



Community Character

TECHNICAL REPORT

TABLE OF CONTENTS

1. Introduction	T-3-2
2. Community Character Corridors and Other Roads	T-3-3
a. Types of Community Character Corridors	T-3-3
b. Designated Community Character Corridors	T-3-3
c. Potential Changes to Community Character Corridors	T-3-4
d. Current and Possible Future Implementation	T-3-4
e. Other Road Designations	T-3-5
f. Rural Roads	T-3-5
3. Community Character Areas	T-3-6
a. Existing Community Character Areas	T-3-6
b. Toano	T-3-6
c. Norge	T-3-7
d. Jamestown Island/Greensprings Road Area	T-3-8
e. New Town Area	T-3-8
f. Potential New Community Character Area	T-3-10
4. Neighborhood/Community Appearance	T-3-12
a. Elements from the Comprehensive Plan	T-3-12
b. County Policy and Beautification	T-3-13
c. Historic Triangle Corridor Enhancement Program	T-3-14
d. Community Appearance Guide	T-3-14
5. Open Space	T-3-15
a. Public Input	T-3-15
b. Mechanisms for Preserving Open Space	T-3-15
6. Preservation of Vegetation during Development	T-3-18
a. Community Character Corridors and Right of Way Landscape Requirements	T-3-18
b. Transitional Screening	T-3-18

c. Perimeter Buffers	T-3-18
d. Chesapeake Bay Preservation Ordinance	T-3-18
e. Utilization of Existing Regulations	T-3-19
f. Optional Specimen Tree	T-3-19
7. Archaeological and Historic Sites	T-3-20
a. Studies	T-3-20
b. Preserving Our Hidden Heritage	T-3-20
c. Architectural Survey	T-3-21
d. Historical Commission	T-3-21
e. Historical and Archaeological Sites	T-3-22
8. Utility Lines	T-3-25
9. Wireless Communication Facilities	T-3-25
10. Appendix	T-3-28
a. Citizen Comments	T-3-28

I. Introduction

James City County's community character is often described as "historic," "rural," and "small town." Key components include the natural topography; large wooded areas of tall deciduous forests; open vistas across ravines, wetlands, and water bodies; relatively low traffic volumes; scenic roads; and small scale, low intensity development. Places such as Norge, Toano, Five Forks, and Jamestown bring to mind separate, identifiable areas of the County. However, this small town feel and sense of place has been challenged by the growth of the past 20 years, including an evolution to more urban and suburban landscapes.

Modern development can change a locality's character in a positive or negative way depending on the manner in which the growth occurs. Factors such as architectural style and massing, streetscape, buffers, scale, and accessibility can influence whether designs are distinctive and build community, or lack authenticity and indistinguishable from those found anywhere else in America.

The character of James City County is important to its citizens and business community members alike, and has contributed to the County's attractiveness and growth through the years. The changing nature of the area and its impact on the quality of life remains a concern as noted in the citizen survey. In addition, the Business Climate Task Force report concluded, "it is the quality and community uniqueness that provides James City County its competitive edge." In recognition of the importance and value of community character, the County has taken many positive steps over the years toward shaping future development and continues to be sensitive to the many characteristics that already exist. The methods that the County has at its disposal influence not only the appearance of the community, but also the way the community functions and the experiences of visitors, citizens, and those who do business in the County.

2. Community Character Corridors and Other Roads

Community Character Corridors (CCCs) are roads in the County that were previously designated as greenbelt roads, mentioned in the 1991 Comprehensive Plan as entrance corridors and roads which promoted the rural, natural, or historic character of the County. In 1997 they were adopted as Community Character Corridors and have played an instrumental role in helping to preserve the original character of these roads. More attention has been given to the roads which are considered to be entrance corridors, for they set the important first impression that many visitors have of the area.

2a. Types of Community Character Corridors and Guidelines

The Comprehensive Plan identified three types of CCCs and appropriate guidelines:

- ◆ *Suburban and urban* CCCs aim to use enhanced landscaping, the preservation of specimen trees and shrubs, berming, and other desirable design elements to complement and enhance the visual quality of the urban corridor. An example of an urban CCC can be found on Monticello Road at New Town where design guidelines establish standards for the predominant features of architecture and streetscape.
- ◆ The objective of the *wooded* CCC would be to fully screen development from the adjacent planned or existing road right-of-way by retaining and enhancing existing vegetation within the recommended width of the buffer (150 feet for residential uses and 50 feet for commercial and industrial uses). Brandon Woods is a recent example of a 150-foot wooded buffer preserved during development.
- ◆ The *open/agricultural* CCC designation would preserve the views and integrity of farm fields and natural open spaces so that they remain the dominant visual features of the corridor. Through the CCC designation, a 150-foot strip of open pastoral land was established between the White Hall development and Richmond Road to help preserve the open farmland character of the land.

2b. Designated Community Character Corridors

The following roads are designated CCCs in the 2003 Comprehensive Plan:

- ◆ Greensprings Road
- ◆ Monticello Avenue
- ◆ Jamestown Road
- ◆ John Tyler Highway
- ◆ Ironbound Road*
- ◆ Centerville Road
- ◆ Longhill Road
- ◆ Longhill Connector Road
- ◆ Forge Road
- ◆ Richmond Road (Route 60) from the New Kent County Line to Anderson's Corner
- ◆ Pocahontas Trail (Route 60) south of Route 199 to the Newport News border
- ◆ Barhamsville Road (Route 30) from New Kent County Line to Anderson's Corner
- ◆ Colonial Parkway
- ◆ Route 199
- ◆ News Road
- ◆ Riverview Road from Croaker Road to the entrance of York River State Park
- ◆ Sandy Bay Road from Ironbound Road to Jamestown Road

2c. Potential Changes to Community Character Corridors

The County is also recommending removing a portion of *Ironbound Road* from the Community Character Corridor list. The portion from the News Road intersection to the Strawberry Plains intersection is no longer a prominent road in the County, since the Monticello Avenue extension has been completed.

In the past, the community has made conscious decisions to pursue protections beyond those afforded by the CCC designation, such as attempting to maintain certain CCC's as two-lane roads through alternatives to widening (for example, new connector roads, decreasing traffic from development, or accepting lower levels of service). As the County re-evaluates its transportation corridors and traffic models results, the community will need to re-examine which roads will be widened, and separately, if a CCC designation would still provide benefit for any existing development, new development, or redevelopment along the widened road.

2d. Current and Possible Future Implementation

Ordinance changes since the 1997 Comprehensive Plan have resulted in buffer requirements for by-right commercial and residential development along CCCs. Major residential subdivisions typically must provide a minimum 150-foot buffer along the existing or planned right-of-way of CCCs and a 75-foot buffer on non-CCCs. Commercial site plans must provide a 50-foot average buffer along the existing or planned right-of-way of roads designated as CCCs, and a 30-foot average buffer for non-CCC roads. If these buffers are not wooded, the Zoning Ordinance determines rates for planting. This rate is one tree and three shrubs for every 400 square feet of buffer calculated based on the width and length. Applicants are encouraged to plant native plants that are appropriate for the proposed location and can provide a sustainable landscape for years to come. In the buffers along CCCs, utilities can cross the buffer perpendicular to the site and entrance roads, community/directional signage, and bicycle and pedestrian paths are only allowed with permission from the Planning Director. Stormwater management structures are discouraged from being located within the buffers. Stormwater management facilities and detention ponds are considered features that would detract from the character that the County is attempting to preserve along the Community Character Corridors.

The current ordinance does not address the different types of Community Character Corridors or their location within the County and requires the same planting rate and mixes for all. Creating a policy document to identify the goals of various CCCs and revising the Zoning Ordinance (either in the existing modification procedure or otherwise) to more appropriately reflect the goals would further the intent of the Comprehensive Plan and reduce any confusion during the development process.

One method of increasing the developmental standards of Community Character Corridors is to establish specific design guidelines for development along the corridor. Compliance would be voluntary and encouraged during the special use permit/rezoning process. Some localities have established overlay districts to require implementation of the design guidelines which would likely be in addition to those already required by the zoning district; however, James City County's approach has been to pursue voluntary measures first before considering this option. The creation of voluntary design guidelines could be an option for Community Character Corridors that are important entrances into the County, close to historic landmarks

that warrant additional standards for higher protection and preservation, or are deemed particularly vulnerable.

2e. Other Road Designations

The Virginia Byway and Virginia Scenic Highway designations offer additional recognition and protection to roads. *John Tyler Highway (Route 5)* through James City County is currently designated a byway, a largely symbolic measure, and protection or preservation is left to the County's discretion. The Commonwealth Transportation Board designates Virginia Byways when a road has relatively high aesthetic or cultural value and leads to or within areas of historical, natural, or recreational significance. Preference is given to corridors controlled by zoning or otherwise to reasonably protect the aesthetic or cultural value of the highway. In 1997, two roads - *Route 359* from Jamestown Road to the Colonial Parkway and *Centerville Road/Greensprings Road* between Monticello Avenue and Jamestown Road, were also designated Virginia Byways. The existing Route 359 was relocated as part of the Jamestown 400th anniversary year event preparations. The County worked with the Jamestown-Yorktown Foundation and the National Park Service to ensure the scenic qualities of this important entry road were maintained. The County should continue to nominate roads for the Virginia Byway program as warranted, especially considering roads already designated as Community Character Corridors that are important entrances into the County and those that are close to historic landmarks.

The *Colonial Parkway* is also a Virginia Byway and is the only Virginia Scenic Highway in the County. A Virginia Scenic Highway is designated by the Commonwealth Transportation Board and is located within a protected scenic corridor, designed and constructed so as to preserve and enhance the natural beauty and cultural value of the countryside. The Commonwealth of Virginia used this designation in 2005 as a path to All-American Road status, a national designation, for the Colonial Parkway.

2f. Rural Roads

A number of secondary roads both inside and outside the Primary Service Area (PSA) have a distinct rural character. These roads are characterized by pavement widths typically less than 20 feet, limited sight distances, narrow shoulders, and in many instances, tree canopies that extend over the pavement. Such roads play a major role in preserving the rural character of the County. Some need safety improvements while others are impacted by traffic volumes greater than their intended capabilities. The County works with the Virginia Department of Transportation (VDOT) to make needed improvements through the Secondary Six Year Improvement Plan (SSYIP) in a manner that retains the rural character of these roads. A current example of a rural road where these types of improvements are identified as needed in the SRP is Croaker Road.

3. Community Character Areas

3a. Existing Community Character Areas

During the 1997 Comprehensive Plan process, certain areas of James City County were confirmed as important places during the public participation process. Guidelines were developed for these areas for future development. The following areas were identified as Community Character Areas (CCAs) in the 2003 Comprehensive Plan:

- ◆ Toano
- ◆ Norge
- ◆ Jamestown Island-Greensprings Road
- ◆ New Town

3b. Toano

In September 2005 the James City County Board of Supervisors created the Toano Community Character Area Study. The Toano Community Character Area Study Committee was created to listen to the views of County citizens, particularly those who live and work in Toano. The Committee's purpose was to recommend principles and guidelines that highlight and honor Toano's history, encourage growth that enhances character, and improve streetscapes and a pedestrian-friendly town center. The historic village of Toano sits along Richmond Road in the northern part of James City County between Anderson's Corner and Norge. The Toano Community Character Area stretches approximately from the railroad tracks on the west to Bush Springs Road on the east and includes the intersection of Richmond Road and Forge Road. The guidelines created by the study were adopted by the James City County City County Board of Supervisors in February 2006, and below are the guideline and principles which came out of the study.

1. Planning Principles

- ◆ Highlight and honor history.
- ◆ Encourage appropriate growth that enhances unique small-town character.
- ◆ Preserve open space/rural lands; establish communal greenspace.
- ◆ Enhance pedestrian and bicycle environment while slowing vehicular traffic.
- ◆ Improve streetscape and landscape to create sense of place.

2. Design Guidelines Plan

The design guidelines highlight improvements and plans for the Toano area, and give guidance for all future developments inside the Community Character Area. For parcels fronting on Richmond Road with a designation of moderate density residential on the 2003 Comprehensive Plan Land Use Map, the design guidelines supplement that designation to encourage a mix of commercial and residential uses, but predominantly neighborhood commercial on the highway frontage.

3. Implementation Strategies

New development and redevelopment in the Community Character Area should implement the following design guidelines:

- ◆ Utilize available funds in the Capital Improvement Program budget as well as alternate sources of funding including grants or private contributions to construct sidewalks and pedestrian crosswalks in accordance with the design guidelines. Target capital investments by James City County (e.g., landscaping, underground utility lines, streetscape improvements, etc.) to support private reinvestment and redevelopment.
- ◆ Utilize available State and Federal grants, including the Virginia Department of Transportation's "Transportation Enhancement Program", to implement streetscape improvements.
- ◆ In accordance with the recommendations of the James City County Architectural Survey establish the Toano Historic District so that property owners may qualify for redevelopment tax credits. Assist property owners in placing qualified properties on the State and Federal registers of historic places.
- ◆ Using the successful Jamestown Corridor Enhancement Committee as a model, establish a Toano Enhancement Committee in partnership with the Friends of Forge Road and Toano and/or the Williamsburg Land Conservancy. Fund a matching grant program similar to that established for Jamestown Road.
- ◆ As part of the update of the County's Community Appearance Guide, create a section providing specific examples for Toano.
- ◆ As part of a public sector contribution, there should be created an illustrative Master Plan for areas within the Community Character Area which have a critical need for joint development to ultimately achieve the vision of the design guidelines.

Toano still retains much of the "village" character that led to its designation as a Community Character Area. Although some new development has occurred, the character is still dominated by buildings constructed at the beginning of the 20th century. These buildings have shallow setbacks and many are two-story, creating a more pedestrian-oriented storefront environment than any area in the County. Toano has also retained a fairly clear visual separation from other more recent development along Richmond Road, with visitors enjoying a distinct sense of arrival from both the east and the west.

3c. Norge

In contrast to Toano, Norge is more impacted by recent commercial development along Richmond Road, and has not had a subarea study conducted. While Norge continues to have a unique, very identifiable residential component located off Richmond Road and some pedestrian-oriented storefronts, the early 20th century "village" character of its business and residential areas along Richmond Road has been visually impacted by infill automobile-

oriented development. Also, newer development from the east has substantially blurred the distinction between Norge and Lightfoot. Voluntary efforts by both residents and businesses have helped retain the visual attractiveness of Norge in some areas; however, a subarea study with guidelines similar to Toano may be beneficial in providing a more comprehensive impact to the historic village character of Norge.

3d. Jamestown Island-Greensprings Road

The Jamestown Island-Greensprings Road area is the setting and entrance for many historical and archaeological sites in the County. Some important guidelines for the area include placing utilities underground and preserving the natural woodland, open space, and waterfront vistas that exist. The guidelines encourage public access to the waterfront with new development and discourage development visible from Jamestown Road. In addition, complementary architecture, landscaping, signage, and site layout is encouraged.

The County has an opportunity to preserve additional open space at the recently acquired Jamestown Beach Campground and Jamestown Yacht Basin. These two parcels and the Chickahominy Riverfront Park are being evaluated by a master planning project called Shaping Our Shores. All three of these properties are located along James City County waterways. The former Jamestown Beach Campground (JBC) and Jamestown Yacht Basin (JYB) are located on Jamestown Road along the James River and Powhatan Creek. Chickahominy Riverfront Park (CRP) is located on John Tyler Highway (Route 5) where Gordon's Creek meets the Chickahominy River. The Master Plan will address the long-range physical development, use and stewardship of these three sites over the next 20 years. It will present a vision for the physical environment that promotes and supports the values and goals of James City County citizens.

The Jamestown CCA has undergone significant changes since its creation. With the acquisition of the campground and marina, the County and the Jamestown-Yorktown Foundation have made significant progress toward further protecting the area. Mainland Farm and other parcels have been acquired by the County for open space and the Foundation has gone to great lengths to visually protect the area through sensitive architectural and building design of its new visitor center and other buildings. Also, the relocation of Route 359, both a Virginia Byway and a major entry into the Colonial National Historical Park, has received the cooperation of the County, Jamestown-Yorktown Foundation, the National Park Service, and property owners to retain its attractive qualities.

3e. New Town

In 1997 the Board of Supervisors adopted design guidelines for New Town and has amended them several times since, as new sections have been developed. The document was prepared by Cooper, Robertson & Partners, and the New Town Design Review Board was created to review all development plans within New Town for compliance with the guidelines. Both the guidelines and master plan establish standards for different areas of New Town and are summarized below.

- ◆ Monticello Avenue
 - Continuous setbacks to allow the preservation of trees and a park-like setting.
 - Public infrastructure such as street and pedestrian lighting, bikeways and sidewalks.
 - A town fence or wall to define the preserved areas of trees and convey the character of New Town.
 - Specific guidelines for building placement and massing, parking and access and the visual character of structures.
- ◆ Ironbound Road
 - Broadened median with large specimen trees in the manner of a linear town common.
 - Specific guidelines for public infrastructure and structures to ensure that the character and experience of the road reinforces the identity of New Town.
- ◆ The Civic Center and Civic Green
 - Guidelines have been developed to ensure that the Courthouse and the church are the dominant structures of the Civic Green.
 - Nearby buildings are to be compatible with the civic anchors.
- ◆ The Town Center, Village Square and the Regional Retail Center
 - Parking provided on street and on lots inside the blocks.
 - Design to be architecturally consistent with the character of the Civic Green and the overall scale of the town.
 - Anchor stores to be limited in size and number to maintain the village character.
- ◆ Office District
 - Offices to relate to the activity of the town center in their design and placement, acting as an extension of the commercial nature of the town.
 - Connectivity of the town center to be maintained through the use or the design and placement of buildings and streets.
- ◆ Gateway Commercial along Monticello
 - Guidelines developed to ensure that the nature and uses of these gateway centers reinforce the character of the town.
 - Buildings are to be predominately small in scale and offer services or activities that complement the town center uses.
- ◆ Residential Neighborhoods
 - Use wetlands and natural features to create places that give character and identity to the town.
 - Provide at least one public open space in each neighborhood as its focus.
 - Design a street system and open spaces for the individual identity of neighborhoods.
 - Encourage pedestrian and bike activities through street linkages.

Thus far over 1.5 million square feet of commercial space and over 1,300 residential units have been approved for New Town, much of which has been built or is in the process of being built. Many of the original design features are now taking shape and the New Town Design Review

Board has been instrumental in adhering to the design guidelines, thus ensuring that the original concept is realized.

3f. Potential New Community Character Area

During the public participation process for the Comprehensive Plan update, citizens were asked to identify special locations in the County with a special community value. Some of the areas noted repeatedly were County parks such as the Chickahominy Riverfront Park, Warhill Sports Complex, and the newly acquired Jamestown Campground and Yacht Basin. Other areas considered special were the Colonial Parkway and Jamestown Island and Anderson's Corner. All are either already addressed in master plans or designated as CCCs or CCAs. Five Forks' designation as a new CCA is an expected outcome of the adopted subarea study with continued citizen support for such.

Five Forks Sub-Area Study

Five Forks is an area with a unique village character. Bounded to the east by Mill Creek and to the west by the Powhatan Creek, Five Forks is within a significant natural area. Five Forks also supports a thriving commercial center and boasts a quality elementary school at its southern edge. Five Forks is generally understood to encompass the area that lies within three-quarters of a mile of the intersection of John Tyler Highway and Ironbound Road. Five Forks has grown and changed. With new growth, however, come questions about traffic levels, housing capacity, and preservation of the village qualities that make the area unique.

In June 2004, the Board of Supervisors created the Five Forks Area Study Committee to listen to the views of County citizens, particularly those who live and work in Five Forks. The committee's purpose was to recommend principles that preserve and build upon the many positive qualities of Five Forks. These principles seek to protect the watersheds and safeguard the village character of the area. The principles address residential growth, commercial development, traffic concerns, and alternative transportation. Finally, the principles call for the creation of the Five Forks Community Character Area to incorporate design standards for future development. In August 2004, the Board of Supervisors adopted the Primary Principles for the Five Forks Area. These principles have been applied in special use permit and rezoning cases since their adoption and form the basis of the Five Forks Community Character Area design guidelines, as stated below.

Five Forks Community Character Area

Five Forks has a rich heritage and a community character unique to James City County. By cooperating with citizens and with local government we will preserve these qualities for future generations. Through these principles the Committee envisions that Five Forks will be a place where future redevelopment or development:

- ◆ Improves or maintains water quality and other environmental features;
- ◆ Preserves Five Forks' unique village character;
- ◆ Does not overburden the road network beyond capacity;
- ◆ Provides adequate facilities for pedestrians and cyclists;

- ◆ Provides goods and services needed by citizens; and
- ◆ Ensures housing opportunities for all citizens.

The following adopted design guidelines are intended to help preserve the community character of Five Forks:

- ◆ Building architecture, scale, materials, spacing, height and color should respect the architectural context of existing structures such as the historic schoolhouse and veterinary clinic and maintain the village character of Five Forks. New buildings should attempt to emulate distinguishing architectural elements of existing structures such as windows, roof lines and cornices.
- ◆ Buildings that are traditional in character, massing and detailing are preferred. Contemporary interpretations of traditional architecture are acceptable, if based on the scale and proportions of traditional architecture, and compatible with the context of the Five Forks village character.
- ◆ Building facade materials and architectural treatment should be consistent on all sides of buildings, including side and rear elevations.
- ◆ Where possible, parking should be located to the rear of buildings and should be well landscaped with shrubs and street trees. Shared access and parking should be pursued before constructing new access breaks and parking facilities.
- ◆ Existing specimen trees and shrubs should be preserved to the extent possible. New landscaping should be of a type, size, and scale to complement and enhance the building and site design. Native plant and tree species are encouraged.
- ◆ Signage should be of a scale, size, color, and materials to complement the village character of the area. Monument style signs, rather than pole signs, are the preferred type.
- ◆ All mechanical equipment should be screened from view with architectural elements, fencing or landscaping.
- ◆ In addition to the above standards, residential buildings should have varied roof lines, wall articulations, window placements, and other features to reduce building mass and unbroken building lines. Arrangement and setting of buildings should preserve the buffers along the community character corridor and complement existing structures such as the historic schoolhouse and maintain the village character of Five Forks.

4. Neighborhood/Community Appearance

While market conditions greatly determine the type of housing and commercial product offered to citizens, the County can influence the design and appearance of the community to meet the ideals expressed by citizens. Commentary shows that many residents value the history and culture of the area, as well as the small-town and friendly atmosphere the County offers. Elements of development can reflect these characteristics that help make James City County a unique place for its residents. They are addressed in myriad ways, from suggestions and requirements for new development to expectations for public plans and improvements.

4a. Elements of Neighborhood/Community Appearance in Development

- ◆ The preservation of trees and shrubs during development reduces the feeling of newness and helps new development blend in with older, existing areas of the community. To preserve existing trees, the Zoning Ordinance requires that certain buffers remain undisturbed, especially between uses that are not compatible.
- ◆ Street trees provide a unifying quality tied into a tradition in older neighborhoods when street trees were often planted. Large shade trees that canopy over the road and sidewalk assist in making the scale more inviting to pedestrians. They also provide environmental benefits by reducing the amount of runoff and cooling the heat of summer. The County Streetscape Policy is commonly added as a condition for special use permits or offered as a rezoning proffer for subdivisions. The County Streetscape Policy was adopted in April 2004. This streetscape policy is included in many new residential projects including Michelle Point, Colonial Heritage, and Whitehall.
- ◆ By de-emphasizing the automobile, street level activities are encouraged and neighbors have the opportunity to interact more often. Tools to achieve this include narrower roads, connecting sidewalks, gathering spaces, and the placement of garages; refuse collection, and parking lots in the background instead of the foreground. In the future, the County should consider traffic calming techniques, more neighborhood gathering spaces, and the limitation of curb cuts and the consolidation of entrances. In addition, along the streetscape, human-scale signs and lighting and amenities such as benches can increase the comfort level of the pedestrian.
- ◆ Prominently placed landmarks such as public facilities and open spaces can contribute to the cohesiveness of a community and sense of place.
- ◆ Accessory structures and infill development of residences and commercial development assist in keeping a small-town character. This reduces the need to utilize large amounts of undisturbed area and helps integrate the new development with existing development. Infill development further supports a compact form that encourages walking, again de-emphasizing the automobile.

- ◆ The County should encourage commercial and mixed-use development to utilize shared parking, especially when the peak times of use are different. In addition, the County may want to explore parking ratio maximums to further reduce the amount of land needed for development and the effect of the automobile on the character of the community.
- ◆ The adaptive re-use of existing structures helps maintain the existing character of the community. For new development, building styles that complement the historic and cultural character promote the traditional feel of the community.

4b. County Policy and Beautification

Although the above elements are encouraged to be incorporated into all new development, they cannot be required to be used unless they are part of Special Use Permit conditions or rezoning proffers. In these situations, the use of select elements can affect the approval of the project and then must be incorporated into the approved site plan.

In the Zoning Ordinance, detailed planting requirements for commercial and industrial site plans ensure that front, side, and rear yards are planted and that parking lot and building foundation planting is provided in all new development. In addition, parking lots are required to be screened by landscaping or berming from public right of ways and minimum plant sizes are established.

The County employs techniques other than development review for beautification. For instance, the County currently has a policy against new billboards but does not have a single way of removing existing billboards. In order to remove these nonconforming billboards, the County would have to pursue purchasing the leases from the property owners. Prior to the 2007 anniversary commemoration, the Board of Supervisors indicated its desire to improve the viewshed of the County's entrance corridors. In particular, the Board asked that existing derelict, damaged, or otherwise functionally-obsolete billboards along John Tyler Highway and Richmond Road be removed or improved whenever possible. Since 2006, the County, in cooperation with landowners, business owners, and the Virginia Department of Transportation, has assisted in the removal of more than 15 of these billboards along John Tyler Highway, Richmond Road, and Merrimac Trail.

Also in years past, the County has designated funds toward beautification of high profile corridors, intersections, and public areas in the County, including planting and maintenance. Cost share programs with VDOT have allowed the funds to be used for a variety of installation projects. Planting has been installed along Route 199, Monticello Avenue, Richmond Road, Jamestown Road, Anderson's Corner, as well as many other areas. Opportunities to plant for beautification and screening become available as the County develops, and projects will continue to be installed. In addition to landscaping, James City County funded the replacement of the standard VDOT signs for route names and route numbers along Route 199 and adjacent roads with signs more complementary to the character of the area. In 2006 the County employed Frazier Group to design and install a new Way Finding System in anticipation of the 400th anniversary commemoration. It was a regional effort to make the entire Historic Triangle

area easier to navigate, with signage that was easier to read and more aesthetically pleasing than the standard VDOT signs.

4c. Historic Triangle Corridor Enhancement Program

The Historic Triangle Corridor Enhancement Program, a public private partnership between the City of Williamsburg, James City County, York County, VDOT, the Greater Williamsburg Chamber and Tourism Alliance, the Virginia Cooperative Extension and Master Gardeners, the Williamsburg Area Association of Realtors, and led by the Williamsburg Land Conservancy, has worked together for the past four years to implement a program to enhance the major entrance corridors in the region. Jamestown Road was the first corridor selected, and businesses and neighborhoods along the road have worked hard to improve its appearance.

The Committee's mission is simple: to enhance the major entrance corridors to the Historic Triangle. Much of the work done to date has centered on the improvement of landscape plantings and maintenance, but improved signage, curbing and the building facades have all been part of the program.

The improvements were financed through public funding and private donations for landscape improvements in the right-of-way, matching public grants for improvements to the business facades and neighborhood entrances, and similar improvements fully funded by businesses, neighborhoods and residents. In almost all cases, the organizations receiving matching grants spent additional funds beyond the matching grants and several organizations have paid the entire cost. In fact the private expenditures are almost double the public funding.

The Greater Williamsburg Chamber and Tourism Alliance will lead the next project, Pocahontas Trail from York Road to just beyond Busch Gardens. This endeavor involves property in all three jurisdictions in the Historic Triangle, providing an opportunity to work together across jurisdictional lines. Carlton Abbott Design firm was hired to design a conceptual master plan and is in the process of producing the plan while consulting with the various stakeholders located along the corridor.

4d. Community Appearance Guide

The County has developed the *Community Appearance Guide* to offer visual examples of suggested design elements. Last updated in August 2007, the Guide will be updated periodically as development occurs to incorporate exceptional examples found in the community and changes in policy. During plan review, conceptual plans allow staff to become involved in the design process earlier to offer suggestions on site layout and building style and material. Adherence to the suggestions is voluntary. However, the rezoning and special use permit processes offer good opportunities for the County to influence site and building design in a regulatory capacity.

5. Open Space

5a. Public Input

The preservation of open and green space within James City County is a continuing concern with residents, as evidenced by the responses to the 2001 and 2007 surveys and comments from the Community Conversations.

- ◆ The National Citizen Survey indicated that 49% of respondents believe that the County is doing a good to excellent job of preservation of natural areas such as open space farmlands and green belts.
- ◆ Seventy-four percent of the respondents to the 2001 Survey agreed that it is more important to preserve farmland in the County than it is to have more development, and in 2007 it increased to 78.8 %.
- ◆ Fifty-seven percent of the respondents to the 2001 and 2007 Survey agreed that it is better to have more homes on smaller lots and set aside areas for open space in order to permanently preserve land and maintain the character of the community.
- ◆ Ninety percent of residents at the first round of Community Conversations in 2002 supported increasing the use of public funds to preserve and/or acquire environmentally sensitive lands or lands critical to maintaining the rural character of the County.

James City County has defined open space as any undeveloped or minimally developed land that is either left in its natural state or set aside as part of a development proposal. The land may be used for active or passive recreation or simply appreciated for its scenic or aesthetic value. Public input has shown that citizens were interested in preserving and utilizing open space when possible.

5b. Mechanisms for Preserving Open Space

James City County has several mechanisms in place for preserving open space:

- ◆ *The Greenspace Acquisition Fund* was established in 1997 and designates one penny of the real estate property tax towards a Capital Improvement Program (CIP) fund for the County to acquire greenspace. Bonds are used to fund the acquisition of land for open space and land conservation purposes. Selection of properties is based on a priority target list of vulnerable properties, the availability of the property, and Board of Supervisors action. The County has worked in partnership with the National Park Service, Colonial Williamsburg, VDOT, Williamsburg Land Conservancy, and other local stakeholders to preserve lands significant to the environmental, historic, and community character of the area. Since the establishment of the fund, a number of parcels and easements have been acquired to protect the County's Community Character Corridors, including Forge Road, John Tyler Highway (Route 5) and

Jamestown Road. Also, James City County has acquired easements or titles to several large parcels, including Mainland Farm, Warhill, Chickahominy Riverfront Park, Whitehall Tavern, and Jamestown Campground.

- ◆ *The Greenway Master Plan* was adopted in 2002 by the Board of Supervisors after extensive research and input by staff and citizens. The Division of Parks and Recreation manages the Greenway Master Plan whose main goal is to balance environmental protection with the need for recreational amenities. Greenways are networks of natural open space corridors that connect neighborhoods, parks, and schools to areas of natural, cultural, recreational, scenic, and historic significance. Greenways are often critical for the natural migration, sheltering and survival of many wildlife species.

- ◆ *The Purchase of Development Rights (PDR) Program* was established in James City County in 2001. The program is voluntary for landowners interested in preserving their property and allows landowners to enter into agreements to sell the development potential of qualifying property to the County while maintaining the right to continue to own and use the property. Property in the PDR program is put into a conservation easement that places permanent limits on future development of the property and binds all subsequent owners of the property. To date more than 360 acres have been protected through this program. Properties that come in through application are ranked based on a set of established criteria:
 - Size of the property
 - Area in open land and farm land
 - Soil productivity
 - Presence of rare or endangered species
 - Proximity to a river, reservoir or tidal marsh
 - Located outside areas designated for public services
 - Frontage on a public road or scenic corridor
 - Contains a historic resource

The PDR program is a major step toward preserving lands in the County for scenic, cultural, and aesthetic value.

- ◆ *The Agricultural and Forestal District (AFD) program* in James City County is a formal method of assembling tracts of land into large, contiguous parcels for the purpose of short- or long-term conservation. Terms can vary from four to ten years at the discretion of the landowner and landowners are offered reduced tax assessments based on land use values. Although the property in the AFD program is usable open space and forested land (farming, timbering, wildlife preserves, etc.), it can provide a way to conserve vistas and Greenspace that contribute to the visual character and environment of the County. Currently there are almost 18,000 acres in the AFD program. The AFD program does not prohibit activities that have the potential to negatively impact the County's visual quality (i.e., timbering).

- ◆ *The Agricultural and Forestal District (AFD) program* in James City County is an additional tool used to preserve open space. The PSA is the area in which the County encourages most growth to occur and to which the bulk of the public facilities and services

improvements are or will be provided. By encouraging growth within the PSA, areas outside the PSA, generally more rural in nature, can be preserved.

- ◆ *The Residential Cluster Development Ordinance* was revised in 1999 to encourage innovative and quality designs of residential developments above one dwelling unit per acre that provide avenues for affordable housing, minimize environmental impacts, establish usable and meaningful open space, and provide recreational amenities within a more practical and efficient development. While cluster development offers the potential for higher densities, it is expected to provide certain benefits to the community and does not require higher densities. These benefits can include:
 - Maintaining open fields,
 - Preserving scenic vistas,
 - Protecting wildlife habitats and corridors,
 - Retaining a natural vegetative buffer around water bodies, wetlands and along roads,
 - Preserving historic sites
 - Creating adequate recreational areas
 - Providing pedestrian circulations to include trail systems,
 - Ensuring that common land adjoins protected open space on adjacent parcels, and
 - Preserving land for agricultural and forestal uses.

- ◆ *Community Character Corridor buffer requirements* also assist in the preservation of open space for scenic and aesthetic value. The buffers aid in the retention of the existing tree canopy when development occurs along sensitive corridors. Native plantings are suggested to provide sustainable landscapes that can thrive in their selected locations.

- ◆ Planners encourage developers to leave usable open space within subdivisions, especially through the *Special Use Permit and rezoning processes*. In the past, land designated as open space within new subdivisions was generally unusable due to environmental constraints such as wetlands or steep slopes. Even small interior open spaces within subdivisions can be beneficial and usable to the residents and should be considered as an open space opportunity in design.

- ◆ The County also preserves open space by dedicating *conservation easements*. A conservation easement is a legal document in which a property owner agrees to forgo specific property rights while retaining ownership. An easement is signed and recorded like other deeds and is a covenant that accompanies the title to the land. An easement may provide monetary payments, tax deductions, or other benefits. The County routinely receives conservation easements as part of the development plan review process for stormwater purposes. Additional easements have also been purchased by the County. Land trusts like the Williamsburg Land Conservancy also have experience and knowledge with easements and land acquisition.

6. Preserving Vegetation during Development

Landscape requirements per the Zoning Ordinance and open space requirements per the Chesapeake Bay Preservation Ordinance, and buffer preservation all play a role in preserving existing trees and vegetation during development.

6a. Community Character Corridors and Right-of-Way Landscape Requirements

When development occurs along one of the County's Community Character Corridors or other road, the following sized landscape areas are to be preserved and or planted along the existing or planned right-of-way:

- ◆ Commercial development along a CCC - 50 feet
- ◆ Most residential development along a CCC - 150 feet (except in A-1, Agriculture District)
- ◆ Commercial development along a non-CCC road - 30 feet
- ◆ Most residential development along any non-CCC road - 75 feet (except in A-1, Agriculture District)

6b. Transitional Screening

When development occurs adjacent to a conflicting land use, a buffer between the uses is required to be preserved in its natural and undisturbed state. If the buffer is not vegetated then a screening landscape is to be installed. When a development zoned LB, B-1, M-1, M-2, or RT is located adjacent to or across a public street from a residential district then the following sized buffers are required.

- ◆ LB, Limited Business - 30 feet
- ◆ B-1, General Business - 35 feet
- ◆ M-1, Limited Business/Industrial - 35 feet
- ◆ M-2, General Industrial - 50 feet
- ◆ RT, Research and Technology - 35 feet

6c. Perimeter Buffers

Any parcel perimeter that is not adjacent to a roadway or that requires transitional screening is required to have a 15-foot side and rear buffers. These buffers are to be left in their natural undisturbed state, unless supplemental planting is needed.

6d. Chesapeake Bay Preservation Ordinance

The James City County Chesapeake Bay Preservation Ordinance restricts the clearing of vegetation to help manage stormwater on developed parcels. The following are some of the restrictions that help preserve trees and other vegetation:

- ◆ Limits and restricts development within Resource Protection Areas (RPA),*
- ◆ Preserves a 100-foot buffer around certain environmental resources such as tidal wetlands and perennial streams,*

- ◆ Preserves all trees with a 12-inch or greater diameter,*
- ◆ Prohibits practices during development that impacts tree health,*
- ◆ Requires an environmental inventory to be submitted with development plans,*
- ◆ Requires an erosion and sediment control plan to be submitted with development plans,* and
- ◆ Limits impervious cover to 60%.

* These items are required by the *Virginia Chesapeake Bay Preservation Area Designation and Management Regulations*.

6e. Utilization of Existing Regulations to Preserve Vegetation

The County has a comprehensive and extensive set of regulations to preserve vegetation, including trees; however, the buffers and preserved trees on developed sites can be left in unhealthy and damaged states. In these instances, the result is buffers that do not meet the intent of what the regulations were created to accomplish. By implementing the following procedures, the County hopes to improve the quality of our tree preservation efforts and ensure the integrity of the buffers:

- ◆ Concurrent plan review by both the Environmental and Planning staff to check the accuracy of the tree protection plan. The plan needs to show the location of proposed trees, showing the actual spread of the tree to scale, and the proper tree protection measures.
- ◆ Enforce the language in the tree protection landscape ordinance for proper tree protection measures.
- ◆ Add more education on and emphasis on tree protection measures during the pre-construction meeting by Environmental inspectors.
- ◆ Strict enforcement of tree protection measures in the field during development.
- ◆ Additional education for Environmental inspectors on proper tree protection measures and identification of native trees and shrubs typically used.
- ◆ Strict enforcement of violations found in the field for encroachment into protected areas as well as damage associated with improper tree protection techniques used that result in damage.

6f. Optional Specimen Tree Preservation Policy

To make it more economically feasible and practical for developers to preserve specimen trees on development sites, the County could consider adopting an Optional Specimen Tree Preservation Policy. This incentive-based policy would make it possible for developers to voluntarily preserve large healthy trees that may be located outside of a required tree save area. In exchange for preserving the specimen tree, the developer could be given a waiver to reduce the landscape requirements on another portion of the property. For example, if a large specimen oak tree is located in the middle of a developable parcel and the builder wishes to preserve it, he or she could get a waiver to reduce the buffer requirement for the rear perimeter buffer or another less desirable landscape requirement. The County, in turn, would receive the benefit of having a specimen tree considered for preservation that would have been destroyed without the option of a trade-off. Once a developer has a tree that he or she wishes to consider

preserving, he or she would meet the County landscape planner in the field and quickly determine if there is a reasonable trade-off in the landscape requirements to preserve the specimen tree. Both the County and developer would know if the policy is to be applied by the end of the meeting and the waiver could be applied administratively to facilitate the change quickly without a significant time and financial burden to the developer. The exact policy details would be defined during the Zoning Ordinance update, but in essence, it would give the developers an incentive to preserve large specimen trees that does not exist at the present time.

7. Archaeological and Historic Sites

The character of James City County is closely linked with the numerous known and unknown archaeological and historic sites within its boundaries. As home to Jamestown, the Battle of Green Spring, and the first free black settlement, the County is known for its diverse wealth of nationally significant archaeological resources. The County has taken a series of positive steps to protect its archaeological and historic resources as detailed below. In order for future development to successfully take known and unknown sites into account, steps must continue to be taken on the local level to identify and protect these non-renewable resources.

7a. Studies

The following studies have been commissioned to identify and evaluate the archaeological and historic resources in the County:

- ◆ *Toward a Resource Protection Process*, a 1986 historic inventory of James City County, York County, Williamsburg, and Poquoson written by the Colonial Williamsburg Foundation.
- ◆ *Toward a Resource Protection Process Update (RP3)*, a 1992 update to the 1986 historic inventory.
- ◆ *Preserving Our Hidden Heritage*, a 1997 archaeological assessment of historic resource in James City County by The William and Mary Center for Archaeological Research.
- ◆ Architectural Survey completed in 2006.

7b. Preserving Our Hidden Heritage

The document *Preserving our Hidden Heritage* offers short- and long-term recommendations for managing archaeological resources. The recommendations to develop formal guidelines and procedures for addressing archaeological sites resulted in the implementation of a revised Archeological Policy in 1998 to ensure the identification and protection of sites as development continues to occur in the County. The current policy recommends adding a condition to all special use permits and rezoning cases requiring archaeological studies where it appears that significant archaeological potential exists. Staff, who consults with existing archaeological studies and representatives of the County Historical Commission or other qualified archaeologists if necessary, makes a determination of when a study is required and forwards that recommendation to the Planning Commission and Board of Supervisors. Inclusion of GIS (Geographic Information System) data for the archaeological sites in future studies will further help protection efforts.

Additional recommended actions made in *Preserving Our Hidden Heritage* include making the Phase I archaeological study more routine, creating a basis and procedures for funding protection efforts, and emphasizing cultural enhancement aspects of archaeological protection and research to developers. If properly managed and interpreted, archaeological sites can be beneficial to developers when marketing projects. The Zoning Ordinance was amended to incorporate the Phase I recommendations but the other recommendations have not been further explored. The study also suggests that the archaeological assessment be updated every five years as more surveys occur in conjunction with development.

7c. Architectural Survey

Starting in 1999 James City County began an architectural survey conducted by Maar Associates Inc. The survey identified 180 historic properties and 20 were surveyed at an intensive level. In late 2006 the County retained the Ottery Group to continue the survey and the coverage expanded to 223 properties. Of the 20 properties intensively surveyed, 11 were documented as being built before 1860 and the remaining nine are considered to be representative of the County's architectural and historic themes. The survey establishes historic contexts, which are guides that categorize these properties by period of time, ethnic and cultural background, and how they were influenced by historical events of the times. Each historical context has its own set of historical and architectural themes. The survey has been an important planning tool in negotiations with developers to demonstrate the importance of the structure and why it should be preserved. Some notable successes are the redevelopment, in the Five Forks area of the former school building and the renovation of the Power's house on Richmond Road in Toano, by local builder Michael Brown.

7d. Historical Commission

In addition to efforts from staff, the County has a Historical Commission whose mission is to preserve, protect and promote the rich historical heritage of the County by engaging in the following efforts and activities:

- ◆ Surveying, identifying, and documenting historical buildings and sites within the County well in advance of potential damage or destruction by public or private action; and
- ◆ Conducting and promoting related activities at all educational levels to increase community awareness and involvement in historic resource preservation.

Historical Commission Projects:

Past

- ◆ Sponsoring of archaeological survey of the County
- ◆ Publication of *James City County: Keystone of the Commonwealth* by Martha M. McCartney
- ◆ Acquisition of the Norge Train Depot

Present

- ◆ Lecture series for James City County's 375th anniversary
- ◆ Norge oral history program

- ◆ Restoration of the Norge Train Depot
- ◆ Architectural survey of the County
- ◆ Nomination of Norge Train Depot and Toano area to National Register of Historic Places
- ◆ Exploration of grant applications for additional research

Ongoing

- ◆ Educational exhibits and programs in the community
- ◆ Collection of books, articles, and other materials pertinent to the County's past
- ◆ Selection and presentation of annual Historic Preservation Awards

7e. Historical and Archaeological Sites

Currently, the County has 20 properties on the National Register of Historic Places or the Virginia Landmarks Register. The two newest members include Whitehall Tavern and the Norge Train Depot. It is the goal of County staff and the Historical Commission to get all eligible properties listed on one or both registers to create awareness of the resources within the community.

Table 1: Properties listed on the Virginia Landmarks Register and/or the National Register of Historic Places

Property Name	Property Type	Virginia Landmarks Register	National Register of Historic Places
Paspehegh Settlement	Prehistoric Native American Village	X	X
Carter's Grove*	18th-century Plantation	X	X
Croaker Landing Archaeological Site	Early-Late Woodland Camp	X	X
Chickahominy Shipyard Archeological Sites	Early-Middle Woodland prehistoric shell midden	X	X
Governor's Land Archeological Sites	17th-century English sites	X	X
Greensprings	17th-century plantation	X	X
Hickory Neck Church	18th-century plantation	X	X
Colonial National Historic Park/ Colonial Parkway	17th-/18th-century sites		X
Jamestown National Historic Site	17th-/18th-century village	X	X
Kingsmill Plantation	17th-/18th-century sites	X	X
Powhatan	18th-century Plantation	X	X
Stonehouse Site	17th-century dwelling	X	X
Tutter's Neck Site	18th-century dwelling	X	
Windsor Castle	19th-/20th-century dwelling	X	X
Riverview	19th-/20th-century dwelling	X	X
Pinewoods (Warbuton House)	17th-century dwelling	X	X
Norge Train Depot (as relocated)	20th-century train station	X	
Whitehall Tavern (White Hall)	19th-/20th-century dwelling and tavern	X	X

*Designated a National Historic Landmark

Sources: - Virginia Department of Historic Resources. *Virginia Landmarks Register and National Register of Historic Places*. Updated December, 2008.

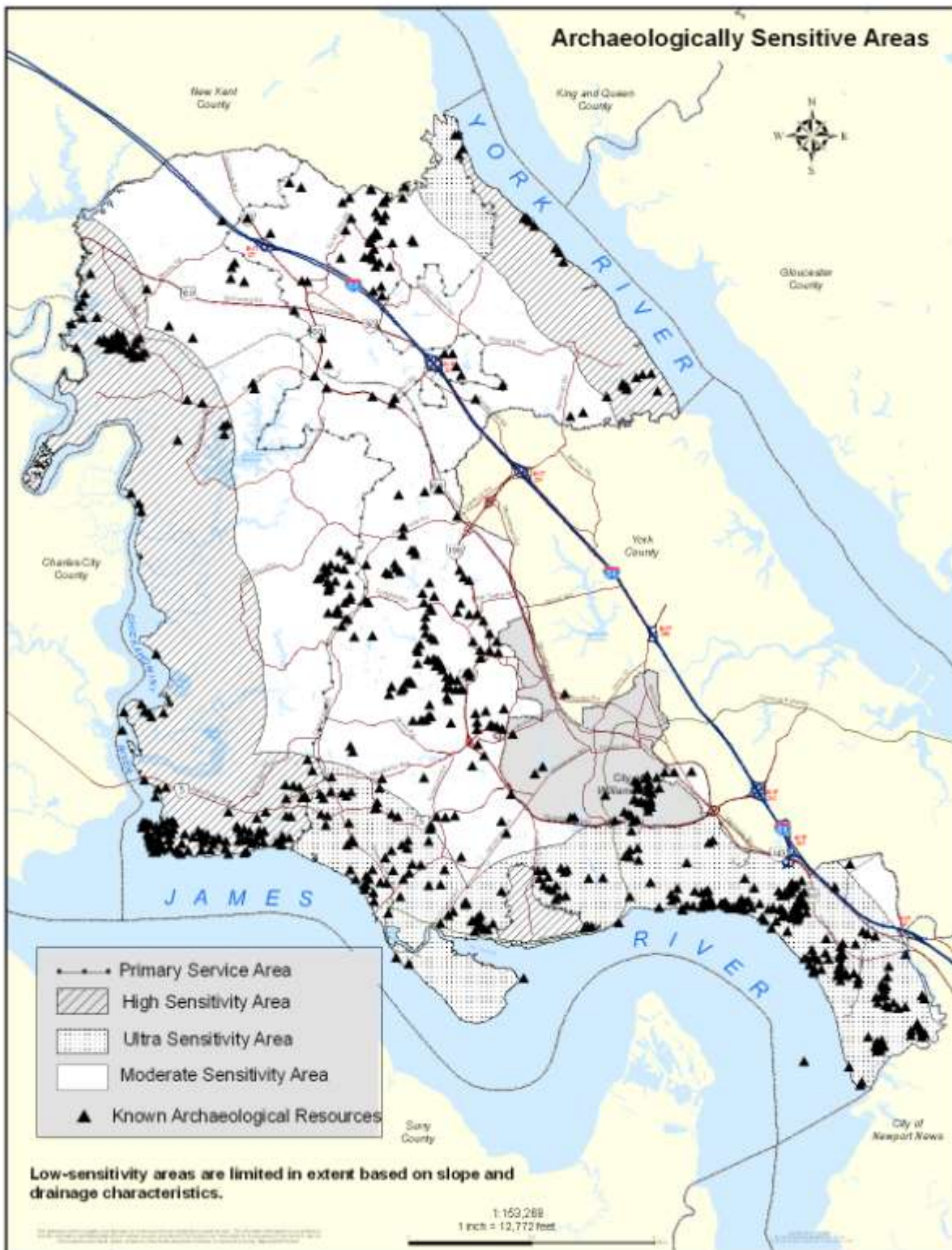
<http://www.dhr.virginia.gov/registers/RegisterMasterList.pdf>

- *National Register of Historic Places*.

<http://www.nationalregisterofhistoricplaces.com/va/James+City/state.html>

- Virginia Department of Historic Resources. *National and State Historic Registers: James City County*.

http://www.dhr.virginia.gov/registers/Counties/register_JamesCity.htm



8. Utility Lines

Utility lines include electrical, natural gas, petroleum, water and sewer transmission, and communication lines. Most utilities are placed underground or are substantially screened for safety reasons and do not affect the character of the community in adverse ways. Although all new utilities are required to be placed underground unless granted an exception by the Planning Commission, the visual impact of existing above ground utilities can be substantial and can increase as lines are upgraded and expanded. Placing existing utilities underground can be costly and difficult. In 2000, James City County established the Underground Utility Fund to target specific corridors that are currently negatively impacted by above-ground utilities. The fund, established originally with one cent of the real estate tax and more recently with annual allocations to the Capital Improvement Program (CIP), has been dedicated to this purpose and has allowed the planning and placement of utilities underground in the following areas:

- ◆ Jamestown Road
 - 199 to Lamplighter Shop
 - Sandy Bay Road area
 - Jamestown Beach Campground/Jamestown Settlement area

- ◆ John Tyler Highway
 - Williamsburg Crossing area
 - Jamestown High School area
 - Five Forks intersection area.

- ◆ Ironbound Road
 - Monticello/Ironbound intersection area (approximately 1,000-feet of Ironbound Road)
 - Remainder of Ironbound Road to Magazine Road (to be done with VDOT four-lane widening in 2009)

9. Wireless Communication Facilities

In 1998, the increasing need for new wireless communication facilities prompted the County to establish Performance Standards for Wireless Communication Facilities and a new division in the Zoning Ordinance to address them. The decision to regulate wireless communication facilities stemmed from the intent of the County to achieve the following purposes:

- ◆ Protect the health, safety, and general welfare of the community;
- ◆ Preserve the aesthetic quality of the community and its landscape;
- ◆ Protect property values;
- ◆ Protect the historic, scenic, rural, and natural character of the community;
- ◆ Minimize the presence of structures that depart from existing and future patterns of development, especially in terms of use, scale, height, site design, character, and lighting;
- ◆ Provide for adequate public safety communications; and

- ◆ Allow the providers of wireless communication facilities to implement their facilities in a manner that will fulfill these purposes, encourage their co-location, and allow them to fulfill their Federal Communications Commission licenses.

Through the use of the performance standards and the ordinance, the County seeks to accomplish the following:

- ◆ Keep the number of wireless communication facility sites to a minimum;
- ◆ Minimize the impacts of newly approved wireless communication facilities; and
- ◆ Expedite the approval process for new wireless communication facility applications that aid in the achievement of the above.

The performance standards and ordinance specifically address several issues that can influence the character of the County:

- ◆ Location,
- ◆ Design, including style, height, lighting, and general appearance,
- ◆ Buffers and setbacks,
- ◆ Zoning, and
- ◆ Public safety

The policy and ordinance strive to effectively camouflage new wireless communication facilities in many areas of the County in order to reduce their incompatibility with and impact on adjacent development. These efforts have been fairly successful to date. Many new towers have been either constructed below the surrounding tree line or built as a camouflaged structure to blend in with the surrounding natural and man-made environment. While the County has these two important tools in use, new technologies are constantly emerging in the field of wireless communication facilities and steps should be taken for the County to stay abreast of these technologies. Adjustments to the Zoning Ordinance and policies will enable the County to recommend the most appropriate system for a particular location.

9a. New Wireless Communication Facility Technologies

Due to the ever-changing field of wireless communications technology, the County needs to provide flexible and adaptive regulations for approving wireless communication facilities. One of the technologies being monitored uses multiple smaller linked antennas to eliminate the need for large towers that can be intrusive to the landscape. Listed below are some of the benefits which this system can offer:

- ◆ Smaller less intrusive antennas
- ◆ Higher quality service
- ◆ Less dead zones
- ◆ Collocation of facilities

This system also has some disadvantages:

- ◆ Systems are not compatible with all situations; physical features such as topography can limit infrastructure installation.
- ◆ There are typically higher start-up costs due to infrastructure installation.
- ◆ A larger number of antennas are needed along with a back-up power source for each antenna.
- ◆ There are consulting costs and other expenses needed to keep up with the newest technology needed.
- ◆ Systems are mostly marketed to institutions such as college campuses, industrial parks, hospitals, and high rise buildings that have difficulty getting quality service.

Other technologies exist, such as satellite, with different sets of advantages and disadvantages. While no single technology has been deemed the best for all of James City County, the benefits of staying abreast of all technologies and making appropriate ordinance and policy changes are obvious. In order to analyze what is best for the County, a master plan of existing wireless communication facilities, possible new locations, and possible system types, could be established to identify compatible collocation capabilities and areas that impact residential and other adjacent land uses the least.

Appendix A Citizen Commentary

James City County's Citizen Surveys

In 2007, the Center for Survey Research at Virginia Tech conducted a scientific telephone survey of 623 James City County citizens, with a sampling error of less than 4%. Below are some excerpts from this study and results from the 2001 survey that give insight into opinions on community character in the County and how they are changing.

- ◆ 84% of the respondents rated historic preservation as good or excellent in 2007 compared to 86% in 2001. In 2007, 77% thought that about the right amount of resources and time were being devoted to historic preservation in James City County compared to 79% in 2001.
- ◆ 75% of the people rated the natural environment as good or excellent in 2007. That figure was 81% in 2001.
- ◆ In 2007, 83% of respondents felt that development in the County was happening too quickly. In 2001, that figure was 78%.
- ◆ In 2007, 79% of respondents felt that it was more important to preserve farmland in the County than it was to have more development. That figure was 74% in 2001.
- ◆ People who agreed that it is better to have more homes on smaller lots and set aside land for open space remained at 57% for both 2001 and 2007.
- ◆ In 2007, 79% responded that it is very important or somewhat important to have biking and walking trails compared to 89% in 2001.

Also in 2007, the National Research Center conducted the National Citizen Survey to determine satisfaction among the County's citizens on the quality of their local environment and County services provided. Of the 1200 households contacted, 438 responded, for a confidence rating of 95%.

- ◆ 77% rated the County's appearance as good or excellent, a rating above the national benchmark.
- ◆ 72% found the cleanliness of the County to be good or excellent, a rating above the national benchmark.
- ◆ 69% found the overall quality of the natural environment of the County to be good or excellent. Benchmark data was not available.
- ◆ 49% felt that the County was doing a good or excellent job of preserving open space, farmlands, and greenbelts, a rating similar to the national benchmark.

Community Conversations

The County followed these surveys with a series of Community Conversation meetings with citizens and members from the business community. In the first round of the Community Conversations held in April 2008, answers to the open-ended questions about what services citizens would most like to see were strongly directed toward more green areas and open space, the maintenance of environmental and historical areas, and the continued creation of biking and walking trails.

In the second round of the Community Conversations held in August and September 2008, citizens responded to questionnaires on the quality of growth within the County. The following were some of the results with the number of respondents in parenthesis.

- ◆ 75% respondents agree that James City County is changing for the worse when it comes to preserving large stands of mature trees along major roads, and 70% believe that the County is not preserving enough mature trees in residential and commercial developments. (78)
- ◆ 63% of respondents believe that development in the County is looking the same with no sense of place. (78)
- ◆ 69% of respondents believe that the county's roads no longer have that rural, small town feel due to the development along them. (76)
- ◆ 59% of respondents feel that the County lacks enough commercial areas that are accessible for walking. (78)
- ◆ 74% believe the County is changing for the worse in preserving large open fields and agricultural areas. (77)