. Further, they both provide direct access to strategically located properties boasting significant developable potential lying either in the Town or just outside the Town boundary. Market demand has yet to direct significant new development to these strategic parcels as of the adoption of this Plan; however, it would be wise for the Town to plan for future growth along these corridors and apply its corridor design guideline tools to any future development requests potentially impacting these corridors.

## **CAPITAL IMPROVEMENT RECOMMENDATIONS**

Capital Improvements are new or expanded physical facilities for the community that are of relatively large size, are relatively expensive and are permanent in nature. Examples relating to the Comprehensive Plan recommendations are street improvements, public buildings and park improvements. The Town's Five Year Capital Improvement Program is reviewed by Town Council annually, and is adopted by Council as a part of the Town's annual budget. The Comprehensive Plan should be consulted annually by the Town Council and the Town Manager in the development of the Capital Improvements Program.

The following list of capital improvement projects are supported by the recommendations developed within the Comprehensive Plan:

- *Continue to revise zoning, subdivision and site plan controls as needed to achieve compatibility with the recommendations contained in the Comprehensive Plan.*
- *Develop a comprehensive parking study for the downtown business district and the Historic Area.*
- *Acquire the Windsor Castle farm property and construct a public park on that property.*
- *Pro-actively enforce property maintenance and zoning regulations to protect the viability and value of all property within the Town.*
- *Develop inter-jurisdictional growth management efforts with Isle of Wight County emphasizing the creation of a unified procedure for design review for all properties within a mile radius from the new Town boundary.*
- *Effectively utilize existing regional and State agencies and boards focused on economic development and tourism attraction to better market Smithfield for these opportunities.*
- *Initiate a future annexation area assessment and feasibility analysis.*
- *Continue the implementation of the Septic Tank Pump-Out program.*

### **COMMUNITY DEVELOPMENT PRIORITIES**

As a necessary step towards implementing this effort, a capital improvements program has been included on the following page. The current CIP was adopted by the Town in October, 2007. The worksheet represents a summary of the projects recommended for inclusion in the CIP by the Comprehensive Plan. Budgeted amounts, total project cost estimates and an expected allocation schedule is included for each year within the five year planning period. As each year of the program is completed, an additional year of improvements should be recommended by the Planning Commission for inclusion in the CIP. The Town should formalize the CIP process, as outlined in the following chart, so that the relation of capital improvement expenditures to the long-range Plan will become a routine process.



Additional improvement projects recommended by the Plan, but not as yet included in the formal CIP are summarized below:

**1. Entrance Corridors Improvements and “Gateway” Project**

Undertake design and improvements of the Town’s entrance gateways, with a focus on the Route 10 Bypass/Route 258 intersection.

Action: Staff/consultant to prepare gateway-specific guidelines study  
Timeframe: 4-6 months (design study); 6-8 months (construction)  
Approvals: Town Council to adopt budget;  
Estimated Cost: \$50,000 (gateway design study)  
Start-up Date: FY 2011

**2. Zoning Ordinance Update**

Update the Town’s Zoning Ordinance to reflect necessary changes and recommendations included in the Comprehensive Plan Update.

Action: Staff/consultant to update Ordinance  
Timeframe: 4-6 months (Ordinance Update);  
Approvals: Town Council to adopt revised Ordinance  
Estimated Cost: \$30,000 (Ordinance update and public hearing support)  
Start-up Date: FY 2009

**3. Town Boat Landing and Dock**

Establish a location and design for a public, Town boat landing; pursue land acquisition required for this improvement.

Action: Staff and Council to evaluate site; retain engineer for design  
Timeframe: 2-3 months (location); 4-6 month (engineering)  
4-6 months (construction)  
Approvals: Town Council to approve budget  
Estimated Cost: \$8000-\$12,000 (survey and engineering)  
\$150,000 (10-15 slips)  
Start-up Date: FY 2010



#### **4. Code Enforcement**

Establish a comprehensive zoning, land use and building code enforcement program and hire a full-time code enforcement official.

Action: Manager to recommend program and job description  
Timeframe: 2-4 months (establish and hire for position)  
Approvals: Council to approve position and adopt budget  
Estimated Cost: \$32,000-\$35,000 (starting staff salary and office startup)  
Start-up Date: FY 2010

#### **5. Downtown Parking Improvements**

Prepare a parking study for the Historic Downtown Area and undertake physical improvements to create convenient parking locations within the business district.

Action: Staff to prepare study of options and parking needs  
Timeframe: 2-3 months (study & engineering design);  
3-5 months (construction)  
Approvals: Town Council to approve plan and adopt budget  
Estimated Cost: 30-50 spaces @ \$1000-\$1200 per parking space  
\$60,000 (exclusive of land costs)  
Start-up Date: FY 2009 (location and design), FY 2010 (construction)

#### **6. Public Restrooms in Downtown**

Prepare a location and design study for public restrooms in the Historic Downtown Area; undertake construction improvements.

Action: Staff to prepare location study and design.  
Timeframe: 2-3 months (study & design); 3-5 months (construction)  
Approvals: Council to approve plan and adopt budget  
Estimated Cost: \$25,000/bathroom facility (exclusive of land costs)  
Start-up Date: FY 2009 (design and construction)

## **7. Pagan River Shoreline and Environmental Protection**

Pursue program to manage, protect and acquire (where necessary) the Town's Pagan River frontage; coordinate with private property owners to obtain conservation, construction and/or maintenance easements. Ensure that all shoreline activities by the Town are protective of the water quality in the Pagan River and the tidal wetlands.

Action: Staff to prepare recommendation to Council  
Timeframe: 4-6 months (initial staff recommendations)  
8-12 months (design); 36-60 months (construction)  
Approvals: Council to approve plan and adopt budget  
Estimated Cost: (estimate to be provided by Staff)  
Start-up Date: FY 2011

## **8. Sidewalk and Bicycle Path Improvements**

Implement a comprehensive system of sidewalk improvements and bike trails throughout the Town.

Action: Staff/consultant to prepare study of options  
Timeframe: 3-4 months (comprehensive plan recommendations);  
4-6 months (engineering and easement acquisition);  
12-24 months (construction)  
Approvals: Town Council to approve plan and adopt budget  
Estimated Cost: (consultant currently under contract for Comprehensive Plan)  
\$200,000 (\$20-\$30 per lineal foot)  
Start-up Date: FY 2011 (planning and design); FY 2012 (construction)

## **9. Underground Utility Projects**

Implement construction of underground electric and telephone utilities in the downtown historic areas.

Action: Staff to prepare study of options and priorities  
Timeframe: 4-6 months (design); 12-24 months (construction)  
Approvals: Town/Council to approve plan and adopt budget  
Estimated Cost: (estimate to be provided by Staff)  
Start-up Date: FY 2011 (planning and design)

*Appendix I:*

**CITIZENS' SURVEY RESULTS**

**ADOPTED  
AUGUST 4, 2009**

*Appendix I:*  
**CITIZENS' SURVEY**  
**2008 Comprehensive Plan Update**  
**The Town of Smithfield**

**Introduction**

The Town has received an outstanding response to its 2008 Comprehensive Plan Update Survey. Over 700 surveys were returned to Town Hall by the requested date (722 surveys will serve as the actual sample size). Based upon the approximately 3000 surveys which were distributed by the Town, this represents a response rate (24.1%) that is significantly higher than the rate most localities achieve with similar citizen surveys. The strong response will allow the consultant and the Planning Commission to make statistically significant inferences about the attitudes and desires of the entire Town by analyzing the survey responses. The Town Staff should be commended for its effort to distribute the survey within the community. The result was a strong community response which will ensure that public participation will play an important role in the development of the Comprehensive Plan.

The following working paper is designed to present the final tabulation of results from the Citizen Survey. The objective of this summary analysis is to provide the Commission with a good idea about the general sentiment of the community regarding land use and other important issues as it moves forward in the Comprehensive Planning process. This analysis will be used as needed in the formulation of final overall goals and objectives for the Comprehensive Plan.

A similar survey was conducted by the Town in 1998 as part of the Comprehensive Plan Update undertaken at that time. In several cases, the same question appeared on both surveys. As a means of providing a comparison of attitudinal change over time, the results of the 1998 survey are provided in italics below those of the 2005 survey, which are presented in **bold**. Those questions that did not appear on the 1998 survey will simply provide the summary of 2005 responses in bold.

**I. Population**

1. The Town's population has grown at a healthy pace over the past decade (approximately 2.75% annually). The existing town population is estimated to be approximately 7,000. Continued population growth within the Town should be encouraged.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>245</b>	<b>145</b>	<b>144</b>	<b>79</b>	<b>93</b>	
	<b>(35%)</b>	<b>(21%)</b>	<b>(20%)</b>	<b>(11%)</b>	<b>(13%)</b>	
1998:	208	106	143	113	122	
	(30%)	(15%)	(21%)	(16%)	(18%)	

**II. General Attitudes on Growth and Land Use**

2. The "quality of life" in Smithfield has not diminished over the past decade.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>111</b>	<b>140</b>	<b>199</b>	<b>141</b>	<b>112</b>	
	<b>(16%)</b>	<b>(20%)</b>	<b>(28%)</b>	<b>(20%)</b>	<b>(16%)</b>	

3. Growth in industry and commerce is a high priority in Smithfield and should be promoted.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>106</b>	<b>97</b>	<b>167</b>	<b>159</b>	<b>188</b>	
	<b>(15%)</b>	<b>(14%)</b>	<b>(23%)</b>	<b>(22%)</b>	<b>(26%)</b>	
1998:	84	84	108	168	232	
	(12%)	(12%)	(16%)	(25%)	(34%)	

4. Smithfield residents are generally better off economically than they were a decade ago.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>70</b>	<b>83</b>	<b>217</b>	<b>205</b>	<b>127</b>	
	<b>(10%)</b>	<b>(12%)</b>	<b>(31%)</b>	<b>(29%)</b>	<b>(18%)</b>	
1998:	40	46	259	188	126	
	(6%)	(7%)	(39%)	(29%)	(19%)	

5. Protection and preservation of the Town's waterfront area is a high priority and should be a major goal for any future land use planning.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>16</b> (2%)	<b>27</b> (4%)	<b>81</b> (11%)	<b>133</b> (19%)	<b>460</b> (64%)	
1998:	28 (4%)	11 (2%)	73 (11%)	126 (19%)	437 (65%)	

6. The preservation of historic sites and buildings is an important goal for the Town, and I support the expenditure of public funds to promote and maintain the Town's historic character.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>55</b> (8%)	<b>42</b> (6%)	<b>108</b> (15%)	<b>170</b> (24%)	<b>331</b> (47%)	
1998:	60 (9%)	45 (7%)	77 (11%)	160 (24%)	337 (50%)	

7. Traffic congestion, circulation problems and parking availability are increasingly becoming major concerns in the downtown area. The Town should provide more parking.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>39</b> (6%)	<b>52</b> (7%)	<b>147</b> (21%)	<b>168</b> (24%)	<b>297</b> (42%)	
1998:	40 (6%)	53 (8%)	116 (17%)	154 (23%)	319 (47%)	

8. In order to promote and protect the long term economic health of Smithfield and to properly plan for our future needs for development and expansion, the Town should again now or in the near future explore the viability of expanding our corporate limits through a formal annexation agreement with Isle of Wight County.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>109</b>	<b>67</b>	<b>160</b>	<b>159</b>	<b>204</b>	
	<b>(16%)</b>	<b>(10%)</b>	<b>(23%)</b>	<b>(23%)</b>	<b>(29%)</b>	

### III. Land Use Issues

9. The location and density of new commercial and residential development should be left to the “marketplace” and not to local government growth controls.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>273</b>	<b>129</b>	<b>127</b>	<b>79</b>	<b>93</b>	
	<b>(39%)</b>	<b>(18%)</b>	<b>(18%)</b>	<b>(11%)</b>	<b>(13%)</b>	
1998:	225	127	127	74	123	
	(33%)	(19%)	(19%)	(11%)	(18%)	

10. The Town should set high standards to guarantee that new subdivisions and residential communities have properly designed and constructed streets and sidewalks, utility networks, storm drainage and site improvements.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>16</b>	<b>2</b>	<b>309</b>	<b>85</b>	<b>59</b>	
	<b>(2%)</b>	<b>(0%)</b>	<b>(4%)</b>	<b>(14%)</b>	<b>(79%)</b>	
1998:	13	7	38	91	533	
	(2%)	(1%)	(6%)	(13%)	(78%)	

11. Zoning and land development controls should require new residential subdivisions to pay the cost of constructing adequate utilities, sidewalks, drainage, street lights and roads, and to fund additional capital improvements necessary to support fire, rescue, police, recreation, and town administration needs associated with the new development.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	18	15	51	79	542	
	(3%)	(2%)	(7%)	(11%)	(77%)	

12. New residential developments should be required to provide sufficient recreational improvements (i.e. tennis courts, swimming pools, playgrounds, walking trails, bikepaths, etc.) to serve the needs of their residents.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	35	39	109	121	401	
	(5%)	(6%)	(15%)	(17%)	(57%)	

1998:	35	41	110	136	366
	(5%)	(6%)	(16%)	(20%)	(53%)

#### IV. Housing and Community Issues

13. Existing housing is sufficient to meet the needs of the citizens of Smithfield.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	162	123	188	103	125	
	(23%)	(18%)	(27%)	(15%)	(18%)	

1998:	82	87	229	146	141
	(12%)	(13%)	(33%)	(21%)	(21%)



14. Affordable housing is needed in the Town to serve more low and moderate income residents.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	113	76	132	122	260	
	(16%)	(11%)	(19%)	(17%)	(37%)	
1998:	193	111	175	63	142	
	(28%)	(16%)	(26%)	(9%)	(21%)	

15. Affordable housing should be a requirement of any new subdivision development.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	163	80	119	105	238	
	(23%)	(11%)	(17%)	(15%)	(34%)	

16. Within Smithfield, at what price level do you consider housing to be affordable?

**AVERAGE RESPONSE: \$167,110.**

**Most commonly listed:**

**\$150k (133-22%); \$200k (103-17%); \$100k (72-12%); \$175k (36-6%); \$250k (27-4%);  
 \$125k (26-4%); \$180k (18-3%); \$120k (17-3%); \$300k (14-2%); \$80k (13-2%);  
 \$130k (10-2%); \$135k (10-2%); \$140k (10-2%); \$160k (10-2%); \$225k (10-2%)**

17. In the remaining undeveloped portions of the Town, what mix of housing types (single family detached, townhouse, multifamily/apartments, assisted living/elderly) should be encouraged? Please provide your ideal mix in terms of percentages of total future dwelling units to be developed in the appropriate areas below (percentages should total 100%):

**AVERAGE RESPONSES:**

**Single Family Detached Homes: 57%  
 Townhouses: 17%**

**Multifamily/Apartment: 12%  
 Assisted Living/Elderly: 20%**

**MOST COMMON RESPONSES:**

**Single Family Det. Homes: 50% (24%)  
 Townhouses: 20% (22%)**

**Multifamily/Apartment: 0% (31%)  
 Assisted Living/Elderly: 10% (27%)**

18. The Smithfield area currently has an unmet need in providing eldercare projects and assisted care living opportunities.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	36 (5%)	65 (9%)	232 (34%)	179 (26%)	180 (26%)	
1998:	63 (9%)	83 (12%)	248 (36%)	130 (19%)	157 (23%)	

19. The Town of Smithfield provides a good location for retirement housing: Growth in this segment of the housing market should be encouraged.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	34 (5%)	48 (7%)	188 (27%)	220 (31%)	211 (30%)	

**V. Local Governmental Services**

20. The Town currently does an effective “public relations” job with its efforts to promote tourism, the downtown and economic development.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	77 (11%)	118 (17%)	242 (35%)	172 (25%)	88 (13%)	
1998:	43 (6%)	67 (10%)	187 (27%)	216 (31%)	175 (25%)	

21. As the Town-owned and operated Smithfield Center approaches its 5th Anniversary it continues to meet the needs of the community.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	40 (6%)	62 (9%)	233 (34%)	200 (29%)	156 (23%)	

22. A new, privately constructed lodging facility (motel or hotel) with an associated restaurant is desired in Smithfield to help boost ongoing tourism efforts, serve the business community as well as to support The Smithfield Center's expanding conference-related needs.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>69</b>	<b>49</b>	<b>100</b>	<b>207</b>	<b>285</b>	
	<b>(10%)</b>	<b>(7%)</b>	<b>(14%)</b>	<b>(29%)</b>	<b>(40%)</b>	

23. Streets and roads in the Town adequately serve the needs of local residents. Traffic congestion is not viewed as a problem in the Town of Smithfield.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>246</b>	<b>166</b>	<b>125</b>	<b>87</b>	<b>85</b>	
	<b>(35%)</b>	<b>(23%)</b>	<b>(18%)</b>	<b>(12%)</b>	<b>(12%)</b>	

24. Smithfield's existing sidewalk system is in need of improvement in order to adequately serve the needs of Town residents and visitors.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>76</b>	<b>82</b>	<b>201</b>	<b>154</b>	<b>200</b>	
	<b>(10%)</b>	<b>(12%)</b>	<b>(28%)</b>	<b>(22%)</b>	<b>(28%)</b>	
1998:	56	81	175	171	191	
	(8%)	(12%)	(26%)	(25%)	(28%)	

25. The planting of trees and other public landscaping along streets should be a requirement of any new residential subdivision development in Smithfield.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>18</b>	<b>16</b>	<b>74</b>	<b>123</b>	<b>482</b>	
	<b>(3%)</b>	<b>(2%)</b>	<b>(10%)</b>	<b>(17%)</b>	<b>(68%)</b>	
1998:	24	25	71	135	427	
	(4%)	(4%)	(10%)	(20%)	(63%)	

26. Overhead utility lines in the Town should be removed and placed underground.

Strongly Disagree	1 59 (8%)	2 35 (5%)	3 153 (21%)	4 127 (18%)	5 338 (47%)	Strongly Agree
1998:	53 (8%)	38 (6%)	133 (20%)	119 (17%)	338 (50%)	

27. Parks and recreational facilities located in Smithfield adequately serve our community's needs.

Strongly Disagree	1 119 (17%)	2 150 (21%)	3 237 (34%)	4 112 (16%)	5 86 (12%)	Strongly Agree
1998:	241 (35%)	150 (22%)	159 (23%)	65 (10%)	64 (9%)	

28. What additional recreational facilities would be desirable in Smithfield?

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| 1). PARK/PLAYGROUND/FIELDS (14%)  | 7). TENNIS COURTS (4%)          |
| 2). HIKE, BIKE, WALK TRAILS (14%) | 8). BASEBALL FIELDS (3%)        |
| 3). MOVIE THEATER (14%)           | 9). YOUTH, TEEN, YMCA CLUB (2%) |
| 4). BOWLING ALLEY (9%)            | 10). PICNIC AREA (2%)           |
| 5). SWIMMING POOL (8%)            | 11). BASKETBALL COURT (1%)      |
| 6). BOAT RAMP/ACCESS (4%)         | 12). AMPHITHEATER (<1%)         |

1998:

- |   |   |
|---|---|
| 1). <i>Movie Theater (24.7%)</i>        | 6). <i>Public Boat Ramp (4.3%)</i>      |
| 2). <i>Bowling Alley (20.7%)</i>        | 7). <i>Teen Activity Center (4.1%)</i>  |
| 3). <i>Public Swimming Pool (10.9%)</i> | 8). <i>Public Tennis Courts (3.6%)</i>  |
| 4). <i>Skating Rink (9.8%)</i>          | 9). <i>Miniature Golf Course (3.4%)</i> |
| 5). <i>Running Biking Paths (8.5%)</i>  | 10). <i>Community Center (2.8%)</i>     |

29. I would be willing to pay increased taxes in order to fund Town projects such as sidewalks, drainage improvements, underground utility lines, and new parks and open space.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	239	99	168	136	69	
	(34%)	(14%)	(24%)	(19%)	(10%)	

30. I would be willing to pay increased taxes in order to fund full-time paid fire fighters and emergency medical technicians and capital improvements for the fire department and rescue squad which would provide for a higher level of emergency services within the Town.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	113	61	174	186	165	
	(16%)	(9%)	(25%)	(27%)	(24%)	

31. What additional services would you like the Town to provide?

- 1). TRASH SERVICE (EXPAND ALLOWED ITEMS, PICK-UP TIMES ETC.) (8%)
- 2). IMPROVED EMERGENCY SERVICES (6%)
- 3). RECYCLING (EXPAND/INC. ITEMS PICK UP) (4%)
- 4). WATER QUALITY & RATES (3%)
- 5). ADDITIONAL TRAFFIC LIGHTS-SPECIFIC LOCATIONS MENTIONED (3%)
- 6). INCREASED PUBLIC TRANSPORTATION OPPORTUNITIES (2%)
- 7). EXPAND, REFURBISH & CLEAN SIDEWALKS (2%)
- 8). HIRE ADDITIONAL POLICE OFFICERS/EXPAND SERVICES (2%)
- 9). CLEANER STREETS (2%)
- 10). NONE (2%)
- 11). MOVIE THEATER (1%)
- 11). NEW LOCAL HOSPITAL (1%)
- 11). DRAINAGE IMPROVEMENTS (1%)
- 11). INCREASED DAY CARE OPPORTUNITIES (1%)

32. Please indicate your opinions as they relate to the following services and resources in Town:

	Good	Fair	Poor	Don't Know
A. Water Supply and Quality	16%(45%)	24%(33%)	58%(18%)	1%(4%)
B. Libraries	54%(61%)	35%(29%)	2%(4%)	9%(6%)
C. General Community Appearance	61%(60%)	33%(36%)	6%(3%)	0%(1%)
D. Garbage/Trash Disposal/Recycling	73%(71%)	20%(22%)	7%(5%)	1%(2%)
E. Fire Protection	71%(76%)	19%(15%)	1%(1%)	9%(8%)
F. Police Protection	73%(75%)	17%(19%)	6%(1%)	4%(5%)
G. Traffic Flow	20%(26%)	48%(50%)	32%(22%)	0%(1%)
H. Street Maintenance	34%	51%	15%	1%
I. Variety of stores	21%(18%)	41%(44%)	38%(38%)	0%(0%)
J. Quality of goods and services	38%(35%)	51%(54%)	10%(10%)	0%(1%)
K. Cost of goods and services	28%(27%)	63%(58%)	9%(14%)	0%(1%)
L. Attractiveness of stores	36%(37%)	55%(54%)	9%(10%)	0%(1%)
M. Attractiveness of signs	33%(25%)	58%(54%)	8%(18%)	2%(2%)
N. Attractiveness of street lighting	47%(30%)	38%(45%)	14%(13%)	2%(2%)
O. Adequacy of street lighting	46%(33%)	35%(45%)	18%(22%)	1%(2%)
P. Retirement facilities	10%(13%)	39%(33%)	33%(26%)	17%(27%)
Q. Day care facilities	11%(17%)	38%(30%)	19%(16%)	32%(38%)
R. Availability of medical facilities	21%(32%)	41%(38%)	36%(27%)	2%(4%)
S. Recreational activities/facilities	16%(10%)	54%(40%)	27%(43%)	4%(7%)
T. Public School education/facilities	26%(29%)	35%(37%)	19%(15%)	20%(19%)
U. Health Care Services	19%	53%	19%	10%
V. The Smithfield (Conference) Ctr.	55%	25%	8%	12%
X. Telecommunications Services	25%	45%	17%	13%

33. What additional health care/medical services (not found here presently) would be desirable in Smithfield?

1). 24-HR EMERGENCY & MEDICAL SERVICES/URGENT CARE	(258-41%)
2). NEW LOCAL HOSPITAL	(83-13%)
3). OPHTHALMOLOGIST OFFICE (EYE CARE CENTER)	(30-5%)
4). OUTPATIENT CARE/CLINIC	(25-4%)
5). DENTIST	(19-3%)
6). PEDIATRICIAN	(14-2%)
7). OBGYN	(9-1%)
8). CANCER CENTER/TREATMENT	(5-1%)
9). GENERAL MEDICAL DIAGNOSTIC CENTER	(4-1%)
10). DOC-IN-A-BOX	(4-1%)

34. In your opinion, what are the three most important issues now facing the Town of Smithfield?

- |      |                                      |                  |
|------|--------------------------------------|------------------|
| 1).  | <b>GROWTH ISSUES</b>                 | <b>(370-23%)</b> |
| 2).  | <b>WATER QUALITY/COST</b>            | <b>(198-13%)</b> |
| 3).  | <b>TRAFFIC</b>                       | <b>(183-12%)</b> |
| 4).  | <b>AFFORDABLE HOUSING</b>            | <b>(87-6%)</b>   |
| 5).  | <b>TAXES</b>                         | <b>(68-4%)</b>   |
| 6).  | <b>SCHOOL SYSTEM/EDUCATION</b>       | <b>(52-3%)</b>   |
| 7).  | <b>HEALTHCARE/MEDICAL FACILITIES</b> | <b>(32-2%)</b>   |
| 8).  | <b>EMERGENCY SERVICES</b>            | <b>(32-2%)</b>   |
| 9).  | <b>LOSS OF "SMALL TOWN" APPEAL</b>   | <b>(21-1%)</b>   |
| 10). | <b>TOURISM</b>                       | <b>(20-1%)</b>   |

- |    |                             |                |     |                                     |               |
|----|-----------------------------|----------------|-----|-------------------------------------|---------------|
| 1. | <i>Growth Management</i>    | <i>(30.3%)</i> | 6.  | <i>Recreation/Family Activities</i> | <i>(6.6%)</i> |
| 2. | <i>Education/School</i>     | <i>(17.7%)</i> | 7.  | <i>Housing</i>                      | <i>(5.9%)</i> |
| 3. | <i>Taxes</i>                | <i>(14.3%)</i> | 8.  | <i>Pollution/Environment</i>        | <i>(5.8%)</i> |
| 4. | <i>Traffic</i>              | <i>(9.4%)</i>  | 9.  | <i>Maintain Small Town Charm</i>    | <i>(5.5%)</i> |
| 5. | <i>Water Quality/Supply</i> | <i>(7.7%)</i>  | 10. | <i>Fire/Rescue/Police Services</i>  | <i>(4.3%)</i> |

35. There are currently adequate year-round employment opportunities in Smithfield for its residents, particularly young people.

Strongly Disagree	1	2	3	4	5	Strongly Agree
	<b>171</b>	<b>176</b>	<b>214</b>	<b>60</b>	<b>41</b>	
	<b>(26%)</b>	<b>(27%)</b>	<b>(32%)</b>	<b>(9%)</b>	<b>(6%)</b>	
1998:	196	153	213	68	55	
	(29%)	(22%)	(31%)	(10%)	(8%)	

36. Where do you most frequently shop for the following retail goods and services? Please check.

	Smithfield	Newport News	Hampton	Virginia Beach	Norfolk	Chesapeake	Suffolk	W'burg
A. Clothing	<u>12%</u>	<u>30%</u>	<u>18%</u>	<u>3%</u>	<u>8%</u>	<u>16%</u>	<u>7%</u>	<u>6%</u>
B. Automobiles	<u>24%</u>	<u>26%</u>	<u>21%</u>	<u>9%</u>	<u>2%</u>	<u>7%</u>	<u>8%</u>	<u>1%</u>
C. Groceries	<u>59%</u>	<u>10%</u>	<u>12%</u>	<u>1%</u>	<u>0%</u>	<u>7%</u>	<u>11%</u>	<u>0%</u>
D. Furniture	<u>26%</u>	<u>36%</u>	<u>20%</u>	<u>7%</u>	<u>4%</u>	<u>7%</u>	<u>6%</u>	<u>1%</u>
E. Drugstore	<u>83%</u>	<u>6%</u>	<u>6%</u>	<u>0%</u>	<u>0%</u>	<u>3%</u>	<u>2%</u>	<u>0%</u>
F. Hardware	<u>44%</u>	<u>16%</u>	<u>16%</u>	<u>1%</u>	<u>0%</u>	<u>11%</u>	<u>11%</u>	<u>1%</u>
G. Banking	<u>66%</u>	<u>10%</u>	<u>11%</u>	<u>2%</u>	<u>4%</u>	<u>4%</u>	<u>2%</u>	<u>1%</u>
H. Movies	<u>4%</u>	<u>25%</u>	<u>30%</u>	<u>2%</u>	<u>4%</u>	<u>10%</u>	<u>25%</u>	<u>0%</u>
I. Gifts	<u>23%</u>	<u>21%</u>	<u>19%</u>	<u>3%</u>	<u>5%</u>	<u>13%</u>	<u>10%</u>	<u>5%</u>
J. Restaurants	<u>27%</u>	<u>23%</u>	<u>19%</u>	<u>4%</u>	<u>6%</u>	<u>11%</u>	<u>10%</u>	<u>0%</u>

37. What additional retail businesses (not found here now) would be desirable in Smithfield?

1). RESTAURANT(S)	(183-12%)	7). CLOTHING STORE	(51-3%)
2). WAL-MART	(182-12%)	8). GROCERY STORE	(41-3%)
3). MOVIE THEATER(S)	(108-7%)	9). BOOK STORE	(36-2%)
4). LOWES	(102-6%)	10). SHOE STORE(S)	(24-2%)
5). TARGET	(98-6%)	11). STARBUCKS	(24-2%)
6). HOME DEPOT	(59-4%)	12). DEPARTMENT STORE	(23-1%)

1998:

1). WAL-MART	(25.4%)	7). APPAREL STORE	(7.2%)
2). DEPARTMENT STORE	(12.6%)	8). HARDWARE/HOME IMP.	(7.2%)
3). K-MART	(10.0%)	9). BOOK STORE	(5.3%)
4). MOVIE THEATER(S)	(9.4%)	10). SHOPPING MALL	(2.1%)
5). SIT DOWN REST(S)	(9.2%)	11). FAST FOOD REST.	(2.1%)
6). SHOE STORE	(8.1%)		

Please check only one answer for each of the following questions.

38. I currently live in the Town of Smithfield.

**681 (96%) YES      26 (4%) NO**

1998: 579 (91%) YES      60 (9%) NO



39. I live in the Smithfield area year-round

**672 (97%) YES      20 (3%) NO**  
*1998: 621 (97%) YES      18 (3%) NO*

40. I rent/own my place of residence.

**87 (13%) Rent      604 (87%) Own**  
*1998: 78 (12%) Rent      550 (88%) Own*

41. I live in a:

**single family home 649 ( 93% ); duplex 4 (1% ); mobile home 10 (1%);  
apartment 10 (1% ); or condo 22(3%).**

*1998:  
single family home 561 (90% ); duplex 9 (1% ); mobile home 27 (4%);  
apartment 20 (3% ); or condo 3 (0%).*

42. Number of students living at home attending Isle of Wight public schools:

**Elementary 0 (83%); 1 (11%); 2 (5%); 3+ (0%)**  
**Middle 0 (90%); 1 (9%); 2 (0%); 3+ (0%)**  
**High School 0 (87%); 1 (11%); 2 (2%); 3+ (0%)**

43. Total number of residents living in your home:

**1 (13%); 2 (48%); 3 (17%); 4 (16%); 5 (5%)**

44. I am retired/employed/student.

**Retired 218 (30%)    Work 492 (68%)    Student 13 (2%)**

*1998:  
Retired 176 (28%)    Work 414 (66%)    Student 36 (6%)*

45. If you do not work in Smithfield, what is the location of your work?

- |      |                      |           |
|------|----------------------|-----------|
| 1).  | NEWPORT NEWS         | (128-28%) |
| 2).  | HAMPTON              | (39-8%)   |
| 3).  | SUFFOLK              | (32-7%)   |
| 4).  | NORFOLK              | (31-7%)   |
| 5).  | SURRY COUNTY         | (24-5%)   |
| 6).  | CHESAPEAKE           | (20-4%)   |
| 7).  | PORTSMOUTH           | (15-3%)   |
| 8).  | ISLE OF WIGHT COUNTY | (12-3%)   |
| 9).  | VIRGINIA BEACH       | (9-2%)    |
| 10). | RICHMOND             | (4-1%)    |
| 11). | WINDSOR              | (4-1%)    |
| 12). | FRANKLIN             | (2-<1%)   |
| 13). | WILLIAMSBURG         | (2-<1%)   |
| 14). | OTHER PENINSULA AREA | (1-0%)    |

*Appendix II:*

**SUMMARY AND ANALYSIS OF THE 2005  
CITIZENS' SURVEY**

**ADOPTED  
AUGUST 4, 2009**

*Appendix II:*  
**SUMMARY AND ANALYSIS OF THE 2005 CITIZENS' SURVEY**

**2009 Comprehensive Plan Update  
The Town of Smithfield**

**Introduction**

The Town of Smithfield has completed a formal Citizens' Attitudinal Survey in conjunction with its 2009 update of the Comprehensive Plan. The intent of the survey was to generate interest in the Comprehensive Plan Update process and to allow the Town's Planning Commission and Staff to gauge public opinion regarding several key land use policy-related issues. Citizen response to the survey was outstanding, as the Town received 722 completed surveys. This represents a response rate which is quite a bit higher than most localities in the region achieve with similar citizen surveys. The response achieved with this survey is very consistent with a similar survey distributed by the Town in support of the 1998 update of the Comprehensive Plan. Seven hundred and two (702) surveys were completed and returned as part of the earlier survey. As was the case with the 1998 survey and Plan update, this outstanding level of response and community participation enables the consultant, Planning Commission and Town Staff to make statistically significant determinations of the attitudes and desires of the entire Town by analyzing the survey responses. The Town Staff should be commended for its effort to distribute and collect the surveys. Their effort certainly has paid off in terms of encouraging community response and ensuring that public participation will play an important role in the development of the Comprehensive Plan.

The 722 responses represent an accurate cross-section of the Smithfield community. The vast majority of those surveyed (97%) live in Smithfield year-round and own their home (87%). Sixty-eight percent of the respondents are actively working, while thirty percent are retired. These figures are consistent with the latest Census estimates available which conclude that approximately sixty percent of the Town's residents are active in the labor force.

**Summary of Survey Results**

The following summary is designed to present the final tabulation of results from the Citizen Survey. A separate document included in Appendix I contains the actual survey tabulation results for each question. The final results of the survey reflect the general sentiment of the community regarding land use issues. These survey results have been analyzed by the Cox Company and have been used in the formulation of overall goals and objectives for Smithfield's 2009 Comprehensive Plan.

## **Survey Analysis**

The following section is a brief summary of the most important conclusions resulting from the tabulation of responses to the Citizens' Survey:

Generally speaking, respondents to the surveys distributed by the Town are very pleased with the existing quality of life in Smithfield. Only nine percent of the respondents to the 1998 survey expressed dissatisfaction with the quality of life in Smithfield at that time. As part of the most recent survey, citizens were asked to provide feedback as to how the quality of life has been maintained or altered in the interim period. An almost equal distribution along attitudinal response was exhibited with respect to the citizen feedback on changes in quality of life in the community over the past decade. In other words, among respondents, an almost equal number of folks expressed agreement, disagreement or an ambivalent attitude towards the question. Citizens are also generally pleased with the recent performance of the local economy. Only 22% of the respondents disagree or strongly disagree with the notion that Smithfield residents are generally better off economically than they were a decade ago. However, concerns were voiced relative to the availability of year-round employment opportunities in the community for residents, especially among young people. Fifty-three percent of survey respondents indicated that availability of such opportunities in Smithfield falls shy of their expectations.

Survey respondents expressed several additional, specific concerns about the future of the community, as well. Under the direction of the Planning Commission, these concerns will be directly addressed during the Comprehensive Plan Update. Generally, these concerns relate to issues such as the protection of natural and historic resources within the Town, housing variety and affordability, economic development and access to medical facilities.

The Citizens' Survey included an opportunity for respondents to list the three most important issues confronting the Town as it enters the Twenty-first century. The following issues were most often mentioned by respondents as being most critical to Smithfield's future:

*Percentage of Total Surveys on  
Which the Issue was Listed:*

*Issue:*

1.	<i>Growth Management-Related Issues</i>	23%
2.	<i>Water Quality/Cost</i>	13%
3.	<i>Traffic</i>	12%
4.	<i>Affordable Housing</i>	6%
5.	<i>Taxes</i>	4%
6.	<i>School System/Education</i>	3%
7.	<i>Healthcare</i>	2%
8.	<i>Emergency Services</i>	2%
9.	<i>Loss of Small Town Appeal</i>	1%
10.	<i>Tourism</i>	1%

Citizen concern about the pace, quality and location of future growth and development in the Town emerged as a recurring theme in the survey responses. The attitude of the respondent sample towards land use and growth was clearly one that supports thoughtful, limited and well-controlled development. Only twenty-four percent of the respondents favor the encouragement of continued population growth within the Town. This is a slight decrease from the 1998 survey, when 34% of citizens supported this concept. Furthermore, several respondents specifically mentioned the need to maintain Smithfield's "small town atmosphere" and historic charm as being of paramount concern to the community. This emphasis on maintaining the character of the Town reinforces local citizens' primary concern regarding the impact of future growth. In addition to the "top ten" issues listed above, other survey responses illustrate the citizens' primary concerns for the Town's future. Several survey respondents expressed concern over the availability and quality of professional job opportunities in the area, and many others specifically mentioned the need to create opportunities that would provide incentive for the Town's young people to stay in Smithfield.

Several of the closed-ended, attitudinal survey questions prompted an overwhelming response from Town citizens. In those instances where a clear majority opinion exists, the Planning Commission will be able to make valuable inferences about community desires relative to several very important planning-related issues. The five issues receiving the strongest mandate based upon survey response were as follows: (issues are ranked in order by highest percentage of response):

<b>Issue</b>	<b>Attitudinal Rank</b>
1. The Town should set high standards to guarantee subdivisions and residential communities have properly designed and constructed streets and sidewalks, utility networks, storm drainage and site improvements. <i>(Note: this same question received the strongest attitudinal ranking in the 1998 survey as well).</i>	93% Agree or Strongly Agree
2. Zoning and land development controls should require residential subdivisions to pay the cost of new Constructing adequate utilities, sidewalks, drainage, street lights and roads, and to fund additional capital improvements necessary to support fire, rescue, police, recreation, and town administration needs associated with the new development.	88% Agree or Strongly Agree
3. The planting of trees and other public landscaping along streets should be a requirement of any new Residential subdivision development in Smithfield. <i>(Note: this same question received the third strongest attitudinal ranking in the 1998 survey as well).</i>	85% Agree or Strongly Agree
4. Protection and preservation of the Town’s waterfront areas is a high priority and should be a major goal for future land use planning. <i>(Note: this same question received the second strongest attitudinal ranking in the 1998 survey).</i>	83% Agree or Strongly Agree
5. New residential developments should be required to provide sufficient recreational improvements (i.e. tennis courts, swimming pools, playgrounds, walking trails, bikepaths, etc.) to serve the needs of their residents.	74% Agree or Strongly Agree

Citizen concern regarding the quality of future development is further evidenced by this clear and strong desire to establish and maintain high development standards to guarantee that new subdivisions have properly designed and constructed streets, utilities, storm drainage and site improvements. The surveys clearly indicate that future development should be carefully planned, designed and regulated so as to ensure that the character of Smithfield is not altered. It is interesting to note that of the five questions that received the strongest response, four speak directly to the issue of regulating future land development. The respondents' support of increased regulatory control of the design of new development is clearly underscored by these four questions. This is particularly noteworthy given the fact that the Town has implemented an entirely new Zoning Ordinance only seven years ago, and yet the sentiments expressed by citizens regarding these issues have remained consistent from those witnessed as part of the most recent Comprehensive Plan Update. Citizens also want to see future development "pay its own way" and provide its fair share of community services, including necessary recreational and utility facilities. This sentiment is also consistent with the attitudes exhibited in the 1998 survey.

The Planning Commission and Town Staff also incorporated several questions into the survey in order to gauge public opinion on several "hot button" planning issues that have surfaced in recent years. As is presented below, these questions generated some interesting responses. These responses will aid the Planning Commission in its effort to develop goals, objectives and policy statements that will accurately reflect the will of the community, provide for adequate infrastructural support of new growth and protect the Town's historic and natural resources.

**Issue 1:           Annexation**

The majority of survey respondents are in favor of the Town exploring the viability of expanding the Town's corporate limits through a formal annexation agreement with Isle of Wight County. Slightly over 52% of those surveyed agreed or strongly agreed with the concept of exploring such a strategy as part of the Town's long term planning for future development and expansion. Only 26% of those responding disagreed or strongly disagreed with this approach.

**Issue 2:           Affordable Housing**

Citizens expressed concern over the availability of sufficient affordable housing opportunities in the Town. Fifty-four percent of survey responses agreed or strongly agreed with the idea that affordable housing is needed in the Town to serve more low and moderate income residents. Additionally, forty-nine percent of those responding indicated that they believe that affordable housing should be a requirement of any new subdivision development. In a separate question, residents were asked to identify the housing price level considered to be affordable within Smithfield. A wide variety of housing values were provided in response. The average response was \$167,110. The most common listed prices were \$150,000, \$220,000, and \$100,000.



It is interesting to note the great disparity in the community attitudes towards what residents consider to be affordable in Smithfield as expressed in the survey results.

**Issue 3: Future Land Use Planning: Recommended Allocation of Residential Densities**

Citizens were asked to provide their ideal mix in terms of percentages of total future dwelling units to be developed within the Town among four residential dwelling types: single family detached homes; townhouses; multifamily/apartments; and assisted living/elderly housing. The average response called for 57% of future dwellings to be devoted to single family residences; 17% devoted to townhouses; 12% for multifamily apartments; and 20% for assisted living.

**Issue 4: Smithfield Center**

Citizens were also asked to rate the ongoing capability and performance of the Smithfield Center in meeting the needs of the community. Over half of the respondents agreed or strongly agreed with the notion that the facility does meet the needs of the community, while only 15% disagreed or strongly disagreed with the statement.

**Issue 5: Desirability of a New Motel or Hotel Facility**

A clear majority of respondents believe that a new, privately constructed lodging facility with an associated restaurant is desired in Smithfield. Nearly 70% of those submitting a completed survey to the Town indicated that they supported such a new project, while only 17% of respondents disagreed or strongly disagreed with the concept. A Hampton Inn & Suites is expected to open by the spring of 2009.

**Retail Shopping**

The survey placed a major emphasis on retail shopping in the Smithfield community. Citizens were asked to list the areas they most often shopped for ten separate goods and services categories. The results show that Smithfield residents rely primarily on local merchants for their grocery, banking, pharmacy and hardware needs, and prefer to travel to Newport News or Chesapeake to do their "big-ticket" shopping. Clearly, the wider variety of stores and goods and services offered in these larger metropolitan areas attracts local residents to shop for such items as clothing, automobiles, furniture, and specialty gifts. One significant change in a retail category response from the 1998 survey worth noting is the "capture" of a significant share of the local banking business within the Town. In the 1998 survey, Newport News was listed as absorbing a significant share (31%) of the local banking business. This dominant share has dropped dramatically in the current survey results, as many more respondents do the majority of their banking in the Town. Also, surprisingly enough, respondents largely ignore Suffolk and Williamsburg when seeking regional shopping alternatives.

As a means of identifying market niche opportunities in the local retail marketplace, citizens were asked to identify additional businesses (currently not found within Smithfield) that they would like to see enter the market. The question drew a wide variety of suggestions spanning various sectors of the retail economy; however, additional restaurants and Wal-Mart were the most frequently mentioned retail uses. It was interesting to note that Wal-Mart was not mentioned as frequently as was the case in 1998. Other national “big box” retailers most frequently mentioned included Lowe’s, Target and Home Depot. Several other potential retail establishments were mentioned less frequently, but are interesting to note nevertheless. These include a newsstand and a sporting goods store. Several of the retail uses mentioned hold promise for capturing market niche opportunities in the Town, and should be considered in any formal economic development marketing that the Town might consider in future years.

### **Additional Attitudinal Results**

While responses to the balance of the survey were more evenly distributed across the attitudinal categories, some important conclusions can be drawn from the final tabulations. The highlights of these remaining sections of the survey are presented below:

### **Land Use**

Emphasis on the protection and preservation of historic, cultural and natural resources surfaced as a dominant theme throughout the survey responses. As mentioned above, eighty-three percent of the respondents agreed or strongly agreed that the protection and preservation of the Town’s waterfront areas are high priorities, and should be a major goal for future land use planning in Smithfield. Local citizens also support the preservation of historic sites and buildings in the Town. Seventy-one percent of the respondents agreed or strongly agreed that the Town should use public funds to promote and maintain these sites and structures as a means of protecting the Town’s historic character.

### **Local Government Services**

In the survey, residents were asked to comment on the quality of public service provisions they were currently receiving from the Town. Those services receiving the highest marks for quality and customer satisfaction were fire protection, police protection, the Smithfield Center, and garbage/recycling collection. The general community appearance and the local library were also mentioned as positives among those surveyed. Those services found to be the relatively weakest among those offered to the community are recreational activities/facilities, retail store variety, retirement housing opportunities, traffic flow and the adequacy of street lighting. Traffic flow, water quality, cost of services, and availability of medical facilities in the community received the highest levels of concern from residents.

## **COMPARISON OF ATTITUDINAL CHANGE OVER TIME:**

### **A review of the 1998 Survey Results and Direct Comparison to those of the Current Survey**

The Citizens' Survey affords the Planning Commission a unique opportunity to compare community attitudes regarding critical issues impacting the community over time. The current survey contains several of the same questions that were included in the 1998 Citizens' Survey. Thus, by comparing the responses to these repeated questions, the Planning Commission will be able to compare snapshots of community attitudes prior to the most recent Comprehensive Planning effort and of today. As such, it is hoped that the Planning Commission will gain insight into how citizen views on issues relating to land use, growth management, the local economy, housing, and various Town services and facilities have changed over the past decade. In short, a comparison of the results of the two surveys will provide a summary of community attitudes about where Smithfield was, where Smithfield is today, and what its citizens hope it can become in the future.

Attitudinal changes over time are readily apparent in several cases in the survey results comparison, while clear indications of consistency in views over time are exhibited as well. The following summary will focus upon those areas in which attitudinal changes have been identified so that the Planning Commission may make determinations concerning how these changes could impact the course and strategy of the ongoing Comprehensive Planning effort:

The Citizens' Survey includes eighteen attitudinal questions (i.e. questions asking the resident to react to a statement regarding a certain issue by selecting an appropriate designation on a "Strongly Disagree" to "Strongly Agree" attitudinal range) that appeared in the same form on the 1998 survey. Further, both surveys contained three "open-ended questions" which encouraged respondents to write down their answers on the actual survey to "big picture" planning-related questions. In addition, a similar question was included on both surveys which asked respondents to relate their satisfaction with services and resources offered in the Town covering the same nineteen categories. Finally, both surveys included five similar demographic/census type questions seeking information about those responding so that the consultant could insure that those responding were representative of the overall community according to Census data available for the Town.

### **Noteworthy Attitudinal Changes**

Of the eighteen repeated attitudinal questions, nine of those exhibited a significant shift in response along the attitudinal categories. The strongest shift was reflected in the questions regarding housing in the community. A significantly higher percentage (54% vs. only 30% in 1998) of survey respondents agreed or strongly agreed with the statement that affordable housing is needed in the Town to serve low and moderate income residents. Further, responses regarding the sufficiency of existing housing in the Town in terms of meeting the needs of Smithfield citizens represented a shift in consensus.

In the current survey, 41% of all respondents either disagreed or strongly disagreed with the statement that *“Existing housing is sufficient to meet the needs of the citizens of Smithfield”*, while only 25% of respondents responded in a similar fashion in 1998. A slightly smaller (approximately 10%), but easily identifiable shift in attitudes is also reflected in the responses to the question regarding eldercare and assisted living opportunities. Sentiments increased in support of the notion that there currently exists an unmet need in providing these types of facilities in the community. This strengthening community support is particularly interesting given the fact that new facilities of this type have been developed in recent years, and others are currently under construction in the community. And yet, there appears to be a growing acknowledgement by the local citizenry that more opportunities exist in this housing market segment to meet the needs of its citizenry.

Another slight shift was reflected in the responses regarding ongoing population growth in the Town. Fifty-six percent of the most recent responses indicated that citizens disagreed or strongly disagreed with the encouragement of future growth. This represents an approximate 10% shift in attitudinal response over the past decade towards the “anti-growth” perspective.

In terms of the local economy, slight shifts in attitude were reflected regarding economic development and the economic well being of local residents. While 59% of 1998 respondents agreed or strongly agreed with the establishment of growth and industry in commerce as a high priority and its corresponding promotion, only 48% of those responding to the recent survey concurred. This did not correspond to a direct “one-to-one” shift in attitudes towards the side of disagreement or strong disagreement with this objective, as the recent survey witnessed only a 5% increase in responses to these categories over the 1998 survey. Thus, the majority of the shift was redirected towards a centrist attitude on the issue.

A similar unequal shift was reflected in the question regarding attitudes towards the general economic well-being of residents in comparison to a decade ago. The current survey reflects an increase (by 9%) of those disagreeing or strongly disagreeing with the statement that “residents are better off economically than they were 10 years ago.” At the same time, this represents a decrease of only 1% of total respondents agreeing or strongly agreeing with this statement than those responding to the 1998 survey. A move towards the middle in community attitudes is reflected in this comparison as well.

A relatively small, but easily definable shift in attitudes is reflected in the question regarding the government regulation of the location and density of new commercial and residential development in the Town. A shift of 5% of respondents was identified towards support of government regulation rather than leaving the decision-making to the private marketplace, as evidenced by a one-to-one shift in attitudinal responses to the question.

In terms of local government services, significant attitudinal changes were identified in two areas within the survey. A significant improvement in the citizens’ overall rating of parks and recreation facilities serving the community’s needs was noted in the most recent survey.

In 1998, 57% of all respondents disagreed or strongly disagreed with the notion that parks and recreation facilities in the Town adequately serve the community's needs. Only 38% of the participating citizens responded in kind. Further, a significantly higher percentage (28% vs. 19%) of respondents agreed or strongly agreed with the statement. With respect to the ongoing "public relations" effort conducted by the Town to promote tourism, the downtown area and economic development, relatively fewer respondents in the current survey agreed or strongly agreed that the ongoing efforts were effective. In 1998, the majority of the respondents agreed that the Town was doing an effective job in this area, while only 38% responded in kind in the current survey. This shift was not as dramatic as reflected in several other questions, as relatively more responses fell in the middle of the road with respect to their feelings on the Town's ongoing effort. Additionally, with respect to issues concerning the downtown area, a strong preference was again reflected in survey responses for additional parking opportunities downtown. Sixty-six percent of all respondents agreed or strongly agreed with the notion that the Town should provide more parking in the downtown area (as compared to seventy percent in 1998).

### **Open Ended, "Big Picture" Questions**

While recreational facilities received higher marks in the survey, strong sentiment was still identified supporting the development of additional facilities in the community. While this sentiment is consistent with that exhibited in the 1998 survey, a notable change in attitude towards the types of facilities preferred is reflected in the responses to this open-ended question. It is clear that today; more citizens believe that the strongest needs in Town recreation are in outdoor, active recreational facilities per the 2005 survey. Parks, playgrounds, fields, hiking, biking and walking trails received stronger support than indoor facilities such as movie theaters and bowling alleys, which dominated the previous survey responses.

The most notable attitudinal change was reflected in the question prompting citizens to identify the three most important issues facing the Town. Chief among the issues mentioned is the growing concern about water quality and cost of public water service within the Town. Heightened concerns over water supply and quality were also reflected in question 32, as more than half of the respondents (58%) rated this service as "poor", up from only 18% in 1998. While growth management and growth-related concerns still dominated the responses provided in response to the open-ended question, water quality was mentioned nearly twice as often in the current survey as was the case in 1998. Another interesting change was a significant reduction in the frequency of the listing of taxes as a critical issue by respondents.

Other significant shifts were identified in citizen ratings of traffic flow, medical facilities, and street lighting in the town. Thirty-two (32%) of all respondents in the survey rated traffic flow as "poor" and only 20% rated flow as "good". In 1998, "poor" ratings totaled only 22% of all responses, while 26% of participating citizens found the flow in Town to be "good".

Support for the availability of existing medical facilities also slipped by approximately 11% between the two surveys. Anticipating that community concern regarding access to local medical facilities has intensified in recent years, the Town Staff recommended that an open-ended question geared towards this issue be included in the survey. The Staff was particularly interested in determining what specific medical services residents considered most desirable in Smithfield. The survey response to the question yielded interesting results, as over 40% of all responses focused upon 24-hour emergency medical services (i.e. urgent care facilities) as being most desirable. This was far and away the most frequently listed response.

Generally speaking, the citizens expressed stronger support for the attractiveness and adequacy of street lighting in the Town.

### **Conclusion**

This summary of survey responses indicates a strong and active constituency in Smithfield which is supportive of the purpose and intent of the 2008 Land Use Plan Update. The feedback generated from the survey creates an atmosphere in which the Town Staff and elected officials can operate to effectuate positive change in their community. The results of this survey will be used to develop goals and objectives for the Land Use Plan, as well as to influence the development of specific planning policies recommended for implementation.

*Appendix III:*

**BATTERY PARK ROAD CORRIDOR STUDY**

**ADOPTED  
AUGUST 4, 2009**



# *BATTERY PARK ROAD*

## *CORRIDOR STUDY*



Adopted by Town Council  
August 4, 2009

Prepared by:  
The Landmark Design Group  
5544 Greenwich Road, Suite 200  
Virginia Beach, VA



Appendix A:  
**BATTERY PARK ROAD CORRIDOR STUDY**

**Description of Project Area:**

***Introduction and Background***

The Town of Smithfield requested LandMark Design Group to complete a roadway alignment study for Battery Park Road. The study includes a base map utilizing information provided by the Town, a proposed horizontal alignment, intersection layouts, cursory review of utilities systems, cursory review of right-of-way information, and preliminary costs projection. Traffic impact analysis and forecasts are not included in the study. Recent traffic studies completed for this area include Epmark Community by URS; Smithfield Commons by URS, and Battery Park Road Carrollton Boulevard Corridor Study by Hampton Roads Planning District Commission (HRPDC) were reviewed. Based on the HRPDC study for the projected build-out, the anticipated ADT is 31,000 on Battery Park Road between Nike Park Road and South Church Street on a daily basis, and 9,000 on Battery Park Road between Nike Park Road and Gatling Pointe.

Battery Park Road serves as a primary transportation corridor for traffic to the east section of Smithfield and the Northeastern section of Isle of Wight County. The corridor for Battery Park in the Town of Smithfield runs from the intersection with South Church Street to the Town limits near the entrance to Gatling Pointe South, a residential subdivision. The Town limits run adjacent to the eastern side of Battery Park Road from Nike Park Road to the north towards Gatling Pointe South. See Sheet C-1 for the project area of Battery Park Road.

**Description of Existing Facilities:**

***Existing Conditions***

Battery Park Road is an aging two-lane rural collector street with minimal landscaping serving as an entrance corridor to the central business district. The typical cross section of the road includes an



average 50-foot right-of-way with an average pavement width of 25 feet. The speed limit for the street is 35 MPH near the intersection of South Church Street, and increases to 45 mph as you travel east. The typical asphalt pavement section appeared by visual inspection to be adequate. No large cracks or potholes were noticed. The majority of traffic is leaving the central business district (downtown) Smithfield area and traveling toward Gatling Pointe or Nike Park Road for quicker access to Route 17 and the James River Bridge. Route 17 leads to

## Smithfield Comprehensive Plan

Portsmouth and Suffolk, and the James River Bridge provides access to the Peninsula. Battery Park Road has shown a greater than average increase in traffic volume over the last several years. This growth rate is expected to continue.

The storm sewer system on Battery Park Road consists of curb and gutter between South Church Street and John Rolfe Drive, and a ditch system along the remainder of the corridor. Turn lanes, such as the entrance leading into Kendall Haven, enter over a piped system or culvert. Also, culverts span the entrances to both commercial and residential dwellings. Battery Park Road drains via ditches through several outfalls to Moone Creek and Town Farm Creek before joining the Pagan River (James River, Chesapeake Bay). Moone Creek is within the Town of Smithfield limits, and Town Farm Creek is in Isle of Wight. Only one storm water management basin currently exists for Battery Park Road. The basin is near the entrance of Kendall Haven on the south side of the road. The basin appears to be a dry basin and accepts runoff from the west, towards South Church Street.



The 16-inch sanitary sewer force main system runs adjacent to the edge of pavement on Battery Park Road. The age of the system is unknown. The water distribution system on Battery Park Road is an 8-inch C900 pipe. Fire hydrants are aged, and may need to be replaced and/or relocated. Columbia Gas mains run underground along Battery Park Road. A natural gas substation is adjacent to the road. The power, telephone, and communications systems are overhead. Poles are located on both sides of the roadway.

### ***Suitability of Continued Use***

The continued use of the existing roadway between Nike Park Road and the Town limits is feasible. The immediate use of two-lanes between Nike Park Road and South Church Street is feasible. The level of service this section of road experiences will decrease with development, and we anticipate that at least a four-lane road will eventually be required. The addition of a turn lane at Nike Park Road and other intersections will improve the current level of



service of the Road. The development of land near the intersection with South Church Street could result in a large number of vehicles at John Rolfe Drive. The distance between John Rolfe Drive and South Church Street is approximately 350 feet, and relocation of that intersection may be desirable. The minimum distance between intersections should be limited to 500 feet. The ditch system does have standing water a few days after a rainfall event, but provides adequate drainage for the Roadway and immediate vicinity. Continued use of the watermain and sanitary sewer forcemain is feasible until development or age requires upsizing or replacement.



### **Design Alternatives and Recommendations:**

The design alternatives and recommendations for the improvements to the roadway and drainage system are limited by costs and safety. The existing roadway is generally in good condition, but will provide an inadequate level of service as the Town continues to experience accelerated growth.

The typical sections included in the study are a three-lane, five-lane, as well as a four-lane divided roadway.

- The three-lane layout provides a center turn lane for vehicles turning left, and one travel lane in each direction. The advantages include a smaller rights-of-way requirement, and less storm water to treat. In addition, the existing road can be used for a portion of the completed road. One disadvantage is that a three-lane road may not provide an adequate level of service at complete buildout of the area, and continuous center turn lanes increase the risk of vehicle accidents.
- A five lane typical section would provide two travel lanes in each direction with a continuous turn lane in the center. Again, safety is a concern with typical sections that provide a continuous left turn lane. Five lanes of traffic would also result in the largest amount of pavement, which increases the size of the storm water management facility (pipes, inlets, ditches, and ponds) and the cost. Five lanes would also have over 60' of continuous pavement with no breaks or landscaping. The construction of five lanes can utilize the existing pavement for the future highway. Additional right turn lanes would be provided, as necessary for entrances, for both three-lane and five-lane roads.
- A four lane divided highway would allow for minimizing pavement while maintaining an adequate level of service. Turn lanes would be provided as necessary, and the highway cross section can be softened by landscaping in the median. The construction of four-lanes centered in the existing right-of-way will utilize a very small portion, if any, of the existing roadway. Off setting construction to one side and utilizing the existing two-lane roadway would place the majority of the right-of-way impacts to one side.

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**General Description of Proposed Facility:**

***Site Location***



The proposed project involves the upgrade of the existing road. Improvements to Battery park Road adjacent to Isle of Wight should be coordinated with the County and VDOT. Further evaluation of alternative typical sections based on traffic volumes is beyond the scope of this report.

***Proposed Roadways***

For the purpose of this study, the anticipated typical section is a four lane divided highway designed to function as a minor arterial. The right-of-way required for this section will be 100 feet, expanding the existing 50' right-of-way by 25' on each side. The four lane divided highway provide two travel lanes in each direction separated by 16' wide median. The median is wide enough to provide a left turn lane when developments meet the industry standard. The proposed roadway shall be in accordance with the Virginia Department of Transportation's subdivision street standards for a street with a projected average daily traffic volume as determined by a traffic study. A four lane divided highway providing safety and landscaping in the median will enhance this entrance corridor. The disadvantages include a larger right-of-way requirement and turn lanes would also have to be added as necessary. Intersections should have a minimum separation of 500 feet. Signals would be added to intersections upon meeting traffic warrants. A multi-use path for bicyclist, runners, walkers, and recreational users may also be added within the 100-foot right-of-way. According to VDOT standards, the minimal width of the multi-use path is 10 feet.

***Proposed Storm Water Drainage***

The storm water drainage system on Battery Park Road will be constructed to provide adequate capacity for improvements to Battery Park Road. This will include ditches, culverts, and pipes draining to storm water management ponds for treatment of water quality and water quantity. The culverts will be used for entrances to commercial development and private residences. Short runs of pipe and inlets will be constructed under turn lanes. A curb and gutter system will be used for the more densely developed areas, such as near South Church Street, and turn lanes. A ditch system will be constructed for the remainder of Battery Park Road.

***Permits, Rights-Of-Ways, and State Requirements***

Permits and regulatory approvals that must be obtained for this project are those that are normally required by the Town or VDOT. The construction plans will require approval of the Virginia Department of

Transportation. Environmental issues will need to be reviewed carefully. Wetlands are expected to border the existing right-of-way (Moone Creek) just east of the existing storm water management facility.

Additional rights-of-ways will be required for road widening. The increase of 25 feet is shown in the Exhibits on both sides of Battery Park Road, and may require the acquisition/relocation of several dwellings, both residential and commercial. Several properties that could be considered to be impacted include:

- Thunderbird Grill, 201 Battery Park Road
- James River Mechanical
- Import Car Service, 213 Battery Park Road
- Colonial Rental Center
- Dentist Hal S. McCarter, 225 Battery Park Road
- Residence, 173 Lane Crescent
- Residence, 165 Lane Crescent
- Residence, 18449 Battery Park Road
- Residence, 18461 Battery Park Road
- Residence, 19180 Battery Park Road
- Residence, 12089 Greenbrier Lane
- Residence, 19217 Battery Park Road
- Residence, 19225 Battery Park Road
- Columbia Gas substation
- Commercial, 19351 Battery Park Road
- Commercial, 13351 Battery Park Road

Of the property impacts, one home would almost certainly need to be acquired and the residents would necessarily be required to relocate.

***Proposed Water Facility***

Any upgrades to the water main system can be constructed in the median or within the right-of-way of the four-lane highway. The anticipated size for the future watermain is 16 inches from Battery Park Road to Nike Park Road, and 12-inches from Nike Park Road to the Town Limits. The size of the future watermain will also depend on the Town's need to loop this watermain with other watermains as determined by additional studies. Fire hydrants along Battery Park Road will be relocated at a spacing coordinated with your Fire Department and Town Ordinance.

***Proposed Sewer Facility***

The anticipated size for the future sanitary sewer force main is 16-inches. The age of the existing forcemain is undetermined at this time.

***Proposed Gas***

A substation for Columbia Natural Gas is located on the south side of Battery Park Road. Underground gas mains exist along Battery Park Road. Size, age, and precise location are unknown. Several above ground markers locate the existence of the main. Coordination with Columbia Gas will be required to determine if relocation is necessary and where future improvements will be desired.



***Proposed Electrical Service and Telephone***

The realignment of Battery Park Road impacts the existing power poles. The poles may have additional utilities that may be affected by the relocation of the poles. New electrical services and lights will be provided in accordance with Town policy.

**Estimated Cost for Development and Construction:**

The construction cost estimate is included in Appendix B. A cost for the engineering design based on a percentage of the construction costs is included. The inspection costs shown reflect daily inspections completed by the Town, and an additional Inspector visiting the site on a routine basis during construction. Additional rights-of-ways may need to be purchased for widening the road and storm water management. The cost estimate does not include any costs associated with purchasing additional land.

**Construction Constraints:**

One of the construction constraints for this site is the existing soil. Poor subgrades may exist in the project area. The cost estimate includes a cost for soil amendment essential in providing proper support for pavement.

Another constraint on the site is storm water management for both water quality and quantity. Portions of Battery Park are at minimal slopes due to the flat topography. Deeper ditches or larger pipes at minimum slopes may be required to convey the storm water runoff away from the roadway to storm water management facilities. Deeper ditches require an increase in the width of the road right-of-way.

Based on the Town GIS information, the existing right-of-way for Battery Park is on average 50 feet wide. Any increase in pavement width will require an increase in the proposed right-of-way. The location of several structures will need to be reviewed and examined in relationship to a new road alignment.

**Additional Studies or Evaluations:**

It is highly recommended that a complete geotechnical investigation, environmental due diligence, and traffic studies be performed prior to the preparation of construction drawings. At a minimum, the study shall include testing for the suitability of the subgrades soil's usage as utility trench backfill, soil borings to identify the types of existing soils, and a California Bearing Ration (CBR) test to verify the subgrade's traffic load bearing capacity. Further studies of traffic analysis at intersections will be required as the adjacent land is developed.



A full topographic survey and environment review should also be completed prior beginning construction documents.



**Phasing:**

The widening of Battery Park Road can be completed in phases. One alternative would include Phase 1 from South Church Street to Nike Park Road, and Phase 2 from Nike Park Road to Gatling Pointe, but depending on growth and adjacent development, multiple phasing options could be considered.

**Recommendations:**

Battery Park Road serves as an entrance corridor, which conveys an initial perception of the Town of Smithfield. As per Smithfield's Comprehensive Plan, the importance of the functional and aesthetic character of these corridors should reflect the citizen's aspirations concerning the improvement of the design, appearance and image of each corridor. Smithfield's Comprehensive Plan also lists Battery Park Road on the Sidewalk and Bicycle Path Improvement Plan. As development in Smithfield and Isle of Wight County continues, the level of service on Battery Park Road will decline. The Town should work with developers, VDOT and others to assure adequate planning and design for the increase traffic on Battery Park Road. To adequately meet the goals of a functional roadway, scenic entrance corridor, sidewalk path, and bicycle path as described in the Smithfield Comprehensive Plan, a minimum of 100' of right-of-way should be set aside for the widening of Battery Park Road.

Smithfield Comprehensive Plan

Item	Quantity	Units		Price	Total	Subtotal
Multi-use Path (10' Wide):	9950	LF	@	\$15.00		\$149,250.00
S. Church St. to Nike Park Rd.	7,667	SY	@			
Nike Park Road to Gatling Pointe	3,389	SY	@			
2" Asphalt SM-9.5A	0.20	TONS	@	\$35.00	\$7.00	
8" Aggr.21A	0.50	TONS	@	\$16.00	\$8.00	
Roadway w/curb and gutter	1,675	LF	@	\$413.25		\$692,193.75
2" Asphalt SM-9.5A	0.85	TONS	@	\$40.00	\$34.00	
8" Asphalt BM-25.0	2.30	TONS	@	\$35.00	\$80.50	
12" Aggr.21A	3.00	TONS	@	\$20.00	\$60.00	
Overlay	0.15	TONS	@	\$45.00	\$6.75	
Storm Sewer	1	LF	@	\$100.00	\$100.00	
Curb & Gutter	2	LF	@	\$16.00	\$32.00	
16" Watermain	1	LF	@	\$50.00	\$50.00	
12" Sanitary Sewer	1	LF	@	\$50.00	\$50.00	
Roadway w/shoulders	8,275	LF	@	\$333.75		\$2,761,781.25
2" Asphalt SM-9.5A	0.85	TONS	@	\$40.00	\$34.00	
8" Asphalt BM-25.0	2.30	TONS	@	\$35.00	\$80.50	
12" Aggr.21A	3.00	TONS	@	\$20.00	\$60.00	
Shoulders	1.50	TONS	@	\$35.00	\$52.50	
Overlay	0.15	TONS	@	\$45.00	\$6.75	
16" Watermain	1	LF	@	\$50.00	\$50.00	
12" Sanitary Sewer	1	LF	@	\$50.00	\$50.00	
Turn Lanes						
Left Turn Lane:						
New Pavement	500	SY				
2" Asphalt SM-9.5A	85.00	TONS	@	\$35.00	\$2,975.00	
8" Asphalt BM-25.0	230.00	TONS	@	\$30.00	\$6,900.00	
12" Aggr.21A	36.00	TONS	@	\$16.00	\$576.00	
MS-1	115	SY	@	\$115.00	\$13,225.00	
Storm Sewer	500	LF	@	\$50.00	\$25,000.00	
Storm Structures	3	EA	@	\$2,500.00	\$7,500.00	
Left Turn Lane Subtotal	6	EA			\$56,176.00	\$337,056.00
Right Turn Lanes:						
New Pavement	500	SY				
2" Asphalt SM-9.5A	83.00	TONS	@	\$35.00	\$2,905.00	
8" Asphalt BM-25.0	230.00	TONS	@	\$30.00	\$6,900.00	
12" Aggr.21A	36.00	TONS	@	\$16.00	\$576.00	
Curb & Gutter	250	LF	@	\$15.00	\$3,750.00	
Storm Sewer	475	LF	@	\$50.00	\$23,750.00	
Storm Structures	4	EA	@	\$2,500.00	\$10,000.00	
Right Turn Lane Subtotal	6	EA			\$47,881.00	\$287,286.00
Stormwater management basin	5	EA	@	\$20,000.00		\$100,000.00
Nike Park Road/South Church Street	1	LS	@	\$200,000.00		\$200,000.00
Fire Hydrant Assembly	13	EA	@	\$3,500.00		\$45,500.00
<b>CONSTRUCTION TOTAL</b>						<b>\$4,573,067.00</b>
Engineering			+/-	10.00%		\$457,306.70
Inspection			+/-	5.00%		\$228,653.35
<b>TOTAL</b>						<b>\$5,040,000.00</b>

NOTE: Projected cost do not include of rights-of-way acquisition.  
Some turn lanes may utilize existing pavement milling & overlay will be required.



*Appendix IV:*

**NATURAL RESOURCES INVENTORY,  
CONSTRAINTS ASSESSMENT AND  
RECOMMENDATIONS**

**ADOPTED  
AUGUST 4, 2009**

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Appendix

**NATURAL RESOURCES AND ENVIRONMENT**

The Town of Smithfield is located in southeast Virginia, a region also referred to as Hampton Roads. The town is situated in the northeastern part of Isle of Wight County, along the Pagan River, one of the County's main water bodies. The Pagan River flows into the James River approximately 4 miles downstream from the confluence of the Pagan River and Cypress Creek. This location at the confluence of rivers and creeks contributes to the Town's unique ecological setting that is characterized by water, tidal flats, wetlands and marshes.

The impact of population growth and the resulting increase in human activity impacting local environmental quality is a growing public concern. Throughout the country, human activity is often at odds with the natural environment, and future growth and development has the potential to impact the environmental quality of the Town of Smithfield. Therefore, the impact of land use decisions on environmental resources should be the foundation for all Town zoning and development considerations. The following sections in this Appendix provide a discussion of the environmental resources and potential threats to these resources within and adjacent to the Town of Smithfield. This Appendix also provides a discussion of environmental constraints to the growth and development of the Town, and tools to deal with these constraints.

**ENVIRONMENTAL SETTING**

***Land use***

The Town of Smithfield Zoning Ordinance reflects 14 distinct zoning districts (Table A.1). This section provides a brief discussion of zoning issues that are relevant to natural resources and the environment; zoning and land use is discussed in more detail in Chapter VI.

As of January 1999, 46 percent (2,969 acres) of the Town had been zoned for development. Developed areas can be divided into residential areas (2,307 acres or 36 percent of the Town's land area), commercial areas (388 acres or 6 percent) and economic development (industrial) areas (274 acres or 4 percent).

The remaining 3,440 acres (54 percent) can be classified as undeveloped and are mostly zoned as Community Conservation District, Environmental Conservation District or Entrance Corridor. These undeveloped areas include woodlands, open spaces, tidal marshes, wetlands, major highways and rivers and other natural areas. Undeveloped areas are a valuable element of a community in that they serve as green spaces, buffers and wildlife corridors. Furthermore, they enhance the standard of living in an area because of their visual impact, positive influence as moderators of an area's climate and function as environmental filters of water and air. However, undeveloped areas could also be a source of non-point source pollution to surface and ground water, particularly if they are not managed properly. While a substantial percentage of these undeveloped areas cannot be developed because of environmental constraints, it is expected that some of these areas could be rezoned if needed as the Town continues to grow. The spatial distribution of these areas will greatly influence future development patterns and growth management strategies, including rezoning decisions. Environmental constraints to development are described later on in this section.

**Table A.1**  
**Existing Land Area within Current Zoning Districts in the Town of Smithfield**  
**(Total area assumed to be 6,538 acres)**

<b>Zoning Designation</b>	<b>District</b>	<b>Estimated Acreage</b>
C-C	Community Conservation District	2081 Ac. (31.8 %)
N-R	Neighborhood Residential District	1225 Ac. (18.7 %)
S-R	Suburban Residential District	761 Ac. (11.6 %)
DN-R	Downtown Residential District	181 Ac. (2.8 %)
A-R	Attached Residential District	92 Ac. (1.4 %)
MF-R	Multi-Family Residential District	81 Ac. (1.2 %)
R-O	Residential Office District	33 Ac. (0.5 %)
MH-P	Mobile Home Park District	17 Ac. (0.3 %)
D	Downtown District	68 Ac. (1 %)
HR-C	Highway Retail Commercial District	265 Ac. (4.1 %)
PS-C	Planned Shopping Center Commercial District	28 Ac. (0.4 %)
P-COR	Planned Corporate Office and Research District	0 Ac. (0.0 %)
I-1	Light Industrial District	89 Ac. (1.4 %)
I-2	Heavy Industrial District	191 Ac. (2.9 %)
<b>Overlay and Special Districts</b>		
E-C	Environmental Conservation District	815 Ac. (12.6 %)
HP-O	Historic Preservation Overlay District	N/A
FP-O	Floodplain Overlay District	N/A
CB-O	Chesapeake Bay Preservation Area Overlay District	N/A
ECO	Entrance Corridor Overlay District (or Other = Roads/River/Creeks)	611 Ac. (9.3 %)
<b>TOTAL</b>		<b>6538 Ac.</b>

### ***Climate***

The Town of Smithfield enjoys a warm, temperate humid climate with an average daily maximum temperature of 87.9 °F in July and average daily minimum temperature of 28.6 °F in January (Table A.2). The average first day of frost is October 25, though frost can occur as early as October 12. On average, the last day of frost in spring is April 16, though frost can occur as late as the end of April. The lowest temperature recorded in Holland, VA (Isle of Wight County) is 1 °F and the highest recorded temperature there was 105 °F.

Average precipitation is approximately 48 inches, which is evenly distributed throughout the year with a slight increase in the summer months. The average relative humidity is 60 percent. On average, during the summer months, the sun shines 70 percent of the time possible, and 60 percent in winter. The prevailing wind direction is from the southwest (USDA 1986).

### ***Topography***

Isle of Wight County is located in the Embayed section of the Coastal Plain of Virginia (USDA 1986). Elevations in the Town of Smithfield range from sea level to 70 feet in the western part of Town and 30 feet in the eastern area of Town. The topography is flat to gently rolling, and the landscape is dissected by a number of rivers, creeks and associated marshes. These streams include the Pagan River, Cypress Creek, Mount Holly Creek, Moone Creek, tributaries to these rivers and creeks, and unnamed tributaries to Jones Creek. All creeks within the Town limits drain to the James River.

### ***Geology***

The Town of Smithfield lies within the Atlantic Coastal Plain Physiographic Province of Virginia. The surficial geology in the Smithfield area consists of unconsolidated sediments of the Atlantic Coastal Plain that range in age from lower Miocene to Holocene (recent) and were deposited in fluvial, estuarine, and shallow marine environments (Mixon, et al., 1989). A more detailed description of the geological formations in the Town of Smithfield is provided below.

The area around Cypress Creek consists of alluvial deposits, mainly of Holocene age. The alluvium consists of light to medium gray and yellowish gray fine to coarse gravelly sand and sandy gravel, silt and clay. It is deposited mainly in channels and floodplains and includes sandy deposits of narrow beaches as well as mud, sand and peat in swamps and marshes bordering rivers.

The Shirley Formation can be found on either side of Cypress Creek and north of the Pagan River. This formation is of Middle Pleistocene age and consists of light to dark gray bluish gray and brown sand, gravel, silt, clay, and peat. It is comprised of surficial deposits of riverine terraces and relict baymouth barriers and bay-floor plains.

The Sedgefield Member of the Tabb Formation, which exists in the eastern portion of the Town, is an upper Pleistocene deposit of pebbly to bouldery clayey sand and fine to medium shelly sand grading upward to sandy and clayey silt. It is comprised of surficial deposits of river and coast parallel plains.

The Charles City Formation exists west of Cypress Creek and north of the Pagan River. This formation is of lower Pleistocene age, and consists of light to medium gray and light to dark yellowish and reddish brown sand, silt and clay comprised of surficial deposits of riverine terraces.

**Table A.2  
Climate Information for Locations Near the Town of Smithfield**

Month	Holland, VA (1951-1981) <sup>1</sup>					Newport News, VA (1971-2000) <sup>2</sup>				
	Temperatures (°F)			Precipitation (Inches)		Temperatures (°F)			Precipitation (Inches)	
	Average Daily Maximum	Average Daily Minimum	Average	Average	Average Snowfall	Average Daily Maximum	Average Daily Minimum	Average	Average	Average Snowfall
Jan	49.6	28.6	39.1	3.77	3.4	46.7	32.0	39.4	4.1	2.9
Feb	51.4	30.2	40.8	3.78	1.3	49.4	33.8	41.6	3.6	3.0
Mar	58.9	36.9	48.0	3.77	1.5	57.0	40.6	48.8	4.7	1.0
Apr	70.2	45.7	58.0	3.00	0	65.9	48.5	57.2	3.4	0
May	77.8	54.8	66.3	3.75	0	73.4	58.3	65.9	4.0	0
June	84.7	62.8	73.8	4.35	0	81.0	66.8	73.9	3.4	0
July	87.9	67.1	77.5	5.41	0	85.2	71.8	78.5	4.9	0
Aug	86.6	66.2	76.4	5.90	0	83.7	70.7	77.2	4.7	0
Sep	81.6	59.8	70.7	4.09	0	78.1	65.1	71.6	4.8	0
Oct	71.8	48.5	60.2	3.96	0	58.3	53.0	55.7	3.5	0
Nov	62.3	38.7	50.5	2.86	0	59.5	43.5	51.5	3.4	0
Dec	52.4	31.0	41.7	3.50	1.5	51.1	36.0	43.6	3.4	0.9
Average	69.6	47.5	58.6	–	–	66.6	51.7	58.7	–	–
Total	–	–	–	48.14	7.7	–	–	–	47.8	7.8

<sup>1</sup> USDA Soil Survey of Wight County, VA (1986)

<sup>2</sup> Office of the State Climatologist, Commonwealth of Virginia

The westernmost section of the Town consists of the Windsor Formation, a lower Pleistocene/upper Pliocene gray and yellowish to reddish brown sand, gravel, silt and clay.

The geology of northwestern section of the Town consists of the Chesapeake Group, an upper Pliocene to lower Miocene group which consists of fine to coarse, quartzose sand, silt, and clay deposited mainly in shallow inner and middle shelf waters.

The Town of Smithfield is located within the Coastal Plain Ground Water Area (V.W.C.B., 1985), which is composed of unconsolidated sediments overlying a bedrock basement. The sediments thicken from a featheredge at the fall zone eastward, to a thickness of about 2,500 feet in Norfolk, Virginia. The groundwater in the vicinity of the Town of Smithfield is divided into seven aquifers (USGS, 1988). The aquifers are separated by confining beds that restrict, but do not prevent, vertical water flow between aquifers. General groundwater flow is toward the Atlantic Ocean. Shallow ground water in the Town of Smithfield is believed to flow toward the Pagan River (based on a review of the Smithfield 7.5 minute topographic quadrangle, 1986).

### **Soils**

Soils are important factors in evaluating land use decisions for an area. The 1986 USDA Soil Survey of Isle of Wight County, VA, provides soil information for the Town of Smithfield. Soil types found in Smithfield are described below. These descriptions include a summary discussion of the development constraints of these soils; this issue will be discussed in more detail later in this section. Figure A.1 provides an overview of the soils in the Town of Smithfield.

**Alaga fine sand (map unit 1, in the Soil Survey of Wight County).** This is very deep and somewhat excessively drained soil that is nearly level to gently sloping and is located on low ridges. Although this soil is loose and is not suited for excavation, it is well suited for homes without basements, septic systems and roads. This soil exists across 0.3 percent of the land surface of the Town.

**Bohicket silty clay loam (map unit 2).** This soil type is found in the tidal marshes of the Pagan River and Cypress Creek and is only suited as habitat for wildlife and wetlands; it is not suited for development. This is one of the most common soils in the Town of Smithfield, existing across 13.2 percent of the land surface of the Town.

**Chickahominy silt loam (map unit 3).** This is a very deep poorly drained soil that can be found on upland flats. It is best suited for forestry and poorly suited for crops. It has a high shrink – swell capacity and a low strength. It is therefore not well suited for septic tanks, buildings and roads. This is also one of the most common soils in the Town of Smithfield, existing across 8.3 percent of the land surface of the Town.

**Chipleys sand (map unit 4).** This is a very deep, moderately well drained soil located on ridges and in depressions next to flood plains. This soil is best suited for woodland. Because this soil is loose, it is not well suited for excavation, dwellings, septic systems and roads. Furthermore, the soil survey mentions that this soil should not be used for leach or spray fields because of the soil's high permeability. This soil is not common in Town, limited to approximately 30 acres.

**Emporia fine sandy loam (map unit 5).** This soil type contains two classes: map unit 5A has 0 to 2 percent slope, and map unit 5B has 2 to 6 percent slope. These soils are very deep and well drained. They are well suited for agricultural crops and pasture. In particular because of the wetness of the subsoil, these soils are considered ill-suited for dwellings, septic systems and roads. This soil exists across 2.2 percent of the land surface of the Town.



# Place Holder for figure A.1

**Kenansville loamy sand (map unit 6).** This is a very deep, well drained soil. It is well suited for crops and woodlands. Because of the soil's looseness, it is not suited for excavation, dwellings, septic systems and roads. Furthermore, the soil survey mentions that this soil should not be used for leach or spray fields because of the soil's high permeability. This soil exists across 1.6 percent of the land surface of the Town.

**Kinston loam (map unit 7).** This is a very deep poorly drained soil located in depressions and drainage ways that is mostly used for forestry in Isle of Wight County. Because this soil is loose and has low strength, it is not well suited for excavation, dwellings, septic systems and roads. This soil exists across 2.3 percent of the land surface of the Town.

**Nawney loam (map unit 10).** This soil type is mostly found in flood plains. It is very deep and poorly drained. Frequent flooding and wetness makes this soil unsuitable for development. This soil exists across 0.1 percent of the land surface of the Town.

**Nevarc and Remlik Soils (map unit 11E).** These are very deep soils located on steep slopes (15 to 60 percent slope) along well-incised drainage ways. These soils' steepness makes them unsuitable for development. These are common soils in the Town of Smithfield, existing across 11.0 percent of the land surface of the Town.

**Peawick silt loam (map unit 12).** This soil types contains three classes: map unit 12A has 0 to 2 percent slope; map unit 12B has 2 to 6 percent slope; and map unit 12C has 6 to 10 percent slope. These soils are very deep and moderately well drained soils on ridge tops and side slopes, and have a high shrink – swell potential. Because of the soil's inherent low fertility it is not well suited for crops. However it is well suited for pasture and forestry. Wetness, low strength, and the shrink – swell capacity are limitations to the use of this soil for building site development, septic tanks and roads. This is the most common soil unit in the Town of Smithfield, existing across 26.5 percent of the land surface of the Town.

**Peawick clay loam (map unit 13B3).** This map unit represents severely eroded Peawick soils. They are generally found in areas with 2 to 6 percent slope. Erosion has removed much of the original surface layer and exposed the subsoil. This soil exists across 0.7 percent of the land surface of the Town.

**Peawick – Slagle complex (map unit 14B).** This complex contains 40 percent Peawick soils, 40 percent Slagle soils and 20 other soil types. It is very deep and moderately well drained and can be found on gentle slopes (2 to 6 percent slope). These soils are very well suited for agriculture and forestry. Wetness, permeability, low strength, and the shrink – swell capacity are limitations to the use of this soil for building site development, septic tanks and roads and streets. This soil exists across 2.9 percent of the land surface of the Town.

**Rumford loamy sand (map unit 16).** Rumford soils are very deep and somewhat excessively drained. They are nearly level to gently sloping and have a moderately rapid infiltration. These soils are well suited for cultivated crops. Wetness, low strength, and the shrink – swell capacity are limitations to the use of this soil for building site development, septic tanks and roads. This is one of the most common soils in the Town of Smithfield, existing across 11.2 percent of the land surface of the Town.

**Slagle sandy loam (map unit 17B3).** This map unit represents severely eroded Slagle soils with a 2 to 6 percent slope. This soil unit is very deep, moderately well drained and gently sloping. It is generally encountered at the toe of slopes, and therefore is not common in the Town of Smithfield. Wetness and low strength are limitations to the use of this soil for building site development, septic tanks and roads. This soil exists across 0.5 percent of the land surface of the Town.

**Slagle sandy loam (map unit 18).** This soil type contains three classes: map unit 18A has 0 to 2 percent slope; map unit 18B has 2 to 6 percent slope; and map unit 18C has 6 to 10 percent slope. Slagle sandy loams are very deep, moderately well drained soils located on a variety of slopes. Wetness, low strength, and moderately slow permeability in the subsoil are limitations to the use of this soil for building

site development, septic tanks and roads. This soil exists across 4.5 percent of the land surface of the Town.

**Uchee loamy sand (map unit 19).** This soil type contains two classes: map unit 19A has 0 to 2 percent slope, and map unit 19B has 2 to 6 percent slope. Uchee soils are very deep, well drained and located mostly in broad, interstream areas. Wetness, low strength and moderately slow permeability in the subsoil are limitations to the use of this soil for building site development, septic tanks and roads. This soil exists across 4.4 percent of the land surface of the Town.

**Udorthents, loamy (map unit 21).** Udorthents are young soils that are forming in areas that have been excavated for construction. Excavations are generally 2 to 15 feet deep. Because of the nature of these soils, a range of properties can be expected but they are generally not suited for farming. Udorthents have not been investigated for limitations. This soil exists across 0.7 percent of the land surface of the Town.

**Urban land (map unit 22).** These are soils where more than 85 percent of the surface is covered by asphalt, concrete, buildings or other impervious surfaces. Approximately 1.4 percent of the land surface of the Town Smithfield is classified as Urban land by the 1986 soil survey.

**Yemassee fine sandy loam (map unit 23).** This soil type is a very deep, somewhat poorly drained soil on broad flats and along shallow drainage ways. It is well suited for cultivated crops and agriculture land. Moderate permeability of the subsoil and low strength are limitations to the use of this soil for building site development, septic tanks and roads. This soil exists across 0.2 percent of the land surface of the Town.

**Open water (map unit W).** The soil survey classifies 8.9 percent of the Town of Smithfield corporate limits as open water.

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Soils types are generally consolidated into units based on common soil property, location in the landscape and proximity to each other (Figure A.2). These units have a generalized suitability for a given use that is usually sufficient for planning purposes. The soil survey of Isle of Wight County indicates that Smithfield has four soil units within the Town boundaries:

**Slagle-Uchee-Yemassee:** This soil unit is moderately well drained, well drained and somewhat poorly drained. It is nearly level to gently sloping. It contains mostly loamy soils and can generally be found in uplands. In the Town of Smithfield, this soil unit is located west and north of downtown and in a small area west of Moon Creek. In the County, these soils are traditionally used for agriculture and forestry. Sites with this soil type have a limited suitability to development of sanitary facilities (septic systems), but are moderately well suited to building site development. Seasonal wetness is the main limitation.

**Rumford-Kenansville:** This loamy soil unit is somewhat excessively drained and well drained, nearly level to gently sloping. In Smithfield it can be found in a narrow strip that runs north-south from the Pagan River along Highway 10 east of Cypress Creek. In the County, these soils are traditionally used for agriculture. Sites with this soil type are well suited to sanitary facilities (septic systems) and to building site development.

**Peawick-Chickahominy:** This soil unit has moderately well drained and poorly drained soils that are nearly level to gently sloping. Soils are clayey and can be found in broad uplands. In the Town of Smithfield, these soils can be found in a narrow strip east of the Rumford-Kenansville soil unit. In the County, 35% of these soils are cleared for pasture and crops; the remainder is used for forestry. Sites with this soil type are poorly suited to sanitary facilities (septic systems) and to building site development. Seasonal wetness is the main limitation.

# Place Holder for figure A.2

**Bohicket-Rappahannock:** This soil unit contains soils that are very poorly drained and nearly level. These soils are clayey and mucky and are located in the tidal marshes of the Pagan River, Cypress Creek and Moon Creek. These soils are not suited for development and are used as wetland and habitat for wetland wildlife. In the Town of Smithfield, these soils are mostly located in the Resource Protection Area (RPA) along the main drainages.

## **WATER RESOURCES**

### ***Surface Water***

#### **Surface Water Bodies in the Town of Smithfield**

The Town of Smithfield and the Pagan River are located within Hydrologic Unit Code (HUC) 0208026093 of the Virginia Hydrologic map. Four main water bodies exist within the town limits: the Pagan River and its tributaries Cypress Creek, Moon Creek and Mount Holly Creek. The far eastern section of the town contains a few drainage ways that are tributaries to Jones Creek.

Surface water circulation in the Pagan River is mainly driven by tidal movements and to a lesser extent by groundwater and overland flow from rain in the surrounding watersheds. Waters within the Pagan River and its tributaries are predominately brackish with a salt wedge that has been noted to extend to the headwaters of the Pagan River during slack tides (Hampton Roads Water Quality Assessment 1993).

#### **Surface Water Quality**

On September 30, 2002, the Virginia Department of Environmental Quality (DEQ) published a report on Impaired Waters in Virginia. In this report, DEQ identified a total of 4,318 stream miles that are impaired because of human activity. DEQ designated the upper and middle segments of the Pagan River in the Town of Smithfield as impaired waters. Both reaches exist within the Town boundaries although the upper Pagan River reach begins west of Smithfield. These reaches were determined to be impaired because of fecal coliform contamination and failure to meet the general standard for benthic macroinvertebrates. Furthermore, the upper reach was determined to have a low Dissolved Oxygen level. Both reaches were included on the list for the first time in 1996 with the noted pollution source as "unknown".

As part of an agreement between the EPA and the State of Virginia a Total Maximum Daily Load (TMDL) must be developed for all waters included on the Virginia list of impaired waters. The TMDL will set a maximum loading rate from all pollution sources within the specified watershed. The EPA and the State have agreed that TMDLs for the upper and middle reach of the Pagan River will be developed by 2010.

Currently, surface water is not being used as a source of potable water within the Town limits; therefore, no surface water withdrawals exist within the Town.

#### **Submerged Aquatic Vegetation**

Submerged aquatic vegetation (SAV) is a diverse assembly of rooted macrophytes (aquatic plants) found in shoal areas of the Chesapeake Bay, from its mouth to the headwaters of its tributaries. The presence of SAV is an important contributor to, and indicator of, the health and productivity of the bay. In addition, SAV serves as breeding grounds and nurseries for many aquatic species. A dramatic bay wide decline of

all SAV species was seen in the late 1960's and 1970's, a decline correlated with increasing nutrient and sediment inputs from development of the surrounding watershed.

No Submerged Aquatic Vegetation (SAV) beds were reported in the 1975 Shoreline survey of the Pagan River by VIMS. Recently, the Chesapeake Bay Program (CBP) has developed a three-tiered framework of SAV restoration goals or targets:

- Tier I goal: To restore or establish SAV in areas of historic (1971 to 1990) distribution.
- Tier II target: To restore or establish SAV in potential habitat to a depth of 1 meter.
- Tier III target: To restore or establish SAV in potential habitat to a depth of 2 meters.

The Pagan River is considered a CBP Tier III restoration area. More information regarding the SAV restoration areas can be found at the website of the CBP (<http://www.chesapeakebay.net/savrest.htm>) and in the Hampton Roads Shoreline Stability Report (not dated).

### **Condemned Shellfish Beds**

The Virginia Department of Health has condemned the taking of shellfish from the Pagan River, Cypress Creek and Jones Creek since 1972, as the result of the "Shoreline Sanitary Survey" that is detailed in the section on Threats to Surface Water Quality (Figure A.3). The condemned area is known as "*Closed Shellfish Harvest Area Number 64*" and includes all of the Pagan River, Jones Creek, Williams Creek, Cypress Creek, Titus Creek and their tributaries. Improved water quality may serve to boost the commercial fisheries markets and would allow for greater profits from the commercial harvesting of both fish and shellfish in the future.

### **Shoreline Conditions and Shoreline Erosion Characteristics**

The shorelines of the Pagan River are generally stable. However, a 1975 VIMS shoreline condition report identified several areas of concern which are most likely caused by boat wakes. Erosion in the area from Days Point to Williams Creek in the mouth of the Pagan River was designated an erosion rate of 3.4 ft/yr. The area from Williams Creek to the Mouth of the Pagan was assigned an erosion rate of 2.6 ft/yr that was described as moderate and non-critical. Severe erosion was noted in a ¾ mile stretch from Goodwin Point east. The 1975 VIMS shoreline condition report recommended the establishment and enforcement of no wake zones in all areas experiencing significant shoreline erosion.

As part of the preparation of this document, a brief review of the shorelines in the Pagan River and Cypress Creek was conducted to identify highly erodible areas. Aerial photographs were reviewed and areas identified as having potential shoreline erosion were thereafter visited in the field. Furthermore, VIMS was contacted for information on shoreline erodibility in Isle of Wight County. From these reviews, it appears that the shorelines of the Pagan River and tributaries are relatively stable. Furthermore, VIMS affirmed that an Isle of Wight Co. shoreline erosion assessment report will be published in the spring of 2003.

### **Public Access**

Boating access is important to the Town of Smithfield as shown by the number of private and public boat docks. Through review of aerial photographs, the amount of boat docks was counted within the three navigable waterways within the town (Figure A.3): the Pagan River, Moon Creek, and Cypress Creek. The distribution of boat docks includes 73 private docks and 3 public docks. The Pagan River has 40 private and 3 public boat docks along the banks. Moon Creek has 11 private docks, and Cypress Creek has 22 private boat docks. There are no public docks in Moon Creek or Cypress Creek. The Virginia Outdoors Plan recommends that more public boat docks should be installed to enhance the use of Smithfield's navigable waters (Virginia Outdoors Plan 2002).

# Place Holder for figure A.3

# Place Holder for figure A.4



## **Ground Water Resources**

### **Groundwater Aquifers**

Groundwater in the vicinity of the Town of Smithfield is divided into seven aquifers, which are subdivided by six confining units or aquacludes (USGS 1988). The stratification of the aquifers and aquacludes is provided in Table A.3. These aquifers and aquacludes exist in sediments ranging in age from the relatively recent Holocene (the Columbia aquifer) to older Early Cretaceous (the Middle and Lower Potomac aquifers and aquacludes).

### **Location of Groundwater Wells**

The Town of Smithfield has owned and operated its water system since 1905 (AES 1999). With the exception of a small number of private wells and the packing plants, the Town water system supplies water to all businesses and residences within the Town limits. The Town's water system currently consists of 2,918 connections.

Four public groundwater wells are currently operated by the Town of Smithfield. The four public water wells are located as follows: (1) Cary Street, (2) West Street (Jersey Park), (3) Edgewood-Jefferson Drive and (4) South Church Street. The Town of Smithfield's Public Works web page indicates that the shallow wells draw water from the Upper Potomac aquifer whereas the deeper South Church Street well draws water from the Middle Potomac Aquifer. Table A.4 provides additional information regarding the Town's public drinking water wells.

Some residences and businesses operate private ground water wells within the Town limits. The Town of Smithfield Water Master Plan lists the following thirteen private wells (AES 1999):

- Smithfield Foods, Inc. operates six wells.
- Felts well at Red Point Drive serves eight residences.
- Chapman well at Red Point Drive serves one residence.
- Dashiell Drive and Pleasant Lane well serves seventeen residences.
- River Oaks well serves nine residences.
- Old Jericho well serves nine residences.
- Magette well on Battery Park Road serves four businesses.
- Battery Park Road well serves an unknown number of residences.

The VDEQ files indicate that seventeen private wells (including two abandoned wells) exist within the Town of Smithfield's corporate limits. Records indicate that all but one of these wells appear to be owned and operated by Smithfield Packing/Gwaltney Foods. It is likely that VDEQ's records are incomplete and do not include all existing wells.

The Town of Smithfield has issued approximately seventeen zoning permits for irrigation wells in recent years. These wells do not appear to be included in the above lists of wells.

**Table A.3**  
**Stratification of the Aquifers and Aquicludes in the vicinity of Smithfield**

<b>Aquifer/Aquiclude</b>	<b>Epoch</b>	<b>Geologic Formation</b>	<b>Location</b>
<b>Columbia aquifer</b>	Pleistocene and Holocene	Undifferentiated sediments	Shallow
<b>Yorktown confining unit</b>	Pliocene	Yorktown Formation	
<b>Yorktown-Eastover aquifer</b>	Pliocene	Yorktown Formation	
<b>Calvert confining unit</b>	Miocene	Calvert Formation	
<b>Chickahominy-Piney Point aquifer</b>	Eocene and Oligocene	Old Church, Chickahominy, and Piney Point Formations	
<b>Nanjemoy-Marlboro confining unit</b>	Eocene	Nanjemoy Formation and Marlboro Clay	
<b>Aquia aquifer</b>	Palocene	Aquia Formation	
<b>Upper Potomac confining unit</b>	Late Cretaceous	Potomac Formation	
<b>Upper Potomac aquifer</b>	Late Cretaceous	Potomac Formation	
<b>Middle Potomac confining unit</b>	Late Cretaceous	Potomac Formation	
<b>Middle Potomac aquifer</b>	Late Cretaceous	Potomac Formation	
<b>Lower Potomac confining unit</b>	Early Cretaceous	Potomac Formation	
<b>Lower Potomac aquifer</b>	Early Cretaceous	Potomac Formation	
<b>Bedrock Basement</b>			Deep

The Town currently regulates through ordinance the installation of private wells; however, it appears that many residents are not aware of the regulations. In addition, the ordinance does not regulate the abandonment of wells. Therefore, wells may have been installed within the Town limits without the Town's knowledge.

It is recommended that the Town create a database of privately owned and operated wells within the Town limits. A mechanism to identify abandoned wells and implement reporting requirements and standards for the installation of new wells, the retrofitting of existing wells and the abandonment of wells should be incorporated by the Town. This reporting requirement should be widely publicized to prevent wells being installed, retrofitted and abandoned without the Town's knowledge. Information pertaining to regulated wells should be forwarded to VDEQ and the Virginia Department of Health. A database of this sort will help to identify threats to ground water quality and potable water sources. In addition, this requirement would prevent the improper abandonment of wells.

**Table A.4.  
Public Water Well Information for the Town of Smithfield**

<b>Location</b>	<b>Date Constructed</b>	<b>Capacity</b>	<b>Depth</b>	<b>Aquifer</b>
<b>Well #1 Edgewood-Jefferson Drive</b>	1991	250 GPM	454 feet	Upper Potomac
<b>Well #2 S. Church Street</b>	1984	1,000 GPM	1,005 feet	Middle Potomac
<b>Well #3 Cary Street</b>	n.a.	213 GPM	407 feet	Upper Potomac
<b>Well #4 Jersey Park</b>	n.a.	216 GPM	437 feet	Upper Potomac

Note: Information in this table, with the exception of the aquifer column, was taken from the Town of Smithfield Water Master Plan, Master Utility Plan Final Report (AES, 1999).  
n.a. = not available; GPM = Gallons per Minute

### **Groundwater Quantity and Quality**

#### **Quality**

The United States Geological Survey (USGS, 1993) describes water quality within each aquifer of the Coastal Plain of Virginia. This report indicates that the Upper Potomac aquifer, from which five of The Town of Smithfield's public water wells draw, is slightly basic throughout the aquifer. The above referenced report indicates that natural concentrations of fluoride, sodium, and dissolved solids in the Upper Potomac and Middle Potomac aquifers in the vicinity of Smithfield appear to exceed state and federal clean drinking water standards. Natural concentrations of chloride, silica, sulfate, alkalinity, hardness and pH in the Upper Potomac and Middle Potomac aquifers in the vicinity of Smithfield appear to be below state and federal standards.

The Town's annual drinking water quality report for its public water system is available on the Town of Smithfield Public Works website. Data from this report reveals that for the past year, public drinking water in the Town met all federal and state requirements. It is noted that fluoride levels exceed the Secondary Maximum Contaminant Level (SMCL) of 2.0 mg/L, but lie below the Primary Maximum Contaminant Level (PMCL) of 4.0 mg/L. The Town of Smithfield is under a Consent Order with the Virginia Department of Health (VDH) to reduce naturally-occurring levels of fluoride found in our drinking water. The Town awaits final approvals to construct a Reverse Osmosis System with a new well to reduce the amount of fluoride in the drinking water. In addition, regular monitoring and testing as required by Federal and State laws will ensure that the ground water in the Town of Smithfield remains safe for drinking or that impaired water is detected quickly.

#### **Quantity/Growth Projections**

The Hampton Roads Ground Water Use Analysis (HRPDC, 2002) discusses what would occur if every ground water permit in the Hampton Roads area was operated at its maximum permitted level versus its current level. This document states that wells withdrawing water from the Upper Potomac aquifer could experience head losses ranging from five to twenty feet in the western portion of Hampton Roads. In

addition, wells pumping from the Middle Potomac aquifer (i.e. one of the public drinking water wells in Smithfield and the proposed wells) could experience from forty to fifty feet of head loss.

The Town of Smithfield is currently participating in the Hampton Roads regional water supply plan with the Hampton Roads Planning District Commission.

### **Land Use and Water Use**

The Town of Smithfield lies within the James River watershed. Thirty-six (36) percent of the land within the town is zoned for residential areas, six (6) percent of the Town is commercial, and four (4) percent is zoned for industrial use. The remainder of the land within the town limits (54 percent) is undeveloped, with a minor portion containing highways. The undeveloped areas also include agricultural lands.

Within the residential areas, water is primarily used for drinking and irrigation of lawns and gardens. The industrial and commercial areas within the Town use water for industrial purposes including cooling and heating, watering livestock and food processing. The undeveloped areas use water for irrigating crops and watering livestock, and provide for ground water filtration and recharge. The Town sells a portion of its water to Isle of Wight County to provide water to Gatling Pointe and Battery Park northeast of Town.

### **Alternative Sources of Potable Water**

The Town may be able to purchase some water from Isle of Wight County for the south side of Town. This water could be supplied through an 8-inch water main that runs along Route 10. Other alternative sources of potable water do not appear to be practical for the Town of Smithfield. The rivers and creeks in the vicinity of the Town have a high salinity and would require extensive removal of contaminants. The 1979 study entitled the "Hampton Roads Water Management Plan" stated that the maximum salinity in the Pagan River near Smithfield was 4.5 parts per thousand. The Town owns a lake; however, it would not be large enough to provide an adequate supply of drinking water to the Town. Therefore, it appears that ground water is the only practical source of potable water for the Town.

### **Ground Water Protection and Conservation**

The State Water Control Board established the Eastern Virginia Ground Water Management Area (9VAC25-600-20) to include Isle of Wight County. All aquifers located between the land surface and basement rock within the Eastern Virginia Ground Water Management Area are subject to the corrective controls set forth in the Ground Water Management Act of 1992. The purpose of this Act is to ensure public welfare, safety and health by managing and controlling ground water resources through conservation and protection.

The Town of Smithfield realizes that it is important to protect and conserve groundwater and cooperates with adjacent jurisdictions in advancing planning and implementation programs that ensure the continued availability of raw water supply sources. The Town also plans to protect the quality and reliability of the regional aquifer by ensuring judicious use of ground water supplies, thus ensuring that the long-range municipal water supply requirements of Smithfield are served.

For the Town of Smithfield to develop an effective ground water protection program it should prepare a ground water management plan consisting of locally appropriate management techniques and community specific goals and objectives. In completing this management plan, the Groundwater Protection Handbook for Southeast Virginia (Carlock and Wickham, 1990) may be a valuable resource.

Water conservation is one way of achieving water quantity and quality goals, according to the Virginia Department of Health, Division of Drinking Water, and local water conservation measures should

therefore be developed and implemented. In addition, water conservation can have major public health, environmental, and economic benefits. Reducing drinking water demand helps improve water quality, maintain aquatic ecosystems and protect potable water resources. Furthermore, using drinking water efficiently can reduce wastewater flows and require less energy, thereby reducing pollution. The Environmental Protection Agency prepared Guidelines for Preparing Water Conservation Plans (Virginia Department of Health, Division of Drinking Water) which localities can use in designing water conservation programs. The Town recently adopted a new Water Conservation and Management Program.

### ***Threats to Water Quality***

#### **Land use**

Land use in the Town of Smithfield can be divided into four major land use categories. As mentioned previously, 36 percent of the land within the town is zoned for residential areas, 6 percent of the Town is commercial, and 4 percent is zoned for industrial use. The remainder of the land within the town limits (54 percent) is undeveloped, with a minor portion containing highways. The undeveloped areas also include agricultural lands.

The Virginia Department of Health, Division of Drinking Water, developed a Source Water Assessment Program (Virginia Department of Health 1999). A section of the document provides an inventory of various land use activities as they relate to potential risks to surface water and ground water. Only eleven land use activities are considered to be of high risk to community and non-transient, non-community waterworks. These eleven include confined animal feeding operations (permitted and non-permitted), hazardous waste recovery facilities, hazardous waste transfer, storage, or disposal facilities, military bases, superfund sites, underground injection wells, underground storage tanks (USTs), unlined landfills, tire piles, and open dumps. Based on the research conducted as part of this Comprehensive Plan, it appears that the majority of these high-risk land uses do not exist within the Town limits. Animal feeding operations and USTs appear to be the only land uses within the Town limits that are classified as a high risk to surface water and groundwater by the Division of Drinking Water.

#### **Surface Water Quality Threats**

The Virginia Department of Health (VDH) conducted a Shoreline Sanitary Survey from July 1998 through May 1999 in Isle of Wight County to identify potential sanitary problems. Sixteen sites were identified within the limits of the Town of Smithfield with either known or potential threats to water quality. These potential threats to water quality were categorized as follows: (1) sewage and potential sewage deficiencies, (2) industrial waste sites, (3) boating activities (marinas), and (4) animal pollution sites.

Anecdotal reports indicate that water quality in the Pagan River has improved over the last several decades. The most likely reason for this improvement is the recent connection of the Town to the Hampton Roads Sanitation District transmission and treatment facilities. This step is anticipated to result in long-term improvements to the water quality in the Pagan River and its tributaries. Current threats to water quality are primarily surface water runoff from impervious areas within the watershed, including the historic downtown area.

#### ***Septic Systems***

In 1999 approximately 115 residences and businesses in Smithfield (approximately 6% of the Town) used private septic systems, according to the Town of Smithfield Wastewater Master Plan (AES 1999). The Shoreline Sanitary Survey identified five of the Town's ten planning areas as having problems with their septic systems including Battery Park South, Battery Park North, the Southern Gateway Planning area,

the West Main Planning area and the Pagan Pines Planning area. The problems typically consisted of bubbling septic tanks, kitchen waste discharge through a pipe into an open ditch and effluent leakage from drainfields onto the ground surface. Furthermore, two potential sanitary deficiencies were observed at residential sites where the septic systems appeared not to work properly during wet weather conditions. The VDH report noted that all sites with sanitary deficiencies were potential indirect contributors to surface water pollution. The Town has recently adopted a Septic Tank Pump-out Program, whereby septic tanks must be pumped out once every five years in order to decrease the potential for problems.

All new development is required by the Town to connect to the public sewer system, reducing the threat of septic systems to the surface water and ground water. As existing septic systems are disconnected, they should be properly abandoned to ensure that no contamination from them occurs over time. Therefore, septic systems are believed to represent a minor potential source of impairment to the groundwater. With proper maintenance and abandonment this potential source of pollution can be further minimized.

#### *Industrial Sites*

The VDH report identified two potential industrial/commercial sites that might be a threat to surface water in the Town of Smithfield, including a combined garden center and concrete plant and a fuel oil company. The combined garden center and concrete plant contains a 4,000-gallon fuel oil tank. Excess concrete materials are discharged into a pond and holding tanks for treatment. The other site is a fuel oil company, having two 20,000 gallon #2 fuel oil tanks, a 20,000-gallon kerosene tank, a 20,000 unleaded fuel tank, and a 15,000-gallon super unleaded fuel tank. Test wells surround the fuel oil site. The Department of Environmental Quality (VDEQ) inspects both sites and these facilities are not expected to pose a threat to surface water if they remain in compliance with the regulations, their classifications and permits.

*Highly Erodible Areas and Shoreline Erosion*

Living on the waterfront is highly desirable throughout the country and building and living along the waterfront has the potential of exposing private property and the adjacent waters to erosion and high sediment loads. Furthermore, these activities may actually accelerate shoreline erosion in some cases. Similarly, erosion in general, and in particular shoreline erosion, is a major threat to surface water quality in the Pagan River, Cypress Creek and the Chesapeake Bay. The Hampton Roads Planning District Commission published a guidance manual on addressing shoreline erosion (HRPDC 1999), in which it provides a description of erosion, its causes and suggested remedies. It also provides examples of slope stabilization measures. These guidelines need to be considered when reviewing waterfront and shoreline development proposals as well as in the treatment of highly erodible sites.

Evidence of the link between erosion and bay water quality has been illustrated by the drought of the recent years. Reports abound that the recent lack of precipitation has decreased sediment loads in the Chesapeake Bay and upstream erosion and greatly improved the water quality and SAV cover in the Bay. This illustrates the potential beneficial effect of erosion control and shoreline stabilization.

*Non-point Source Pollution*

Non-point source pollution is a form of contamination that cannot be tracked to a single source. It originates from a diverse and diffused group of sources including water runoff from impervious areas such as roadways, parking lots, sidewalks, rooftops and from highly developed area such as residential yards and urban landscaped areas. Table A.5 provides an example of some non-point source pollutants. Under natural conditions, water from rainfall soaks into the ground and is filtered by the soil before it reaches the groundwater. Under developed conditions, not all rainwater can infiltrate the soil and the amount and velocity of rainwater runoff is directly correlated to the intensity of land use and percent impervious area in a watershed. Runoff will pick up the various pollutants and deposit them in the surface water.

**Table A.5.  
Non-Point Source Pollutants**

<b>Pollutant</b>	<b>Potential Sources</b>
Lead	Automobile exhaust, (old) exterior paint, (old) roofing materials
Zinc	Leaching and abrasion of galvanized iron and steel and atmospheric fallout
Copper	Leaching and abrasion of copper pipes, brass fittings, and roofing materials; automobile brake linings
Chromium	Atmospheric fallout from cement plants; automobile exhaust, and leaching and abrasion of chromed metal on automobiles and machinery
Biological Oxygen Demand (BOD)	Vegetation, yard waste, litter, garbage and animal wastes
Phosphates	Vegetation, yard waste, litter, garbage, animal wastes, fertilizer and car wash soap
Nitrogen	Vegetation, yard waste, litter, garbage, animal wastes and fertilizer
Pesticides	Vegetation, landscaped areas, yards and yard waste
Total Suspended Solids (TSS)	Construction sites, land disturbing activities, erosion and yard waste
Oil and grease	Leakage from automobiles and machinery and improper disposal of waste oil after "at home" oil changes

The increased volume and velocity will also cause erosion on non-developed sites, in particular when these sites do not have a vegetative cover. Furthermore, increased flow and sediment load has the potential to further increase erosion and sedimentation in the streams.

Minimizing the amount of impervious surface can reduce urban non-point source pollution. The preservation of open space and natural vegetation can slow down the runoff and allow it to infiltrate into the soil. Moreover, the use of Best Management Practices (BMPs) can also reduce the non-point source pollutants entering a stream, by increasing the retention, detention and filtering of the runoff. The Town of Smithfield has developed specific guidelines for the total amount of impervious areas in specific zoning districts, the use of BMPs, and other erosion control measures. Adherence to these guidelines should be beneficial in minimizing non-point source pollution in the Town limits.

### **Groundwater Quality Threats**

In August 2002, the Virginia Department of Health prepared a source water assessment report for the five active groundwater wells in the Town of Smithfield (VDH 2002). While the assessment report mentions that no known contamination of the Town's drinking water wells has occurred in the past 5 years, it examines the vicinity of all wells for four activities that could potentially contaminate the groundwater and therefore the drinking water quality in the Town of Smithfield. For the assessment, the areas around the wells were divided into two zones: Zone I is an area with a 1000-foot radius around the well and Zone II is an area with a 1-mile radius. Potentially contaminating activities examined in these zones include: (1) Land Use Activities of Concern in Zone I; (2) Conduits to Groundwater in Zone I, (3) Potential Sources of Contamination in Zone II; and (4) Best Management Practices (BMP) in Zone II. The report is summarized in Table A.6. "Land Use Activities of Concern" were observed within 1000 feet of all wells. These activities range from the storage of fuel oil and crop production to furniture refinishing. Two of the wells have potential "Conduits to Groundwater" within 1000 feet, including the Pagan River and an unnamed pond. Three of the wells have "Potential Sources of Contamination" within one mile of the well and all wells have at least one nearby BMP. The VDH ranks the potential threats of all activities as either low or medium, but the overall susceptibility of the groundwater to contamination is considered high for all wells. This high susceptibility of the groundwater to contamination is partly caused by the relatively small size of the Town and the lack of undeveloped land. Smithfield does not appear to have any area where the groundwater is not potentially impacted by any of the four listed threats.

#### *Underground Storage Tanks (USTs)*

Regulations and standards for underground storage tanks (UST's) in Virginia are provided by the VDEQ Storage Tank Program Technical Manual (1997). Through these regulations, VDEQ is required to maintain a database of regulated underground storage tanks (USTs) in the State of Virginia. Regulated USTs include USTs that are currently in use, USTs that have been removed from the ground, USTs that are closed in the ground, and USTs that have been reported as leaking underground storage tanks (LUSTs). Heating oil tanks with a capacity of less than 5,000 gallons, USTs with a capacity of 1,100 gallons or less containing motor fuel for noncommercial purposes, wastewater treatment tanks and USTs holding hazardous wastes are exempt from VDEQ's UST regulations.

The Storage Tank Program Technical Manual (1997) also provides standards for UST and piping construction, release detection, corrosion protection and overflow and spill prevention to which all regulated USTs are required to adhere.

A review of VDEQ's database revealed that sixty-three USTs are registered with VDEQ as being "currently in use" within the Town of Smithfield. These sixty-three gasoline, diesel, kerosene, used oil, and heating oil USTs exist at twenty-five distinct facilities. A review of VDEQ's LUST database reveals that twenty-one leaking underground storage tanks have been reported within the Town limits in the past



**Table A.6.  
Potential Threats to Groundwater**

Location	Potential Threats to Groundwater Quality				VDH Susceptibility Rating
	Land Use Activities (within 1000 feet of well) and other Potential Sources of Contamination (within 1 mile of well)	VDH Risk type	Potential Conduits to Groundwater (within 1000 feet of well)	Number of Best Management Practice (within a 1 mile of well)	
Well #1 Edgewood- Jefferson Drive	<ul style="list-style-type: none"> <li>➤ Fuel storage system</li> <li>➤ Crop and fodder production</li> <li>➤ 2 Meat products, pork, ham facilities <sup>a</sup></li> <li>➤ Ham and sauces facility <sup>a</sup></li> </ul>	<ul style="list-style-type: none"> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Low</li> </ul>	Pagan River within 318 feet from well	1	High
Well #2 S. Church Street	<ul style="list-style-type: none"> <li>➤ Furniture/boat refinisher/boat yard</li> <li>➤ Fuel storage system</li> <li>➤ 2 Gasoline stations/service centers</li> <li>➤ Storm sewer discharge/infiltration ponds</li> <li>➤ Car wash</li> <li>➤ Primary roadways</li> <li>➤ Parking lot</li> </ul>	<ul style="list-style-type: none"> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Low</li> <li>- Low</li> <li>- Low</li> </ul>	Unnamed pond	1	High
Well #3 Cary Street	<ul style="list-style-type: none"> <li>➤ Fuel storage system</li> <li>➤ Crop and fodder production</li> <li>➤ Gasoline station/service center</li> <li>➤ 3 Fuel storage systems</li> <li>➤ Ham &amp; Bacon <sup>a</sup></li> <li>➤ Commercial offset printing, glue, plastic <sup>a</sup></li> <li>➤ Weekly newspaper publishing <sup>a</sup></li> <li>➤ Sheet metal fabrication <sup>a</sup></li> <li>➤ 2 Meat products, pork, ham facilities <sup>a</sup></li> <li>➤ Discharge without facility <sup>a</sup></li> <li>➤ Car wash</li> <li>➤ Primary roadways</li> <li>➤ Ham and sauces facility <sup>a</sup></li> </ul>	<ul style="list-style-type: none"> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Low</li> <li>- Low</li> <li>- Low</li> </ul>	None	1	High
Well #4 Jersey Park	<ul style="list-style-type: none"> <li>➤ Above ground storage tank</li> <li>➤ 27 Fuel storage systems</li> <li>➤ Discharge without facility <sup>a</sup></li> <li>➤ Ham &amp; bacon facility <sup>a</sup></li> <li>➤ Commercial offset printing, glue, plastic <sup>a</sup></li> <li>➤ Weekly newspaper publishing <sup>a</sup></li> </ul>	<ul style="list-style-type: none"> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> <li>- Medium</li> </ul>	None	1	High

Location	Potential Threats to Groundwater Quality				VDH Susceptibility Rating
	Land Use Activities (within 1000 feet of well) and other Potential Sources of Contamination (within 1 mile of well)	VDH Risk type	Potential Conduits to Groundwater (within 1000 feet of well)	Number of Best Management Practice (within a 1 mile of well)	
	<ul style="list-style-type: none"> <li>➤ Sheet metal fabrication <sup>a</sup></li> <li>➤ 2 Parking lots</li> <li>➤ Primary roadways</li> <li>➤ Wastewater pumping station</li> </ul>	<ul style="list-style-type: none"> <li>- Medium</li> <li>- Low</li> <li>- Low</li> <li>- Low</li> </ul>			
Well #5 Pinewood Heights	No data available, well used only in case of emergencies				

<sup>a</sup> While no contamination was detected, these activities were identified by the VDH as “Potential Source(s) of Contamination” within a 1 mile radius of the well.

13 years. VDEQ has closed a majority of these cases. Potentially, these USTs, as well as the currently in use USTs within the Town limits, may represent sources of impairment to the groundwater aquifers (primarily the shallow Columbia aquifer) if they are not properly monitored and maintained per VDEQ's UST standards.

### *Landfills*

A review of the "Solid Waste Facilities" registered in Virginia's DEQ Tidewater Regional Office (April 23, 2002) revealed that no permitted solid waste facilities exist within Smithfield's town limits. However, numerous solid waste facilities exist in Isle of Wight County, some of which are owned or operated by companies from Smithfield. These solid waste facilities are not believed to represent sources of impairment to the Town's groundwater, as they are not located within the Town limits.

### *Hazardous Waste Facilities*

A review of the Environmental Protection Agency's Envirofacts website revealed that twelve facilities within Smithfield have reported hazardous waste activities. None of these facilities are Superfund sites or Resource Conservation and Recovery Act (RCRA) large quantity generators (facilities which generate 1,000 kg or greater per month). Two of these facilities are RCRA Small Quantity Generators (facilities which generate more than 100 kg, but less than 1,000 kg per month), three are classified as RCRA Conditionally Exempt Small Quantity Generators (facilities which generate up to 100 kg per month) and the remaining sites do not have a handler or facility classification. Two of these facilities (Gwaltney of Smithfield Limited Incorporated and the Smithfield Packing Company Incorporated) have reported toxic releases to surface water from their facilities. The remainder of the facilities, according to a review of the Envirofacts website, have not had any reported violations. Current environmental regulations are protective of the surface water and groundwater, and if these regulated facilities remain in compliance with their classification and permits, they are not believed to represent a source of impairment to groundwater. However, should a release occur from one of these hazardous waste facilities, groundwater (primarily within the Columbia aquifer) might be impacted.

### *Mining Activities*

Mining activities within the State of Virginia, including borrow pits and "sand operations", are regulated by the Virginia Division of Mineral Mining. The Town of Smithfield has one borrow pit located in the southernmost section of Town. This was a pre-existing borrow pit when the Town annexed land from Isle of Wight County in January 1998. An interview with Mr. David Benner of the Virginia Division of Mineral Mining revealed that no additional permitted mining activities exist in the Town of Smithfield. However, numerous "sand operations" exist in Isle of Wight County, three of which are between one half and one mile distant from the Town of Smithfield. These operations are not believed to represent a source of impairment to the Town's groundwater.

### *Septic Systems*

In 1999, approximately 115 residences and businesses in Smithfield (approximately 6% of the Town) used private septic systems, according to the Town of Smithfield Wastewater Master Plan (AES, 1999). These septic systems can be grouped into six, or possibly seven areas, according to an interview with Bill Hopkins and Jeff Holland with the Town of Smithfield Planning Department. Fourteen septic systems existed in the Rising Star neighborhood until recently when the residences connected to the Town sewer system as part of a Community Development Block Grant obtained from the Virginia Department of Housing and Community Development. At that time the septic tanks were properly abandoned.

All new development is required by the Town to connect to the public sewer system, reducing the threat of septic systems to the ground water. As existing septic systems are disconnected, they should be properly abandoned to ensure that no contamination from them occurs over time. Therefore, septic systems are believed to represent a minor potential source of impairment to the groundwater. With proper maintenance and abandonment, this potential source of pollution can be further minimized.

### *Point Source Discharges*

The National Pollutant Discharge Elimination System (NPDES) was established by the Clean Water Act to limit pollutant discharges into streams, rivers and bays. VDEQ administers this program in Virginia through the Virginia Pollutant Discharge Elimination System (VPDES). VPDES permits are required for all point source discharges (such as pipes or ditches) to surface waters by businesses, individuals, or governments. VPDES also regulates storm water discharges for certain industrial storm water discharges and larger municipal storm water systems.

In humid areas, such as southeastern Virginia, groundwater of the Columbia aquifer is in direct contact with water in the streams. Carlock and Wickham (1990) estimate that 70-80% of a stream's annual discharge may consist of groundwater. Therefore, it is likely that surface water discharges impact the ground water, primarily the Columbia aquifer.

A review of the Environmental Protection Agency's Envirofacts website indicates that one facility within the Town of Smithfield holds NPDES permits. Smithfield Foods holds the second NPDES permit in the Town. Smithfield Foods conducts sampling and monitoring of their discharge on a regular basis, per its permit requirements. Review of the data on the Envirofacts website indicates that these facilities were not in violation of their permits.

An interview with Carolyn Putnam, with the VDEQ, revealed that three VPDES permits have been issued in the vicinity of the Town limits. One permit is for Gwaltney Foods and one for Smithfield Foods. The third is for Coastal Borrow Pit, which is located on Casper Circle outside of the Town limits. All three hold general storm water permits and, according to VDEQ records; these facilities appear to be in compliance with their permits.

### *Poorly Constructed and Abandoned Wells*

Records of public and private wells and well abandonment are maintained by the Virginia Department of Health. Furthermore, the Isle of Wight Health Department, Environmental Health Services Division, maintains records on wells in the Town of Smithfield. An interview with an employee of the Isle of Wight Environmental Health Services Division revealed that prior to 1996, private wells were not regulated. He also stated that their records are organized by property and that they do not maintain a master list of permitted or abandoned wells. Due to this organization system, these records were not deemed to be practically reviewable, and therefore were not examined.

The Virginia Department of Environmental Quality also maintains a record of permitted wells. A file review at VDEQ revealed that 25 permitted wells exist in the Town of Smithfield. Three of these wells have been abandoned according to VDEQ's records. All three appear to have been properly abandoned. Many of the files contained well construction logs, which indicated the depth of the well and the materials used to construct the well. However, based on these records it was difficult to determine if the wells were properly constructed.

A letter from the Smithfield Town Manager to Erinn Tisdale of the VDEQ, dated August 30, 2002, mentioned that the Town performs regular maintenance and inspections and conducts repairs as necessary on the public drinking water wells. Therefore, these wells are not believed to be poorly constructed and do not appear to represent a source of impairment to the ground water. In a previous section of this report, it was recommended that the Town create a database of privately owned and operated wells and abandoned wells within the Town limits. A database of this sort would help to identify poorly constructed and improperly abandoned wells within the Town limits and would prevent the improper abandonment and poor construction of wells in the future. Therefore, such a database would help prevent future ground water pollution.

## NATURAL RESOURCES

### *Wildlife*

The number and diversity of wildlife species present in an area is correlated to the quality and quantity of available wildlife habitat, and in particular, food and cover. In addition, most species have minimum population size requirements in order to be self-sustaining, and habitat fragmentation that is often the result of development is considered a major threat to indigenous species. In urban situations, parts of a habitat are often cleared for development, and this may impact the long-term sustainability of certain species in an area. Development also increases the total edge of a habitat, which makes it more prone to invasion of competing species.

The Virginia Department of Conservation and Recreation's Historic Resources' Natural Heritage Program and the Department of Game and Inland Fisheries' Fish and Wildlife Information System maintain inventories of wildlife resources and habitats for the Town of Smithfield and Isle of Wight County. In addition to deer and small mammals such as raccoons and squirrels, the wetland habitat in the area fosters a large population of waterfowl. Several species of waterfowl that are on the list of Birds of Special Concern use the tributaries within Smithfield as a stopover and feeding ground during migration periods. The Virginia Institute of Marine Science (VIMS) Environmental Sensitivity Index Maps indicate the following dabbling and diving ducks in the area:

Mallard	Black Duck	Ring necked Duck
Blue-winged Teal	Wood Duck	Ruddy Duck
Lesser Scaup	Greater Scaup	
Common Goldeneye	Canvasback	

Hunting is only allowed on land within the Town of Smithfield that is zoned Community Conservation (C-C) District and Environmental Conservation (E-C) District.

### *Commercially and Recreationally Important Fisheries*

The United States Corps of Engineers released a Final Feasibility Study and Environmental Assessment for Jones Creek, Isle of Wight County, Virginia, in 1996. This study identified the Atlantic silversides, Atlantic croaker, striped anchovy, spot, weakfish, hogchoker, bluefish, naked goby, oystertoad fish, skilletfish, blackcheek tonguefish, summer flounder, and black seabass as the species of fish commonly found in the Lower James River, Pagan River and Jones Creek (U.S. Army Corps of Engineers 1996). While most of these species are not economically exploited, commercial fisheries data published by the Virginia Marine Resource Commission indicate that commercial fisheries are a valuable resource for the Town of Smithfield, with more than \$85,000 produced in 2001 (Table A.7). Most of the income from commercial fisheries comes from the harvesting of blue crab.

### *Forest Resources*

Southeastern Virginia is one of the top lumber producing areas in the Commonwealth of Virginia and primarily produces loblolly pine. International Paper, Inc., a paper and wood products manufacturer, operates a plant in Franklin and is a large employer for the region. As a result of this and other nearby wood product plants, the demand for forest products in the area is high, and pine plantations can yield favorable long-term financial returns. In addition to economic value, forests also provide ecological benefits by maintaining water quality, providing essential habitat for a variety of plants and animals and functioning as windbreaks to prevent soil erosion.

**Table A.7**  
**Total Weight (lbs.) and Value (\$) of Commercial Fisheries in the Pagan River, 1996 through 2001**

Species	1996		1997		1999		2000		2001	
	Weight (lbs)	Value	Weight (lbs)	Value	Weight (lbs)	Value	Weight (lbs)	Value	Weight (lbs)	Value
<b>Stripped bass</b>	2,453	\$ 4,245	1,476	\$ 2,037	1,512	\$ 2,669	190	\$ 277	1,282	\$ 2,192
<b>Blue crab</b>	28,049	\$ 17,545	11,497	\$ 11,947	18,056	\$ 13,835	22,497	\$ 18,551	96,464	\$ 82,738
<b>White perch</b>	30	\$ 19			183	\$ 47	92	\$ 23	35	\$ 17
<b>American Eel</b>			1,526	\$ 2,291	1,010	\$ 420	240	\$ 108	284	\$ 380
<b>Atlantic croaker</b>			333	\$ 112						
<b>Catfish</b>							79	\$ 18	23	\$ 13
<b>Carp</b>									359	\$ 36
<b>Red drum</b>									30	\$ 38
<b>Mullet</b>									20	\$ 4
<b>Other fish</b>	20	\$ 6	146	\$ 74						
<b>Total</b>	30,552	\$ 21,815	14,978	\$ 16,461	20,761	\$ 16,971	23,098	\$ 18,977	98,497	\$ 85,418

Note: No harvest reports were available for 1998

Forestland comprises 1,843 acres or 29% of the total land area in the Town of Smithfield, and the timber industry could potentially be an important component of the Town's economy. Existing forests in the Town of Smithfield are mostly zoned as Community Conservation District and Environmental Conservation District. Best management practices (BMPs) performed by landowners and the timber industry should help to ensure the conservation of the Town's forest resources. It is important that the valuable economic and ecological benefits provided by forestlands be conserved and managed to benefit the Town of Smithfield.

### **Wetlands**

Wetlands areas are highly productive ecosystems that perform various vital functions in the environment. Wetlands filter pollutants from water and air, provide critical habitat for a variety of species and potentially reduce flood damage. The U.S. Congress recognized these benefits and passed legislation protecting wetlands in the 1972 Clean Water Act (CWA).

The physical definition of wetlands in the CWA is as follows:

*"Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas (33 CFR §328.3(b))"*

In order to determine if an area is a wetland, physical conditions in an area are investigated to determine whether the each of the following mandatory parameters exist at the site:

- The dominance of hydrophytic vegetation (wetland plants)
- The presence of hydric soils
- The presence of wetland hydrology

A review of the National Wetland Inventory (NWI) maps for the Town of Smithfield show that there are 1841 acres of wetland within the Town limits (Figure A.5). The wetlands in Smithfield can be divided into two major wetland types: Estuarine (Tidal) Wetlands (1509 acres) and Palustrine (Non-tidal) Wetlands (332 acres). NWI maps provide an indication of the approximate location of wetlands; however, recent reviews show that on a national level, NWI maps are approximately 80 percent accurate. Therefore, NWI maps should not be solely relied upon for the confirmation of wetland areas.

### **Tidal Wetlands**

Tidal (estuarine) wetlands are wetlands that experience periodic flooding by ocean-driven tides. They include salt marshes (emergent wetlands) and salt ponds that contain salt-tolerant grasses, including smooth cordgrass, salt hay grass, giant cordgrass and switchgrass. Other herbaceous plants such as black needlebrush, three-squares, narrow-leaved cattail and rose mallow may be abundant, especially in brackish water areas.

Estuarine wetlands are particularly important habitats for brackish and marine fishes, shellfish, various waterfowl, shorebirds, wading birds and several mammals. Most commercial and game fishes use the tidal marshes and nearby estuaries as nurseries and spawning grounds. Menhaden, bluefish, flounder, sea trout, mullet, croaker and striped bass are some of the most familiar fish species that depend on these areas. The Chesapeake Bay and its tributaries are the major spawning and nursery grounds for striped bass on the East Coast.

# Place Holder for figure A.5



Blue crabs, an economically important species to the Town of Smithfield, also depend on the tidal marshes in the area. Other tidal marsh dependent shellfish include oysters, clams and shrimp.

Tidal wetlands in the Town of Smithfield are located along the Pagan River, Cypress Creek and Moon Creek and at the mouth of Mount Holly Creek and the tributaries to Jones Creek. There are approximately 1500 acres of tidal wetlands in the Town of Smithfield. They are generally located in soil type 2 (Bohicket silty clay loam). The location of the tidal wetlands is shown on Figure A.5. Tidal wetlands in Virginia are protected under § 62.1 – 13.2 of the Code of Virginia, and are part of the Resource Protection Area (also zoned C-C with the overlay CB-O).

### **Non-Tidal Wetlands**

According to the NWI maps, the Town of Smithfield has 332 acres of non-tidal (palustrine) wetlands consisting of emergent wetlands (6 acres), forested wetlands (299 acres) and scrub-shrub wetlands (7 acres). Like tidal wetlands, non-tidal wetlands are important components in a landscape. They filter water and air and are an important habitat to a variety of species. While tidal wetlands are flooded twice a day during high tides, non-tidal wetlands are generally the result of prolonged (days or weeks) saturated soil conditions. The determination as to whether an area contains non-tidal wetlands can only be made by investigating an area to determine if the three mandatory wetland parameters can be observed in the field.

### ***Flood Plains***

According to the Town's zoning map and a review of the Federal Emergency Management Agency's (FEMA) flood insurance maps, floodplains within the Town of Smithfield are located in the Resource Protection Areas (RPA). The floodplains are constrained by steep slopes, and a review of the maps show that a large part of the town is not impacted by the 100-year flood.

### ***Natural Heritage Resources and Threatened & Endangered Species***

According to the College of William and Mary's Center for Conservation Biology, two active bald eagle breeding territories are located within Isle of Wight County. One of these sites is located approximately 4 miles west of the Town of Smithfield at the headwaters of the Pagan River (Watts, B.D., M.A. Byrd, and G.E. Kratimenos 1994).

### ***Prime Farmlands***

The United States Department of Agriculture (USDA) defines prime farmland as the land best suited to food, feed, forage, fiber and oilseed crops. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming this type of land results in the least damage to the environment. Prime farmlands are of major importance in meeting the nation's short- and long-range needs for food and fiber, and the designation is intended to encourage and facilitate the wise use of these resources. Loss of these resources to other uses such as urban or industrial use encourages the farming of marginal lands including forests.

The Isle of Wight County Soil Survey (USDA 1986) follows this productivity-based approach to identifying prime farmland by providing yield data for crops and pasture. Based on these criteria, the NRCS assigned the prime farmland status to the following soils located in the Town of Smithfield: Emporia fine sandy loam (map unit 5), Slagle fine sandy loam (map unit 18), and Yemassee fine sandy loam (map unit 23). The Town of Smithfield contains approximately 2000 acres of prime farmland. Agricultural lands in Town are typically zoned C-C.

## ENVIRONMENTAL CONSTRAINTS

Since its incorporation in 1752, the Town of Smithfield has benefited from its location on the Pagan River, and its proximity near the James River and Chesapeake Bay. Despite its location four miles upstream of the confluence with the James River, the Town's waterfront is still navigable by ships and has provided citizens with protection during severe storms. Prior to the building of the James River Bridge between Newport News and Isle of Wight County, the Town was serviced by a passenger ferry and freight lines. Currently, the rivers and creeks near Smithfield define part of the quality of life for its residents. Water-based recreation and the vistas are important factors influencing this quality of life and in attracting tourism. In addition to the rivers and creeks, the surrounding natural resources are also very important in protecting the quality of life for the Town's residents. Natural areas are important filters of pollutants and they serve as habitat to a large variety of species.

The preservation and protection of the natural resources of the Town of Smithfield is not only essential for the aesthetic characteristics of the Town, but also for the maintenance of surface water and groundwater quality in the Town. Unregulated development can have an adverse impact on these resources. This is particularly important since the Town relies so heavily on surface water for recreation and groundwater for its population and industry. While environmental considerations were not an explicit consideration during the early growth of the Town of Smithfield, properly managed growth can provide the Town with healthy and robust economic growth while protecting the environment and preserving the Town's natural resources, its heritage and the general quality of life. The following section provides an overview of the primary growth determinants within the Town of Smithfield.

### ***Chesapeake Bay Preservation Act***

The Chesapeake Bay Preservation Act (Chapter 25, Title 10.1 of the Code of Virginia) established a program to protect and improve the quality of water of the Chesapeake Bay. The Act provides a framework for local governments to identify and protect sensitive areas adjacent to tributaries of the Bay, which if improperly used or developed can contribute to water quality degradation of the Bay and its tributaries. The Act also requires that local governments enact regulations for use during land use planning activities including the identification of sensitive land areas.

The Town of Smithfield adopted the Chesapeake Bay Preservation Area Ordinance in 1990. This ordinance was superseded by article 3.P. of the current Zoning Ordinance. The Ordinance addresses many significant environmental features outlined below. Individual environmental constraints will reference the requirements of the Act and the Ordinance where appropriate. Under the Ordinance, the Town is required to promote the following:

- Protection of existing high quality state waters and restoration of all other state waters to a condition or quality that will permit all reasonable public uses, and will support the propagation and growth of all aquatic life which might reasonably be expected to inhabit them;
- Safeguarding the clean waters of the Commonwealth from pollution;
- Prevention of any increase in pollution;
- Reduction of existing pollution; and
- Promotion of water resource conservation in order to provide for the health, safety, and welfare of the present and future citizens of the Commonwealth.

The Town of Smithfield mapped all the Chesapeake Bay Preservation Act Preservation Areas. These include Resource Protection Areas (RPAs), Resource Management Areas (RMAs) and Intensely Developed Areas (IDAs). Identification was based on items such as the United States Geological Survey

(USGS) 7.5 minute topographic quadrangles and other materials such as National Wetland Inventory (NWI) Maps and soil survey maps.

To minimize water quality impacts from land use and development, the Town has delineated Chesapeake Bay Preservation Areas according to criteria outlined by the Chesapeake Bay Local Assistance Board in the Regulations. The Regulations also include criteria for local governments to use in granting, denying or modifying requests to rezone, subdivide or use and develop land in the Chesapeake Bay Preservation Area. The criteria are implemented through various land use ordinances and include the use of Best Management Practices as well as planning and zoning concepts to reduce the impacts of the use and the development on sensitive lands and ultimately upon water quality. Figure A.6 shows the location of the town's Chesapeake Bay Preservation Areas.

### **Resource Protection Areas (RPAs)**

RPAs are sensitive areas at or near the shoreline of the Chesapeake Bay and its tributaries. This sensitivity is based on the land's intrinsic ecological and biological relationship to water quality, including the potential degradation to the water that could be the result of the development of these lands. Therefore, the RPA regulations established by the Chesapeake Bay Preservation Area Ordinance and Article 3.P. of the zoning ordinance are designed to protect and improve the water quality of the Chesapeake Bay, its tributaries, buffer areas and other sensitive environmental lands near shorelines by minimizing the potential effects of human activities among these areas. Furthermore, the Town adopted the Chesapeake Bay Preservation Overlay District, Article 3.P as part of the Town of Smithfield's Zoning Ordinance.

The RPAs in the Town of Smithfield include: 1) tidal wetlands, 2) non-tidal wetlands connected by surface flow and contiguous to tidal wetlands and tributary streams, 3) tidal shores (as measured at mean high tide), 4) a 100-foot buffer around items 1-3 and along both sides of any tributary stream, river or channel, and 5) other sensitive lands at or near the shoreline that provide for the removal, reduction or assimilation of sediments, nutrients, and potentially harmful or toxic substances in runoff. The 100-foot buffer areas are designed to impede runoff, prevent erosion and filter non-point source pollutants from runoff.

Development within the RPAs is restricted with the following exceptions: (1) the development is water dependent, (2) constitutes redevelopment within an IDA, or (3) is otherwise specifically allowed by provisions of Article 3.P. Land disturbance exemptions of the Chesapeake Bay Preservation Overlay District (Article 3.P), include water wells, passive recreation facilities such as boardwalks, trails, and pathways, and historic preservation and archaeological activities, provided that it is demonstrated to the satisfaction of the Zoning Administrator that these activities will not unduly and negatively affect the RPA resources.

Performance standards for development and redevelopment in RPAs have been established; they include: limitations on land disturbance, preservation of indigenous vegetation, limitation on impervious cover, sewage disposal requirements (Article 11, Section I.9), storm water runoff requirements and buffer area requirements. These standards are explained in further detail in Article 3.P of the Zoning Ordinance.

A Water Quality Impact Assessment (WQIA) is required on any proposed development within an RPA, including any buffer area modification or reduction. The purpose of the WQIA is to ensure that development within RPAs will be located on those portions of a site and in a manner that will be least disruptive to the natural functions of RPAs and other sensitive lands.

# Place Holder for figure A.6

### **Resource Management Areas (RMAs)**

RMAs include land types that, if improperly developed, have the potential for causing significant water quality degradation or for diminishing the functional value of the RPAs. Because of the physiographic location of the Town and the various creeks that are tributaries to the Chesapeake Bay, all land not classified as RPA was designated as RMA.

There are no restrictions to development in the RMAs as long as a project proposal meets the requirements of the underlying zoning of the land. The development of land in the RMA must conform to the requirements outlined in the Town's Zoning Ordinance.

### **Intensely Developed Areas (IDAs)**

The Chesapeake Bay Act established IDAs as an overlay to the RPA designation to allow for the redevelopment of an area, which may include portions of the RPA and RMA. IDAs typically consist of infill sites where little of the natural environment remains. They include historically developed areas along the waterfront mainly utilized for commerce and industry. Selection criteria for an IDA include (1) previous development in such a way that 50% of the soil surface is impervious; (2) the area is currently served by public water and sewer; or (3) the housing density is equal to or greater than 4 dwelling units per acre. The Town of Smithfield has two certified IDAs (IDA-1 and IDA-2) located on the Pagan River, and a proposed IDA on Cypress Creek (P-IDA).

IDA-1 is located along the Pagan River and includes the corporate headquarters of Smithfield Foods, a set of five townhouses and two maintained lawns. The area extends to the Pagan River with a hardened shoreline (rip rap) and boardwalks. Historic use of this area was a main port for the Town with many merchants and ships bringing cargo to Smithfield from along the James River and beyond. Aerial photography shows this area in 1954 as a busy port and commercial area. Aerial photography indicates that this IDA was cleared before 1980 and Smithfield Foods corporate headquarters was built in 1999.

IDA-2 is located across the Pagan River from IDA-1. Historically, this area was a dog food processing plant, and the land use was almost entirely industrial. The dog food plant has since been removed and a Town-maintained park (Clontz Park) was built on the site. Aerial photography indicates that IDA-2 was developed in 1989 and cleared previous to 1995. The majority of the current IDA-2 is maintained lawn with a few trees. A hardened shoreline and a boardwalk extend along the entire riverfront.

The Chesapeake Bay Preservation Act requires that any future development within these IDAs reduce nutrient loadings by 10% from that of the previous development. To estimate the runoff and nutrient loading characteristics for these areas, aerial photography and historic planning documents may be utilized to obtain an historical estimate of the impervious surface for both IDAs.

### **Wetlands**

Wetlands are protected under the Federal Clean Water Act (CWA), Section 404, the State of Virginia Tidal Wetlands Act, and the Virginia Water Protection Permit Program under Section 401 of the CWA. Impacts to wetlands are regulated by the U.S. Army Corps of Engineers (COE), the Virginia Marine Resources Commission (VMRC) and the Virginia DEQ. The Norfolk District Office of the COE is responsible for regulating most wetlands throughout Hampton Roads Virginia and detailed permitting information can be obtained from this office, or from their website: [www.nao.usace.army.mil/Regulatory/Regulatory.html](http://www.nao.usace.army.mil/Regulatory/Regulatory.html). The Virginia DEQ has implemented a wetlands program in 2002 and now takes the lead on permitting wetland impacts associated with linear transportation projects and commercial, residential and institutional development and detailed permitting information and general information regarding their program can be obtained from their website: [www.deq.state.va.us/regulations/xwaterregs.html](http://www.deq.state.va.us/regulations/xwaterregs.html). When a project qualifies for a permit, the applicant

prepares a Joint Permit Application (JPA) which must be submitted to the VMRC, a Pre-Construction Notification (PCN) which is submitted to the Corps or a registration statement which is submitted to Virginia DEQ, depending on the lead agency involved.

The Town of Smithfield has various tidal and non-tidal wetlands as observed on the NWI maps (Fig A.5). Any activity in these areas is restricted by local ordinances, state and federal laws, and this should be a consideration before developing the area. Furthermore, areas that have hydric soils (Fig A.7) may contain wetlands, and these areas will need to be examined in more detail prior to development. In general, a developer will be required to conduct a wetland delineation to determine the presence and location of any wetlands on the property. If wetlands are discovered, the delineation is verified by the COE. Subsequently, the developer may either opt to avoid wetland impacts or apply for a permit to fill in all or parts of the wetlands. The developer is required to submit a permit application to VMRC for the fill of wetlands, and having adopted a “no-net-loss” policy, both the state and federal government likely will require some form of mitigation for wetland impacts.

### ***Topographic Constraints***

Limitations to the development of steep slopes are detailed in Table A.8 and Figure A.7. According to the soil survey, 11 percent of the total surface area of the Town of Smithfield has soils with slopes between 10 and 60 percent slope. These steep areas are located along the Pagan River, Cypress Creek and the other creeks in Town. Areas with these slope characteristics are mostly undeveloped. Moreover, these slopes are likely located in the RPA; however, development of all steep slopes outside the RPA should also be discouraged. Limiting development of these steep slopes should limit the degradation of water quality caused by stormwater runoff and erosion. HRPDC (1999) provides various design alternatives for protecting highly erodible areas and steep slopes.

Flat areas in Town may also pose development problems because of stormwater issues caused by potential slow runoff and poor drainage. Flat areas also contain all tidal and most non-tidal wetlands.

### ***Flood Hazards***

Based on a review of the Federal Flood Insurance Maps, the Town of Smithfield has few flood prone areas, with the exception of areas along the Pagan River, Cypress Creek and the minor tributaries. Most flood prone areas are within the RPA and are undeveloped and bordered by steep slopes. The area along U.S. Highway 10 from the bridge over the Cypress Creek to the bridge over the Pagan River is developed and appears to be within a flood prone area.

### ***Sensitive Soils***

Soils are important natural resources that affect surface and ground water quality in the Town of Smithfield. A detailed discussion of the various soil types was provided earlier on in this Appendix. Figure A.7 shows the location of hydric soils, highly erodible soils, soils with high and low infiltration rates, prime farmlands and soils with topographic limitations. As specified by the Chesapeake Bay Preservation Act and local ordinances, disturbance of these types of soils pose the largest threat to the water quality of the Chesapeake Bay and its tributaries.

Hydric soils are soils that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil column. The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. These soils either supported wetlands in the past or are currently supporting wetlands. Further investigations should provide an indication whether an area with hydric soils still contain wetlands.

# Place Holder for figure A.7

**Table A.8.  
Topographic Limitations in Smithfield**

<b>Slope</b>	<b>Percentage of Town</b>	<b>Limitation</b>	<b>Remark</b>
Water	8.9 %	Open water	Areas of open water (Pagan River etc.)
0-2 %	59.2 %	Slow runoff, may be subject to poor drainage, slight danger from erosion	
2-6 %	18.4 %	Slow to medium runoff, slight danger from erosion	
6-10 %	2.5 %	Medium to rapid runoff, potential for serious erosion	
10 % +	11.0 %	Rapid to very rapid runoff, serious potential erosion, land should be kept under permanent vegetative cover	Located along the Pagan River and creeks.

In agricultural regions such as Isle of Wight County, some areas with hydric soils were converted to croplands. An area with hydric soils may be considered a prior converted cropland if it was cropped before 23 December 1985 and is still being used for agricultural production. These areas are exempt from wetland regulations, including permitting; however, the NRCS is required to make the “prior converted cropland” determination before development. The area will be considered a wetland if prior converted cropland is abandoned and wetland conditions return. Development of the site is then subject to regulation under section 404, and a permit may be required. An area will be considered abandoned if for five consecutive years there has been no cropping, management or maintenance activities related to agricultural production.

Highly erodible soils are those soils that have a high potential for eroding and release of sediments to waterways. The erosion potential is caused by a combination of steepness and length of slope, which act together to increase the speed of water running down the slope. Three soil types in the Town have a high erodibility potential. HRPDC (1999) provides various design alternatives for protecting highly erodible areas and steep slopes.

Highly permeable soils are soils that are susceptible to pollutants leaching through the soil profile and thus contaminating the groundwater. These are soils with low water holding capacity and open texture. Three soils in the Town are highly permeable. Highly permeable soils are particularly unsuitable for the construction of septic systems.

Other soil characteristics may also impact the development suitability of an area to some extent. These include low infiltration rate, shrink-swell potential, wetness, flooding and depth to water table. The soil descriptions earlier on in this section and the Isle of Wight County Soil Survey provide a discussion concerning some of these constraints.

Based on a review of the Soil Survey of Isle of Wight, 128 acres have soils with high infiltration rates; 729 acres contain highly erodible steep slopes; 539 acres have soils are highly erodible; and 1579 acres contain hydric soils. It appears that 1896 acres contain soil with no constraints to development, while the Town contains 584 acres of open water. The soils most suited to development include Rumford loamy sand (unit 16), the flat Slagle fine sandy loams (unit 18A) and the flat Uchee loamy sand (unit 19A).



The Isle of Wight County Soil Survey follows this productivity-based approach to identifying prime farmland by providing yield data for crops and pasture. Based on these criteria, the NRCS assigned the prime farmland status to the following soils located in the Town of Smithfield: Emporia fine sandy loam (map unit 5), Slagle fine sandy loam (map unit 18), and Yemassee fine sandy loam (map unit 23). The Town of Smithfield contains approximately 2000 acres of prime farmland (Figure A.1). Agriculture lands in Town are zoned C-C.

### ***Shoreline Erosion***

As noted previously the shorelines of the Pagan river and tributaries are relatively stable. Noted erosion in the area should be addressed utilizing non-structural erosion control methods, such as marsh creation. Structural erosion controls should be limited to areas used for boat docking and areas of severe erosion. Otherwise structural controls should be used as a last resort. HRPDC (1999) provides various design alternatives for protecting highly erodible areas and steep slopes.

### ***Marina Siting Criteria***

The navigable waterways in the Town of Smithfield are important to the Town. Recreational boating and other water activities create significant revenue. Smithfield would like to increase the waterway-based activities and create more revenue by increasing the number and capacity of marinas along the Pagan River, Moon Creek and Cypress Creek, while avoiding negative impacts to the environment. There are several legal aspects that have to be considered before siting a marina. The Virginia Marine Resources Commission (VMRC), the Corps of Engineers and the Virginia DEQ all require a Joint Permit Application (JPA) to secure authorization for building marinas in tidal waters. The JPA is reviewed by the above three agencies which issue permits accordingly. Criteria considered in determining any permit for a boat mooring facility was adopted from The Virginia Marine Resources Commission's Publication: *Subaqueous Guidelines*, in the Virginia Clean Marina Program by the Virginia Department of Environmental Quality. Criteria for siting a marina are presented in Table A.9 below.

**Table A.9.  
Virginia Marine Resources Commission  
Marina Siting Criteria Checklist**

<b>Criteria</b>	<b>Undesirable</b>	<b>Desirable</b>
<b><i>Water Depth</i></b>	Less than 3 ft. mlw *	Greater than 3 ft. mlw
<b><i>Salinity</i></b>	Suitable for shellfish growth	Unsuitable for shellfish growth
<b><i>Water Quality</i></b>	Approved, conditionally approved or seasonally approved for shellfish harvesting.	Closed for direct marketing of shellfish. Little or no potential for future productivity.
<b><i>Designated Shellfish Grounds</i></b>	Private leases or public oyster ground in proximity.	No private leases or public ground within affected area. No potential for future productivity.
<b><i>Maximum Wave Height</i></b>	Greater than 1 ft.	Less than 1 ft.
<b><i>Current</i></b>	Greater than 1 knot.	Less than 1 knot.
<b><i>Dredging</i></b>	Requires frequent dredging. No suitable site for dredged material.	Does not require frequent maintenance. Suitable for all dredged material.
<b><i>Flushing Rate (Tidal Exchange)</i></b>	Inadequate to maintain water quality.	Adequate to maintain water quality.
<b><i>Proximity to Natural or Improved Channel</i></b>	Greater than 50 ft. to navigable water depths.	Less than 50 ft. to navigable channel.
<b><i>Threatened or Endangered Species</i></b>	Present as defined in existing regulations, or project has potential to affect habitat.	Absent: project will not affect.
<b><i>Adjacent Wetlands</i></b>	Cannot maintain suitable buffer.	Suitable buffer to be maintained.
<b><i>Navigation and Safety</i></b>	Water body difficult to navigate or presently overcrowded conditions exist.	Navigation not impeded.
<b><i>Existing Use of Site</i></b>	Presently used for skiing, crabbing, fishing, swimming or other potentially conflicting uses.	Not presently used for skiing, fishing, swimming or other recreational uses.
<b><i>Submerged Aquatic Vegetation</i></b>	Present	Absent
<b><i>Shoreline Stabilization</i></b>	Bulkheading required.	Shoreline protected by natural or planted vegetation or riprap.
<b><i>Erosion Control Structures</i></b>	Groins and/or jetties necessary.	No artificial structures needed.
<b><i>Finfish Habitat Usage</i></b>	Important spawning and nursery areas.	Unimportant area of spawning or nursery for any commercially or recreationally valuable species.

\* mlw=mean low water

## IMPLEMENTATION

This section provides a specific discussion of the actions that will be used to implement the goals and objectives intended to protect the natural resources of the Town of Smithfield, including surface water, groundwater and ecologically sensitive areas. Other plans associated with the Comprehensive Plan are detailed in sections VI, VII, VII, IX, X, XI and XII of this plan, and the actions in those sections will need to be considered in combination with those outlined in this Appendix.

The Town of Smithfield recognizes that land use and the environment are integrally linked and has implemented a set of land use policies and strategies that are in harmony with the environment, which include: (1) the management and protection of groundwater resources, (2) the protection of surface water resources, and (3) the protection of sensitive ecological resources in the Town. This can be achieved through the control of point source and non-point source pollution and appropriate land use planning and zoning. As mentioned in this Appendix, the expected eventual result of these policies will be the protection of the waters of the Chesapeake Bay and the protection and improvement of the quality of life within the Town of Smithfield. The Town relies on groundwater resources for its potable water supply and is proud of the aesthetic beauty of its natural areas and the tidal wetlands along its rivers and creeks. The following section provides the steps that the Town should take to ensure the continued protection of the Town's natural resources and recommendations for additional steps.

### ***Manage and Protect the Surface Water and Groundwater Resources within Town***

The Town of Smithfield employs a multi-faceted approach to water quality protection and enhancement. General guidance is provided by the Town's environmental goals, objectives and strategies and by the specific land use designations shown on the Future Land Use Plan. Specific performance criteria and implementation mechanisms for the protection of water quality have been adopted in the Town's local Chesapeake Bay Preservation Ordinance, Floodplain Ordinance and Subdivision and Zoning Ordinances. The Town also complies with State and Federal guidelines concerning wetland protection and management, a vital aspect of water quality.

The following general concepts and approaches to water quality protection are utilized throughout the Town's various land use control ordinances:

- **Performance standards**: standards that regulate (1) land use activities by setting limits on the amount of disturbance a particular development may cause rather than defining what that land use might be; and standards that regulate (2) the development, operation and closure of groundwater wells by the Town and private entities.
- **Buffer Strips**: a strip of land, usually left in or returned to native vegetation that protects an area from adjacent or nearby land uses by filtering sediment and runoff along rivers and streams.
- **Setbacks**: the minimum distance a building or other development must be from a watercourse or sensitive area.
- **Density Requirements**: requirements that govern the average number of families, persons, or housing units on a parcel of land. Density requirements can be flexible, and when combined with cluster development, can help maintain open space by permitting higher densities in one area as a tradeoff for lower densities and open space in other areas. Density limits for water quality protection tend to encourage large lot zoning, although cluster development could also result.
- **Stormwater management**: specially developed criteria that address stormwater runoff by limiting the amount of impervious surfaces, or by using retention basins, porous pavement or created wetlands or ponds to slow and filter runoff (for more detail see section XI of the Comprehensive Plan).

- Best Management Practices (BMPs): special structural and non-structural practices such as filter strips, no-till farming, retention basins and any number of other management techniques that are successful in limiting or controlling the downstream impacts of land disturbing activities.
- Streambank Erosion: stormwater runoff can cause bluffs to cave in or steep slopes to become easily eroded, with large quantities of unwanted sediment carried down streams or onto nearby properties. By tradition and logic, the upper plateaus in Smithfield have primarily been used for building single-family detached residences.

Protection of the surface water resources in particular will also protect the other sensitive natural resources including tidal wetlands, non-tidal wetlands, wildlife, fisheries resources, sensitive species, silvicultural areas, agricultural lands and other green space.

### Surface and Groundwater Recommendations

1. **Continue enforcing well regulations.** The Town currently has a local ordinance regulating the installation of private wells; however, it appears that many residents are not aware of its existence. In addition, this ordinance does not regulate the abandonment of wells. Therefore, wells may have been installed within the Town limits without the Town's knowledge. The public should be made aware of permitting and reporting requirements.
2. **Develop a groundwater well database.** The Town should work with VDEQ to develop a comprehensive database of privately owned and operated wells within the Town limits. A mechanism to identify abandoned wells and implement reporting requirements and standards for the installation of new wells, the retrofitting of existing wells, and the abandonment of wells should be incorporated by the Town. This reporting requirement should be made widely known, to prevent wells from being installed, retrofitted and /or abandoned without the Town's knowledge. Information pertaining to regulated wells should be forwarded to VDEQ and the Virginia Department of Health. A database of this sort will help to identify threats to ground water quality and potable water sources. In addition, this requirement would prevent the improper abandonment of wells.
3. **CBPA.** Continue enforcing the Chesapeake Bay Preservation Act Overlay District and all other Code requirements in Town that are protective of surface water, minimize runoff and erosion, protect sensitive natural features, such as wetlands, and other areas with intrinsic water quality value. Minimize the generation of point source and non-point source pollution by using innovative pollution control measures including the continued use of BMPs.
4. **Impermeable cover estimate.** Develop an estimate of impermeable cover for each land use category in Town. Encourage developments that minimize the creation of impervious cover.
5. **Protect steep slope areas from erosion.** Generally, areas with slopes equal to or greater than 15 percent generate additional construction costs, which in itself has tended to discourage development. However, valuable "waterfront" property and modern construction techniques will lead to future use of the more challenging slopes. It is therefore important that sensitive steep areas be protected from erosion through the implementation of the new slope provisions included in the Town's revised Zoning Ordinance that were added to protect creeks and rivers from erosion, high sediment loads and the erosional effects on water quality.
6. **Stabilize areas with high rates of shoreline erosion.** It is expected that the Virginia Institute of Marine Science (VIMS) will publish a shoreline assessment for Isle of Wight County in the spring of 2003. Town personnel will review this document and develop action plans for any highly erodible areas within the Town limits as identified by the VIMS report. Potential action plans can be found in HRPDC's Guidance Manual for erosion control (HRPDC 1999).

### ***Land Use & Development***

The Town has adopted a comprehensive set of land use and development criteria, the purpose of which is to achieve the goals of the Chesapeake Bay Preservation Act and to implement the following objectives:

- Prevent a net increase in non-point source pollution from new development;
- Achieve a 10 percent reduction in non-point source pollution from redevelopment; and
- Achieve a 40 percent reduction in non-point source pollution from agricultural and silvicultural (forestry) uses.

In order to achieve the stated goals and objectives, these criteria establish performance standards to minimize erosion and sedimentation potential, reduce land application of nutrients and toxins, maximize rainwater infiltration and ensure the long-term performance of the measures employed.

The Town has evaluated, analyzed and modified the model ordinance provided by the Chesapeake Bay Local Assistance Department. The Town adopted the criteria established for land use developments in the RPAs and the IDAs, and strengthened their application to govern development in the RMAs. Sections of the ordinance provide for site plan review to control non-point source pollution and best management practices for development. Criteria address development siting and set backs, buildable areas, impervious surfaces, buffer vegetation and landscaping and shoreline and wetlands protection. Water quality impact assessments are required for major developments.

#### **Land Use and Development Recommendations**

1. **Development.** The development of land in Smithfield should be designed to be in harmony with the natural environment. Designation of suitable sites for future development and conservation are of prime importance in the Future Land Use Plan in order to fully protect the water quality and living resources of the Bay. Some areas are more conducive to development than others, while others are inappropriate. Harmonious development should take place along the major tributaries and adjacent to secondary waterways and intermittent streams, lakes and ponds and isolated wetlands. Actions that prevent direct, indirect and cumulative adverse impacts on the environment as a result of land use activities are essential.
2. **Preserve and protect.** A fundamental intent of the Future Land Use Plan is to preserve and protect the most environmentally sensitive areas in the Town. Accordingly, an “Environmentally Sensitive Areas” land use classification is included on the Future Land Use Map for all tidal marshlands and Resource Protection Areas established in the Smithfield CBPA Ordinance. Furthermore, this Comprehensive Plan contains a map that depicts areas with physical constraints to development including areas with hydric soils, steep slopes, highly erodible soils, and soils with high infiltration rates. In addition, the Town’s sensitive environmental areas include the areas in the Resource Management Areas characterized by 100-year floodplains and steep slopes prone to erosion. Isolated upland wetlands are also incorporated in the Sensitive Environmental Areas, pending site-specific identification and delineation.
3. **Land use intensity.** The Future Land Use Plan gives consideration to the proper location, type and density of development in the less critical Resource Management Areas throughout the Town. Accordingly, less intensive land uses are designated for areas adjacent, or in proximity, to the established environmentally sensitive area or in areas themselves characterized by other environmental limitations (such as intermittent streams, hydric and erodible soils). The “Community Conservation” land use designation allows for minimal residential use and promotes the preservation of open space and lands adjacent to sensitive environmental areas. Wherever possible, this land use designation has been applied for the more sensitive RMA lands abutting the major creeks, slopes and drainageways protected for planning purposes as environmentally sensitive areas.

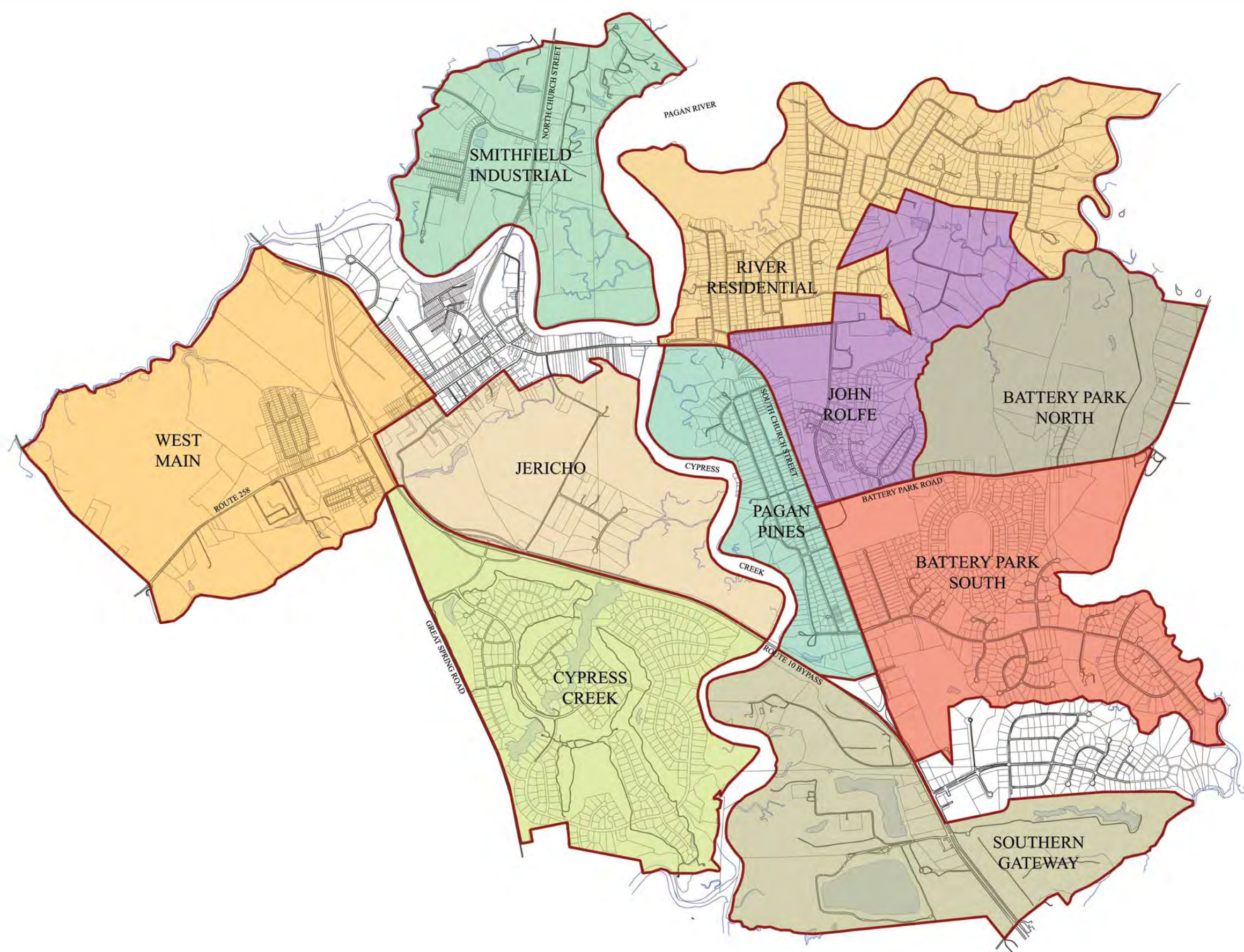
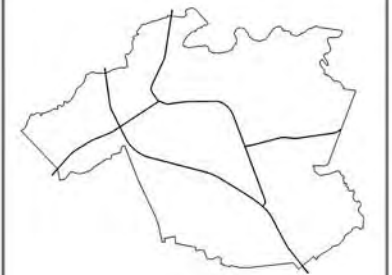
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The Town of  
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VIRGINIA

**PLANNING AREAS KEY**

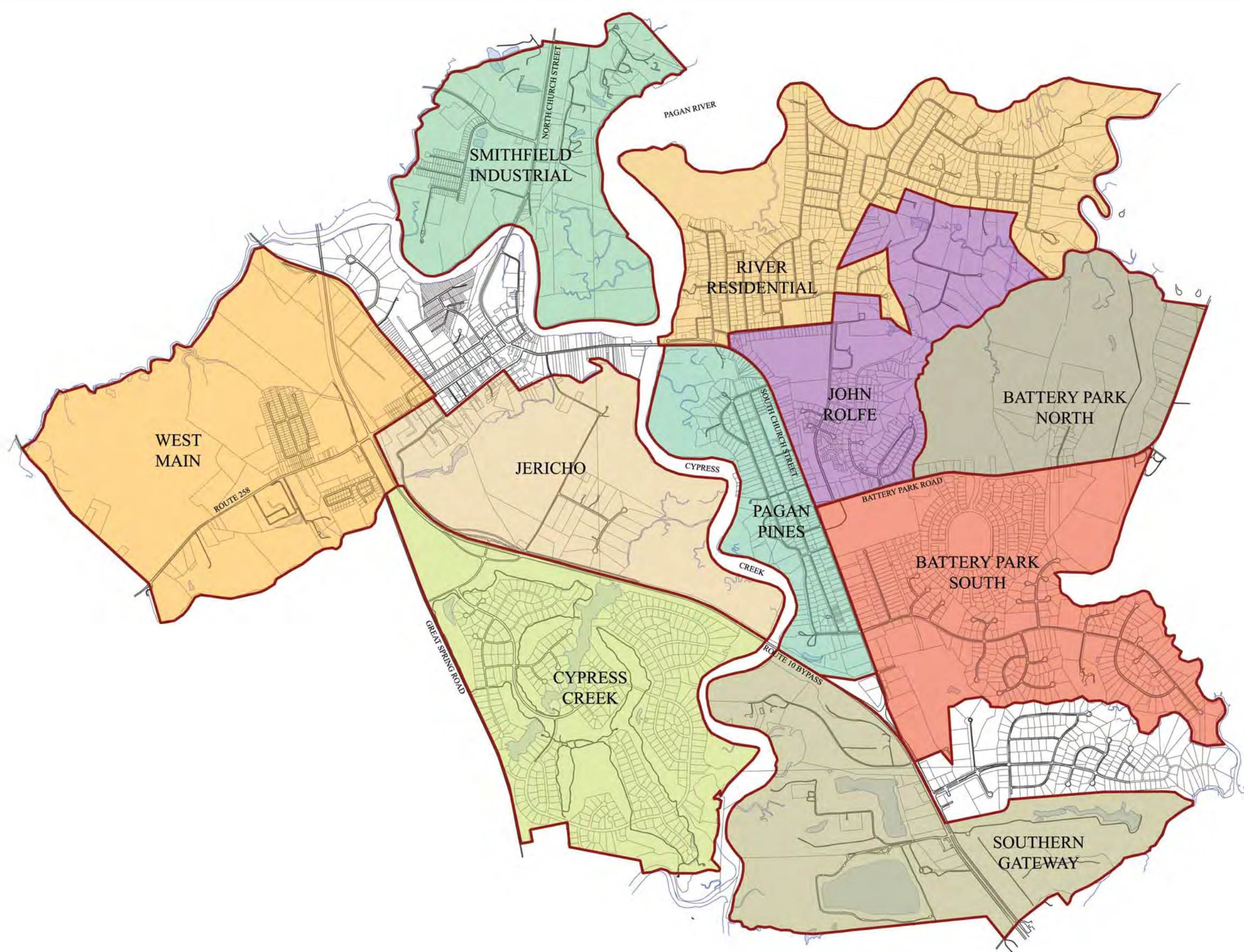
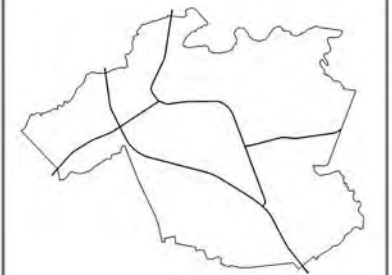


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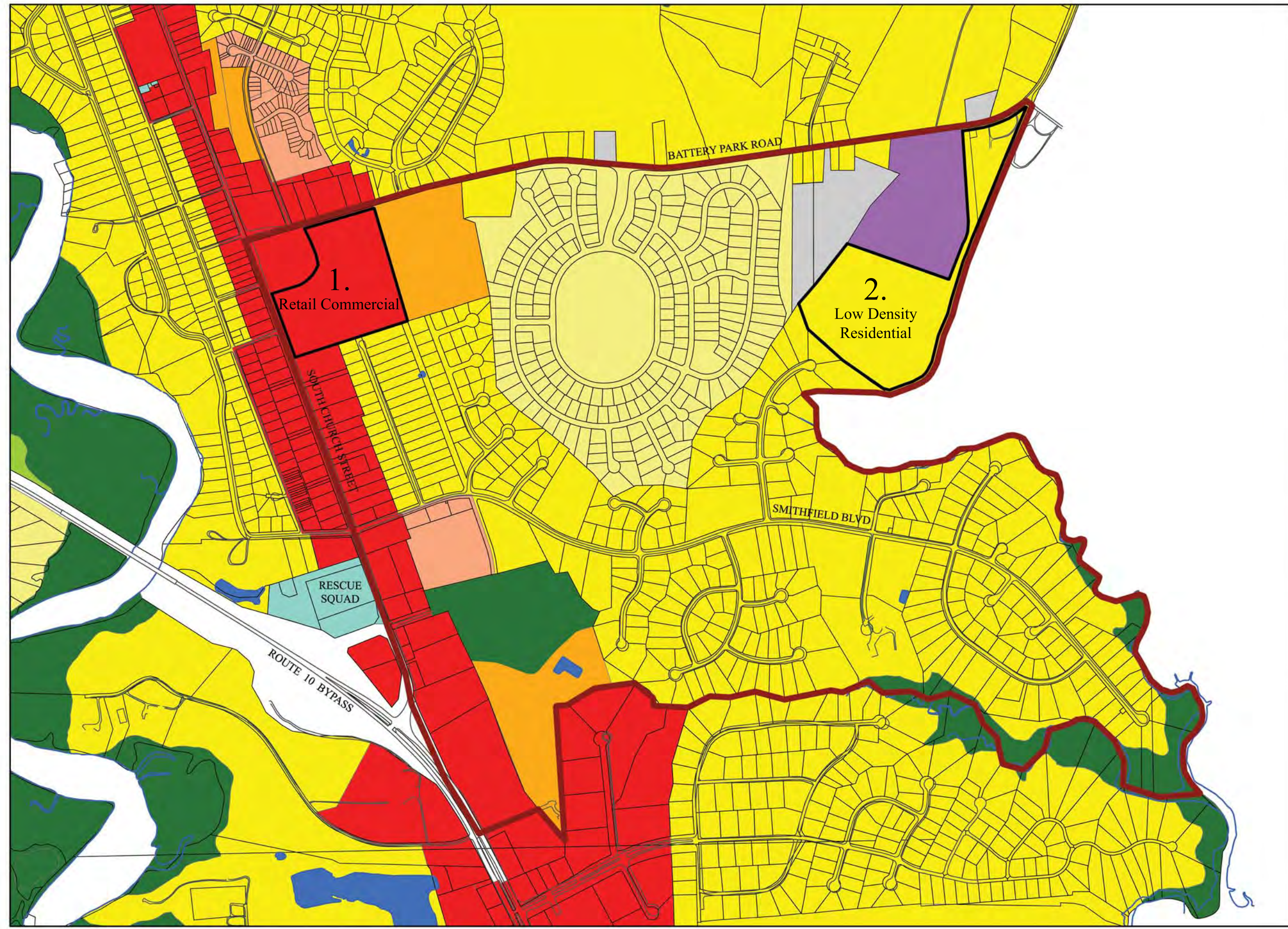
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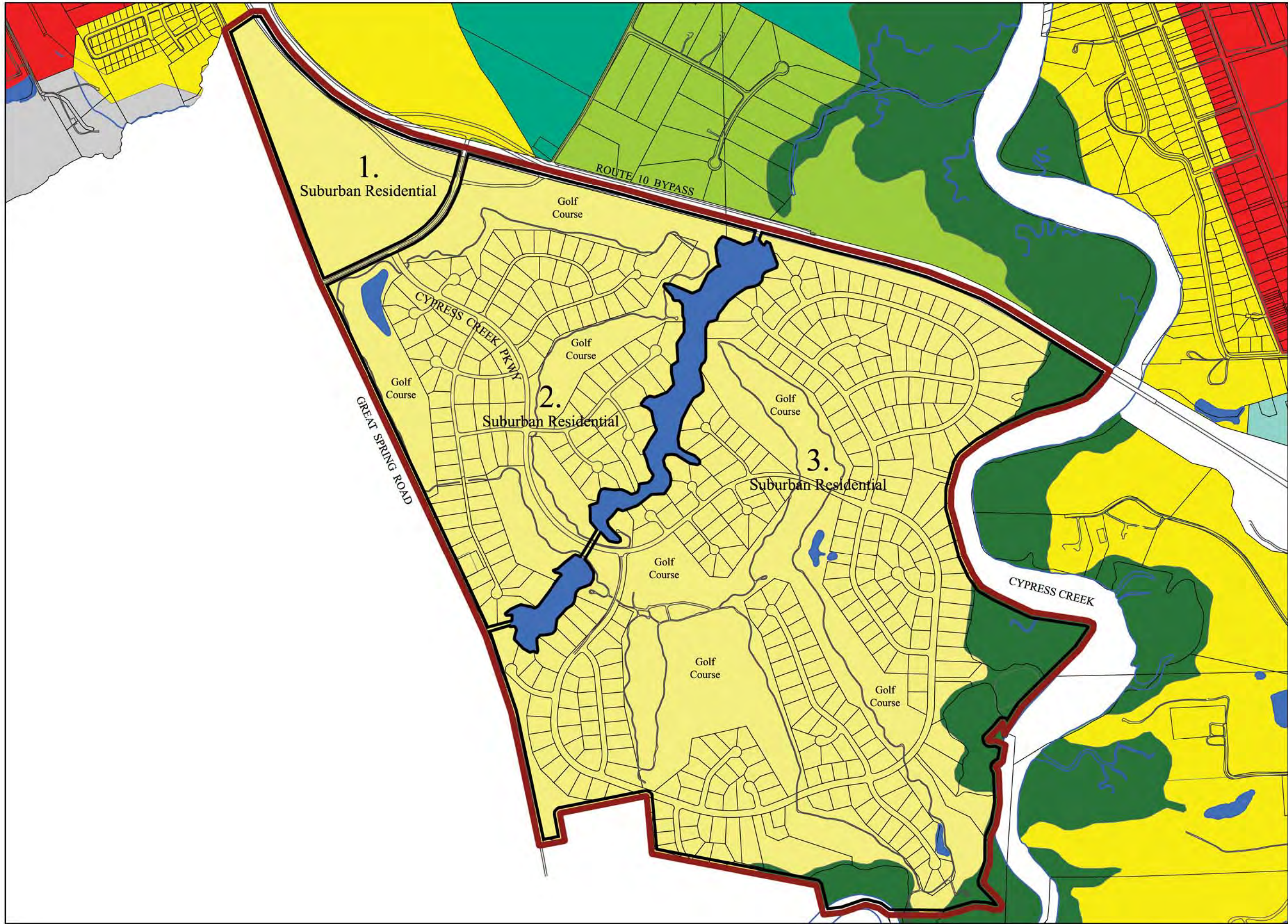
## PLANNING AREA



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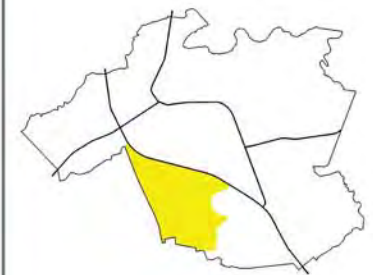
- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
- Retail Commercial
- Downtown Commercial
- Mixed Use
- Light Industry
- Heavy Industry
- Parks and Recreation
- Public and Semi-Public
- Planning Area
- Sub Areas





# CYPRESS CREEK

## PLANNING AREA



### Future Land Use:

- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
- Retail Commercial
- Downtown Commercial
- Mixed Use
- Light Industry
- Heavy Industry
- Parks and Recreation
- Public and Semi-Public
- Planning Area
- Sub Areas



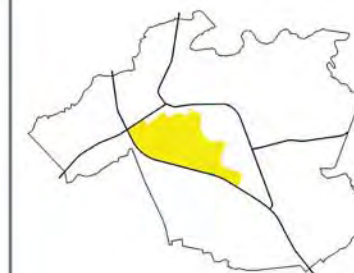
0 250 500 1,000 Feet



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# JERICHO

## PLANNING AREA



### Future Land Use:

- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
- Retail Commercial
- Downtown Commercial
- Mixed Use
- Light Industry
- Heavy Industry
- Parks and Recreation
- Public and Semi-Public

- Planning Area
- Sub Areas

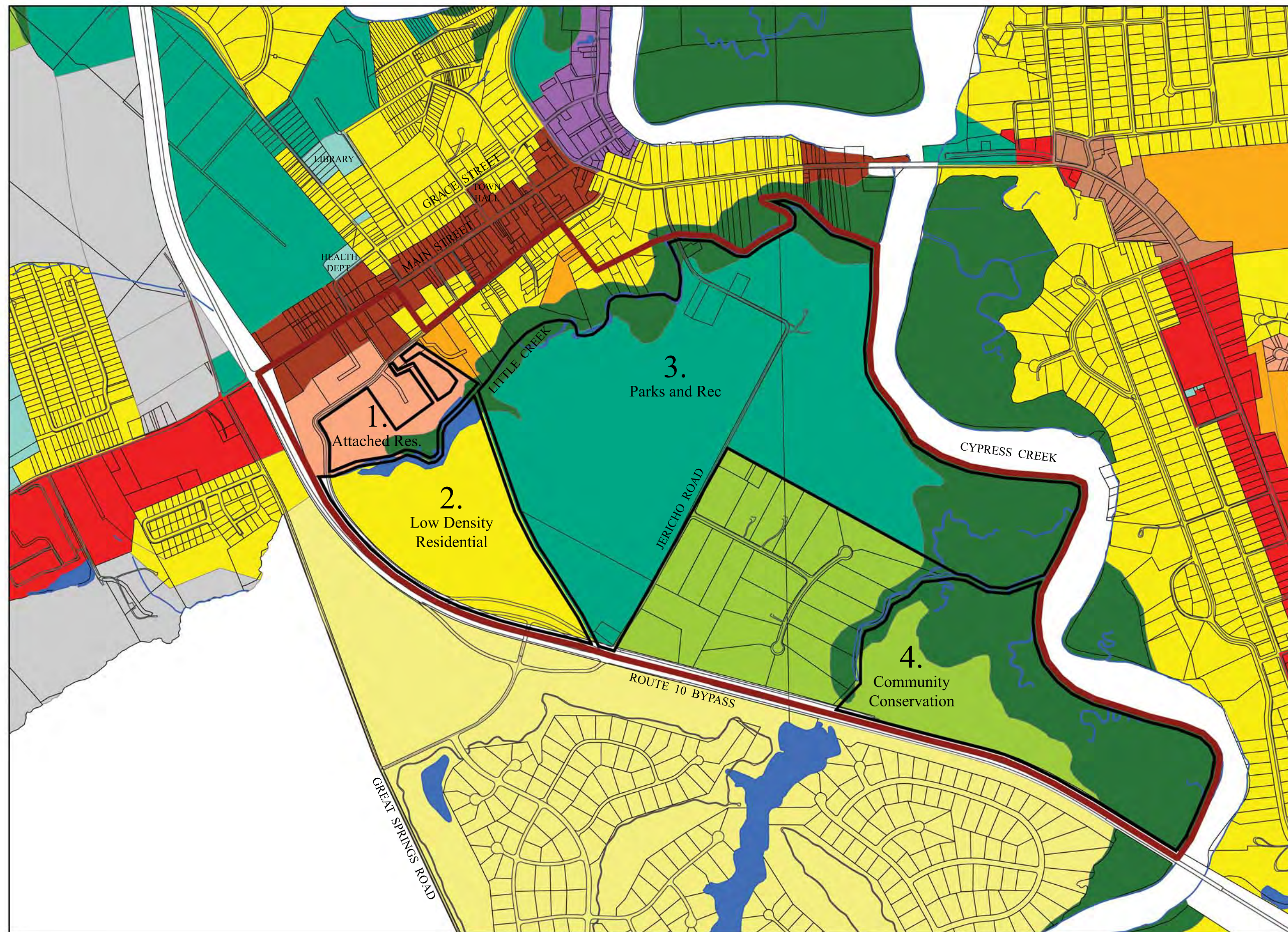


0 250 500 1,000 Feet



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# JOHN ROLFE

## PLANNING AREA



### Future Land Use:

- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
- Retail Commercial
- Downtown Commercial
- Mixed Use
- Light Industry
- Heavy Industry
- Parks and Recreation
- Public and Semi-Public
- Planning Area
- Sub Areas

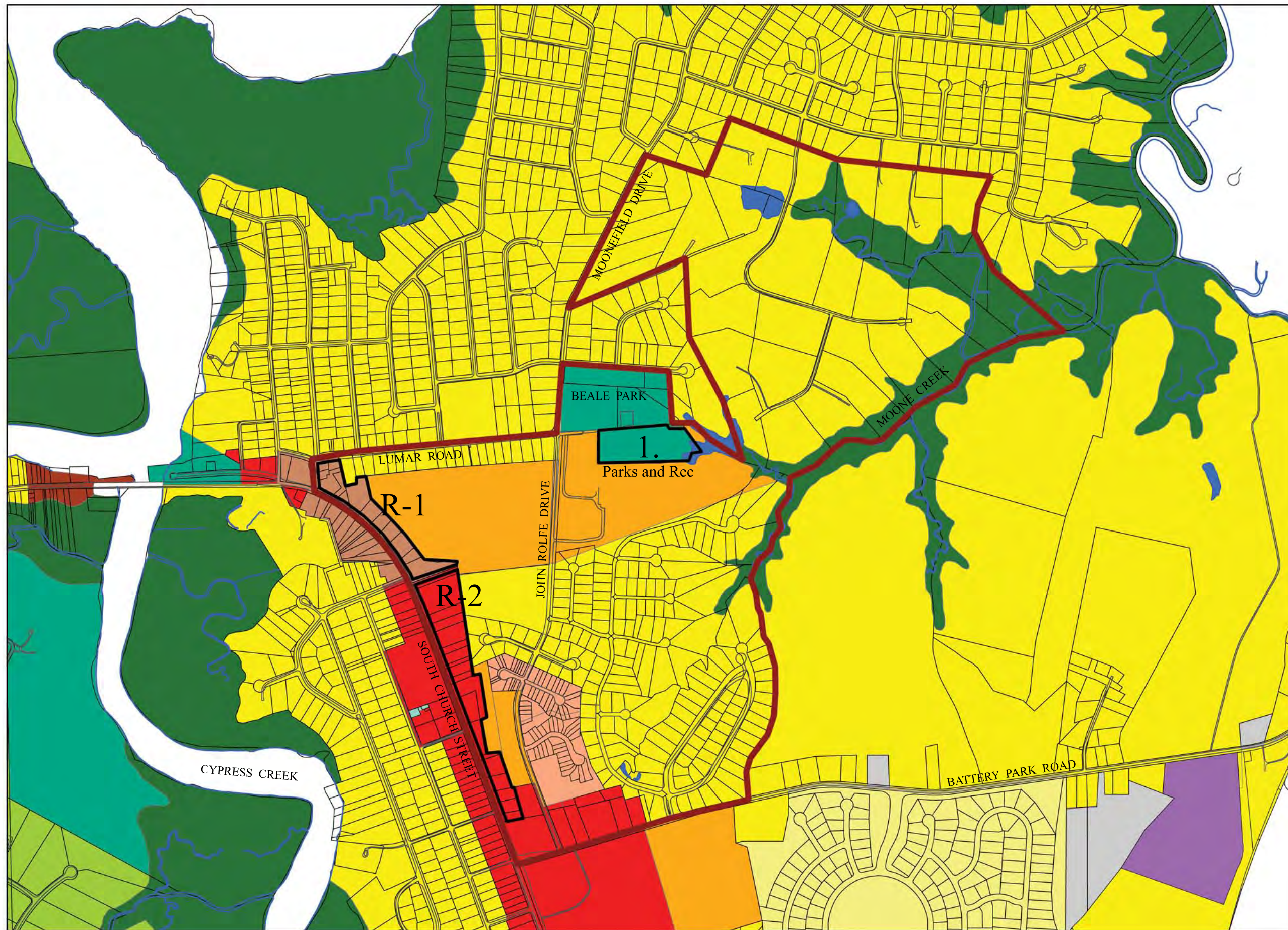


0 250 500 1,000 Feet



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# PAGAN PINES

## PLANNING AREA

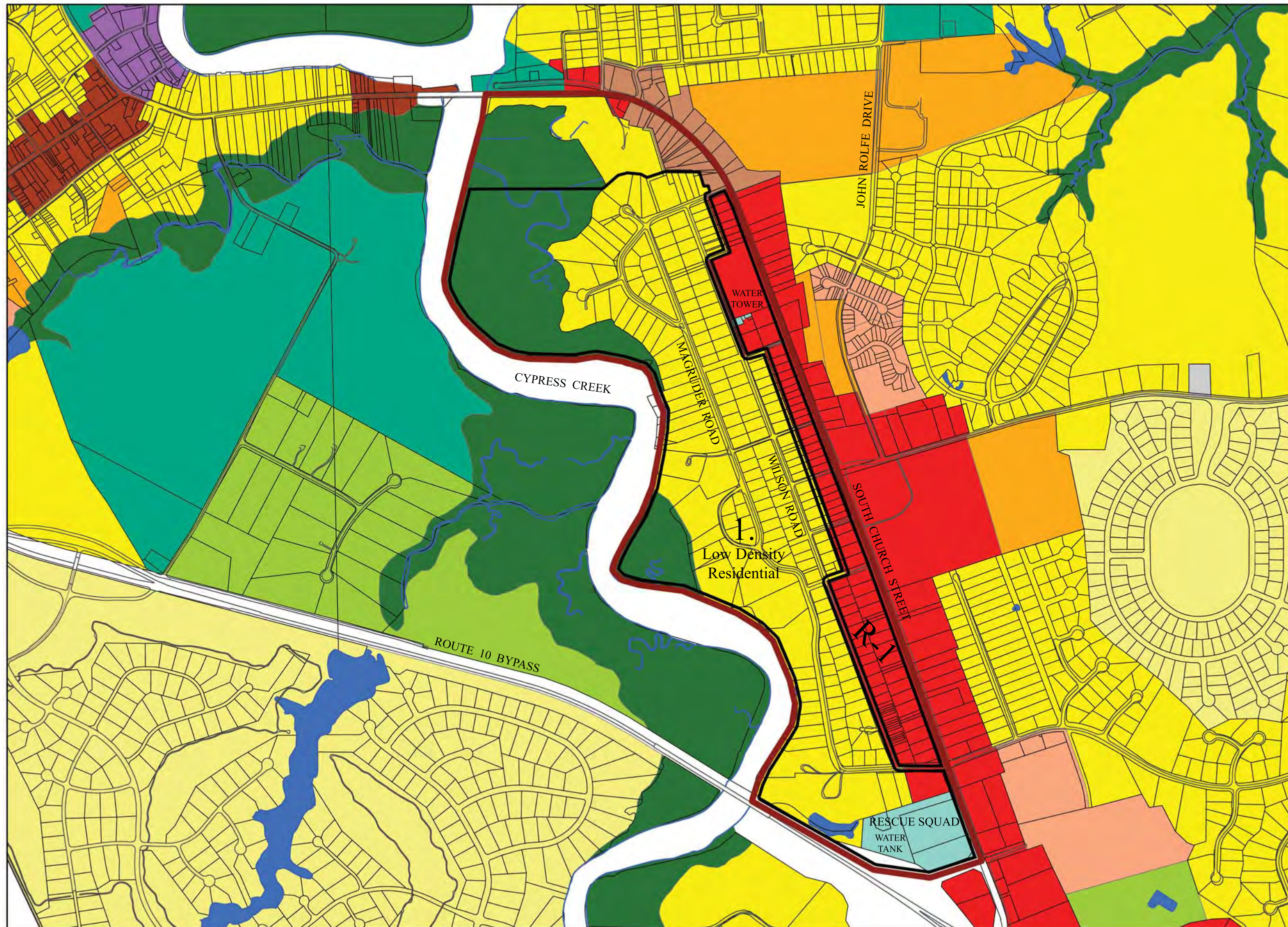


### Future Land Use:

- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
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- Downtown Commercial
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- Parks and Recreation
- Public and Semi-Public
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- Sub Areas



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# RIVER RESIDENTIAL

## PLANNING AREA



### Future Land Use:

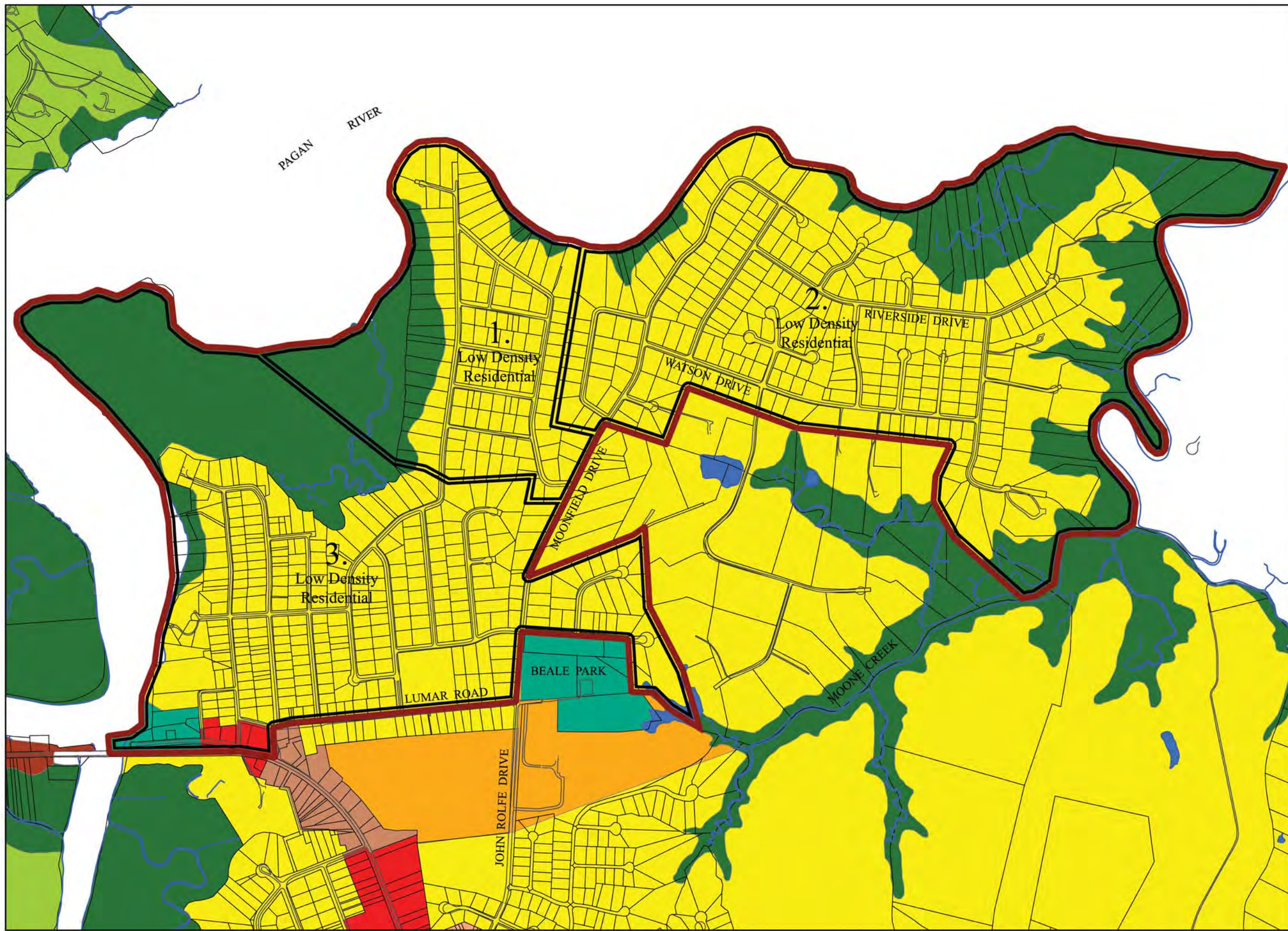
- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
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- Planning Area
- Sub Areas



0 250 500 1,000 Feet



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# SMITHFIELD INDUSTRIAL

## PLANNING AREA



### Future Land Use:

- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
- Retail Commercial
- Downtown Commercial
- Mixed Use
- Light Industry
- Heavy Industry
- Parks and Recreation
- Public and Semi-Public
- Planning Area
- Sub Areas

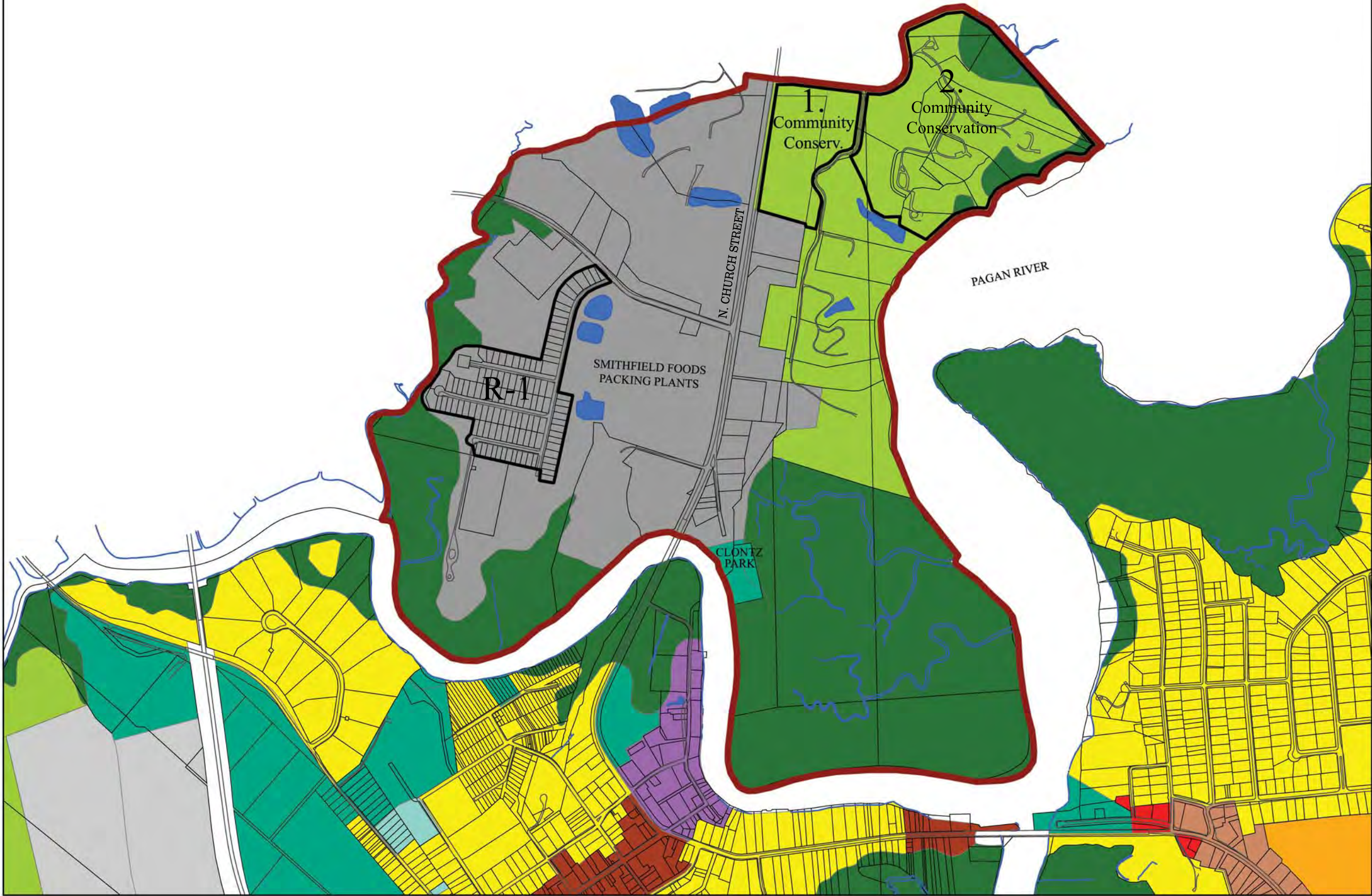


0 250 500 1,000 Feet



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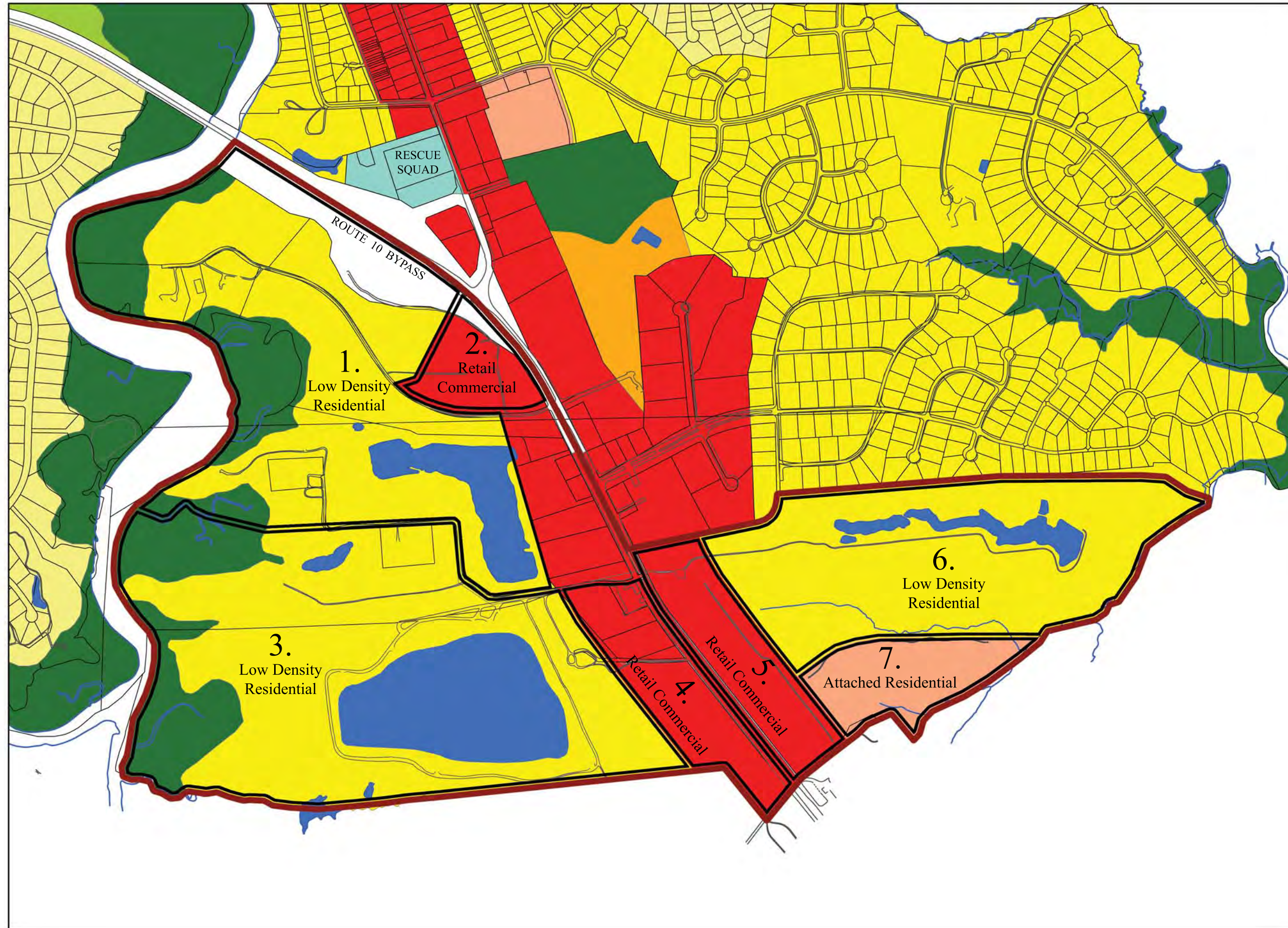
# SOUTHERN GATEWAY

## PLANNING AREA



### Future Land Use:

- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
- Retail Commercial
- Downtown Commercial
- Mixed Use
- Light Industry
- Heavy Industry
- Parks and Recreation
- Public and Semi-Public
- Planning Area
- Sub Areas



0 250 500 1,000 Feet



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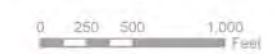
# WEST MAIN

## PLANNING AREA

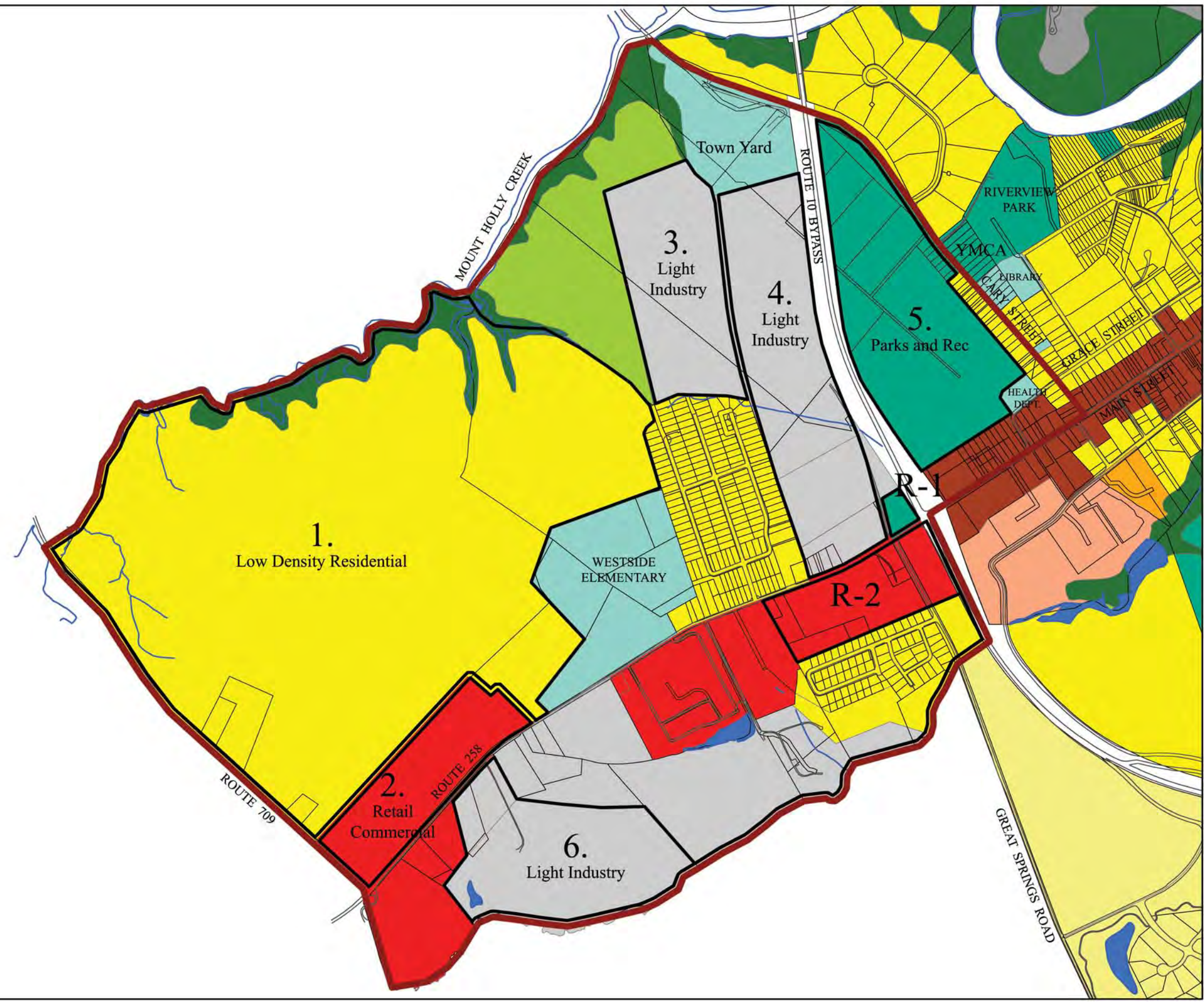


### Future Land Use:

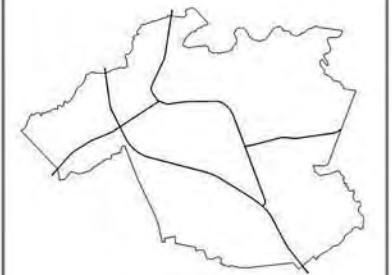
- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
- Retail Commercial
- Downtown Commercial
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# BIKE & PEDESTRIAN PLAN



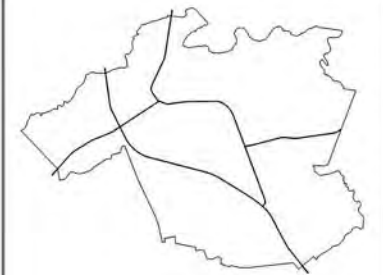
- Existing Sidewalks
- Proposed Sidewalk Extension
- Proposed Bikeways



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The Town of  
**SMITHFIELD**  
VIRGINIA

**PLANNING AREAS**



**Future Land Use:**

- Environmental Conserv.
- Community Conservation
- Low Density Residential
- Suburban Residential
- Attached Residential
- Multifamily/Retirement
- Residential Office
- Corp. Office/Research
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