



CITY OF SUFFOLK

442 W. WASHINGTON STREET, P.O. BOX 1858, SUFFOLK, VIRGINIA 23439-1858
PHONE: (757) 514-4060 FAX: (757) 514-4099

DEPARTMENT OF
PLANNING & COMMUNITY DEVELOPMENT
Division of Planning

October 18, 2022

Suffolk Planning Commission
City of Suffolk, Virginia

Dear Commissioners:

Attached for your consideration is information pertaining to Rezoning Request, RZN2022-007, (Conditional), Ellis Farm, submitted by Bob Arnette, Manning Road Development Group, LLC, applicant, on behalf of Coastal Virginia Partners, LLC, contract purchaser, on behalf of Ellis Freehold, LLC, property owner, in accordance with Sections 31-304 and 31-305 of the Unified Development Ordinance, to rezone the official zoning map of the City of Suffolk to change the zoning from A, Agricultural zoning district, to RLM, Residential Low-Medium Density (Conditional) zoning district, for property located at 494 Manning Road, Zoning Map 33, Parcels 75 and 75A. The affected area is further identified as being located in the Holy Neck Voting Borough, zoned A, Agricultural zoning district. The 2035 Comprehensive Plan designates this area as part of the Central Growth Area, Suburban Use District.

Planning Commission was scheduled to consider this application at their meeting of September 20, 2022; however, upon receipt of a request to postpone consideration of this item by the applicant, the Planning Commission voted 8-0 to amend the agenda to table this application for thirty (30) days.

Please be advised that since the September 20, 2022, Planning Commission meeting, the Planning Department has received a request from the developer to remove the application from the agenda for the upcoming October 18, 2022, Planning Commission meeting and postpone the application for consideration until the November 15, 2022, Planning Commission meeting.

Information and maps pertaining to this request are attached for your consideration. Please contact either myself or Brittany Colyer, the staff planner handling this case, if you have any questions in advance of the meeting.

Respectfully submitted,

Kevin Wyne, AICP
Interim Director of Planning and Community Development

STAFF REPORT

DESCRIPTION

REZONING REQUEST: Rezoning Request, RZN2022-007 (Conditional), Ellis Farm, a request to change the zoning from A, Agricultural zoning district, to RLM, Residential Low-Medium Density zoning district (Conditional), for property located at 494 Manning Road, Zoning Map 33, Parcels 75 and 75A.

APPLICANT: Bob Arnette, Manning Road Development Group, LLC, applicant, on behalf of Coastal Virginia Partners, LLC, contract purchaser, on behalf of Ellis Freehold LLC, property owner.

LOCATION: The subject properties consist of T.M. 35*75 and 35*75A which are a combined size of approximately 114 acres. The properties are located on Manning Road approximately one-half mile south of the intersection of Manning Road and Holland Road (Route 58) business corridor.

PRESENT ZONING: T.M. 35*75 and T.M. 35*75A are currently zoned A, Agricultural zoning district.

EXISTING LAND USE: The property is presently vacant and comprised of fields and forested lands.

PROPOSED LAND USE: The applicant proposes to rezone the property from A, Agricultural zoning district to RLM, Residential Low-Medium Density zoning district (Conditional), for the purpose of developing a single-family detached development. The applicant has voluntarily proffered a maximum of 300 single-family detached units.

SURROUNDING LAND USES:

- North – Speights Run Reservoir
- South – Single-family detached homes, fields, and forested lands zoned A, Agricultural
- East – Lake Speight Colony Neighborhood zoned RLM, Residential Low-Medium Density zoning district.
- West – Springfield Neighborhood zoned RLM, Residential Low-Medium Density zoning district.

COMPREHENSIVE PLAN: The City's 2035 Comprehensive Plan designates this area as part of the Central Growth Area, Suburban Use District.

CHESAPEAKE BAY PRESERVATION AREA DESIGNATION: The property is located within the City's Chesapeake Bay Preservation Area Overlay District (CBPA) and is designated as a Resource Management Area (RMA). The 100' Resource Protection Area (RPA) buffer is also present along the northeastern boundary of T.M. 33*75.

FLOOD PLAIN: The property falls within Flood Zone A and Zone X, as shown on Panel 0210D of the Flood Insurance Rate Map for the City of Suffolk, Virginia, Community No. 510156, dated November 16, 2011.

PUBLIC NOTICE: This request has been duly advertised in accordance with the public notice requirements set forth in Section 15.2-2204 of the Code of Virginia, as amended, and with the applicable provisions of the Unified Development Ordinance. A notice, containing a copy of the staff report, was also provided to the applicant on September 16, 2022, and October 14, 2022.

HISTORY: The subject property is currently vacant. Tax Parcel 33*75 was created circa 1877, as outlined in Nansemond County Deed Book 6, page 180. Tax Parcel 33*75A was created circa 1943, as outlined in Nansemond County Deed Book 148C, Page 63.

STAFF ANALYSIS

ISSUE

The applicant proposes to conditionally rezone approximately 114 acres of property located at 494 Manning Road, Zoning Map 33, Parcels 75 and 75A, from the existing A, Agricultural zoning district, to the RLM, Residential Low-Medium Density district (Conditional). The purpose of the rezoning is to allow for a maximum of 300 single-family detached dwelling units for a gross density of roughly 2.8 dwelling units per acre rather than the existing density that is permitted of 1 unit per acre. Wetlands were found to be located along the northeastern property line of Tax Parcel 33*75 and found to extend down the center of the parcel, occupying approximately 8.5 acres of the site which reduces the potential number of units that could be realized. This site is situated approximately one-half mile south of the intersection of Manning Road and Holland Road (Route 58) business corridor, with a portion of the parcel being bisected by a railroad. The provided conceptual layout does not show that there will be any development on the portion south of the railroad; however, both sections are included as part of this rezoning request.

CONSIDERATIONS AND CONCLUSIONS

In accordance with Appendix B, Section B-4 of the Unified Development Ordinance, rezoning applications must include a statement of the reasons for seeking an amendment to the zoning maps of the City of Suffolk. The applicant stated that this request aligns with the 2035 Comprehensive Plan as this site is located within the Suburban Use District within the Central Growth Area where single-family detached forms of development are encouraged where adequate public facilities are available.

1. Comprehensive Plan

According to the 2035 Comprehensive Plan, the subject property is located within the Central Growth Area, Suburban Use District. The Suburban Use District is intended to primarily be composed of traditional residential subdivisions. Single-family dwellings are the most common use found in this district. Neighborhoods should be designed with sidewalks and be pedestrian friendly at a recommended density of 1-5 dwelling units per acre. Retail uses in this district are primarily neighborhood-scale centers. Civic buildings and community facilities are also appropriate. -scale centers. Civic buildings and community facilities are also appropriate.

As previously stated, the proffered number of 300 dwellings as a part of this rezoning request would result in a gross density of 2.8 units per acre, which falls within the recommended density

for the Suburban Use District. The requested RLM (Conditional) zoning district and proffered unit count are found to be compatible with the surrounding development use patterns.

The Comprehensive Plan sets specific themes and policies related to land use, transportation, open space, and the environment that should be considered when contemplating a rezoning application. It is staff's opinion that the requested rezoning to the RLM, Residential Low-Medium Density zoning district (Conditional), is consistent with the policies of the 2035 Comprehensive Plan. Relevant to this application are the following:

Policy 2-1: Keep development focused in designated Growth Areas in the City.

- *Action 2-1A: Ensure that the City's land use regulations support higher density/intensity development in focused Growth Areas.*

The proposed rezoning from A, Agricultural, to RLM, Residential Low-Medium Density (Conditional), would result in an increase in the permitted residential density for the subject properties within the Central Growth Area, Suburban Use District. Thus, this rezoning aligns with Action 2-1A.

Policy 2-2: Assure that development occurs in a predictable and orderly manner.

The surrounding area on Manning Road is primarily comprised of low to medium density residential uses that were developed prior to the adoption of the 2035 Comprehensive Plan. This site would be developed at a low to moderate density and is a good balance of accommodating the recommendations of the Suburban Use District. The proposed rezoning to RLM, in conjunction with the proffered number of 300 dwelling units, is expected to continue predictable and orderly development in this area as outlined by the Comprehensive Plan.

Policy 2-4: Promote compatibility in land use patterns.

The proposed rezoning to the RLM (Conditional) district and the maximum density of roughly 2.8 dwelling units per acre is found to be compatible with nearby established neighborhoods.

Policy 4-1: Provide opportunities for residents to adopt a lifestyle that is less dependent on auto travel.

- *Action 4-1A: Focus development in the two Suburban/Urban Growth Areas based on the densities shown in Chapter 3.*

The proffered density of 2.8 units per acre falls within the recommended density for the Suburban Use District. Further, moderate-density residential development at this site should offer additional support for commercial uses along the Holland Road (Route 58) Business Corridor and the downtown area.

Policy 6-1: Encourage development of a balanced and diverse housing stock throughout the City.

- *Action 6-1A: Ensure that the City's land use regulations allow for a variety of housing types, such as single-family detached, single-family attached, and multi-family.*

The requested change in zoning would allow for an increase in density at the subject property which currently allows only one dwelling unit per acre. The proposed rezoning is more compatible with the Comprehensive Plan than the existing Agricultural zoning designation for the property.

2. Unified Development Ordinance

Section 31-403 of the Unified Development Ordinance provides a purpose statement for each zoning district to assist in evaluating the compatibility of any rezoning request. The purpose of the RLM district is to allow for low-medium density, single-family residential uses where adequate public facilities and services exist or are planned with capacity to serve development. Residential low-medium density provides a flexible minimum and maximum lot size in order to allow for market and design flexibility while preserving the neighborhood character and permitting applicants to cluster development in order to preserve environmentally sensitive land areas. RLM zoning is most appropriate for the Suburban Use District. Applicable Place Types: Traditional Neighborhood Center, Traditional Neighborhood, Suburban Neighborhood, Corridor, and Special District.

3. Adequate Public Facilities

The purpose and intent of the adequate public facilities ordinance is to ensure that public facilities are available to support new development and associated impacts and that each public facility meets or exceeds the Level of Service standards established by the 2035 Comprehensive Plan and the Unified Development Ordinance. No rezoning request or proffer amendment should be approved which would cause a reduction in the levels of service standards for any public facility impacted. The public facilities impacted by the proposed development are discussed individually below.

Public Water and Sanitary Sewer

Based on the information provided, the Department of Public Utilities has no objections to this request. A Public Facilities Report was provided and demonstrated that there is adequate water and sewer levels of service and availability.

Stormwater Management

Based on the information provided, the Department of Public Works Engineering has no objections to this rezoning. An Environmental Site Assessment and Major Water Quality Impact Assessment were provided as a part of this request.

Transportation

The applicant's Traffic Impact Study states that the proposed development is expected to generate 172 peak a.m. vehicular trips and 292 peak p.m. vehicular trips. The Department of Public Works, Traffic Engineering Division, reviewed the Traffic Impact Study (TIS) and associated voluntary proffers and found them both to be acceptable. Proffer #4, as presented, directly addresses traffic-related improvements and reads as follows:

- Proffer #4
The property owner shall make road improvements as outlined in the approved Traffic Impact Study (TIS), prepared by Charles Smith, P.E., PTOE EPR, updated June 2022. All road improvements proffered shall be completed or bonded before the first certificate of occupancy.

The improvements outlined in the Traffic Impact Study are as follows:

1. Access will be provided via two access locations on Manning Road. The northern access will be a full access with exclusive right and left turn lanes. The southern access will be a right-in / right -out access.

Schools

The subject property is currently assigned to Kilby Shores Elementary School, Forest Glen Middle School, and Lakeland High School. The developer is given credit for the school impacts that would be associated with a by-right development on the subject property. The current Agricultural zoning district could yield a total of no more than four (4) single-family detached dwelling units by-right through a minor subdivision. A development of four (4) single-family detached dwelling units would generate one (1) student at the high school, middle school, and elementary school levels. After subtracting the students that may be generated by a by-right development, the net impact of this rezoning request when subtracting the credit for the potential by-right development would be 53 elementary school students, 29 middle school students, and 39 high school students. After considering the current student enrollment, the total committed development, and the net students that are expected to be generated from the proposed development, the high school has sufficient capacity to absorb the additional students generated by this proposal; however, at the elementary and middle school, there is a deficit.

The current FY2022-2031 Capital Improvements Program in effect at the time of this application allows for cash proffers to be paid in order to advance capacity at the elementary and middle school levels. In order to properly mitigate for impacts to the elementary school levels, the applicant would need to provide a total cash contribution of \$1,902,729.25, divided by 53 elementary school students equates to a cost of \$35,900.55 per student or \$6,342.43 per housing unit. Additionally, in order to properly mitigate for impacts to the middle school level, the application would need to provide a total cash contribution of \$1,219,902.40, divided by 29 students equates to a cost of \$42,065.60 per student or \$4,066.34 per housing unit. The developer has proffered this amount as part of proffer statement #1, as shown in the attached Exhibit "B".

4. Fiscal Impact Analysis

A Fiscal Impact Analysis was submitted in support of this rezoning. The FIA states that a positive net fiscal impact of roughly \$694,000 per year is anticipated after build out.

5. **Proffered Conditions**

The applicant has proffered six conditions in support of this request. The first proffer pertains to school contributions as discussed above. The second proffer limits the development to a maximum of 300 single-family detached dwellings. Proffer #4 pertains to traffic improvements, which were outlined in the Transportation section of this report, and proffers #3, #5, and #6 pertain to building materials. Please refer to the attached proffer statement.

RECOMMENDATION

In summary, the proposed rezoning of parcels 33*75 and 33*75A from the A, Agricultural zoning district, to the RLM, Residential Low-Medium Density zoning district (Conditional), is consistent with the policies of the 2035 Comprehensive Plan. The proposed density of roughly 2.8 units per acre is expected to be compatible with the surrounding land uses. Therefore, staff recommends **approval** of Rezoning Request, RZN2022-007 (Conditional), with the proffers as submitted.

Planning Commission was scheduled to consider this application at their meeting of September 20, 2022; however, upon receipt of a request to postpone consideration of this item by the applicant, the Planning Commission voted 8-0 to amend the agenda to table this application for thirty (30) days.

Please be advised that since the September 20, 2022, Planning Commission meeting, the Planning Department has received a request from the developer to remove the application from the agenda for the upcoming October 18, 2022, Planning Commission meeting and postpone the application for consideration until the November 15, 2022, Planning Commission meeting.

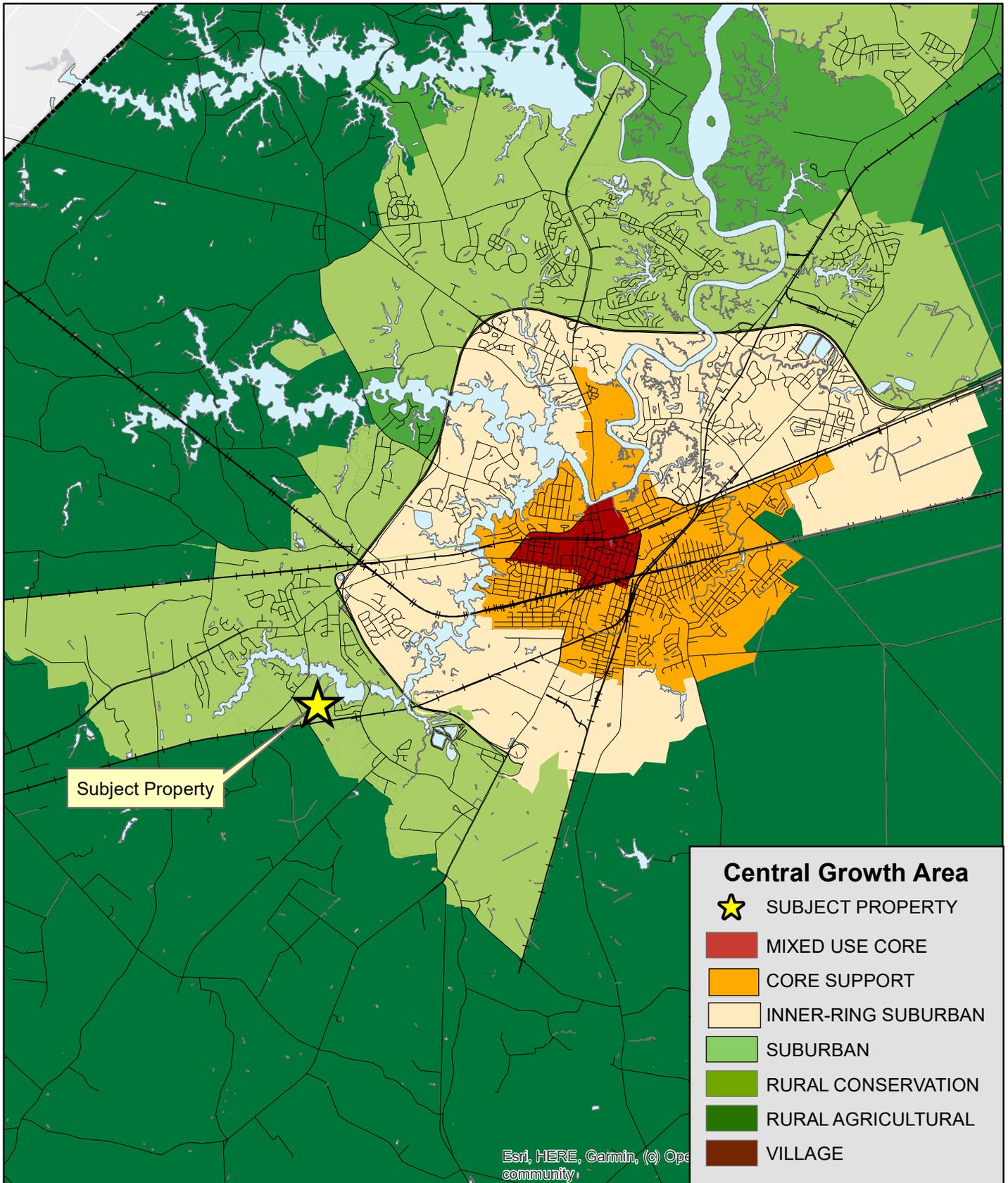
Attachments

- General Location Map
- Zoning/Land Use Map
- Request from Developer to Table Application (For October Meeting)
- Ellis Farm Subdivision (narrative)
- Ellis Farm Conceptual Master Plan
- Public Comments
- Proposed Ordinance
- Exhibit A – Planning Commission Recommendation
- Exhibit B – Voluntary Proffer Statement
- Exhibit C – Property Map
- Exhibit D – Rezoning Exhibit



GENERAL LOCATION MAP

RZN2022-007



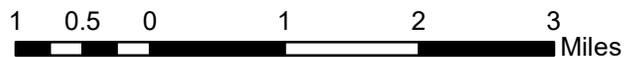
Subject Property

Central Growth Area

- ★ SUBJECT PROPERTY
- MIXED USE CORE
- CORE SUPPORT
- INNER-RING SUBURBAN
- SUBURBAN
- RURAL CONSERVATION
- RURAL AGRICULTURAL
- VILLAGE

Esri, HERE, Garmin, (c) OpenStreetMap contributors

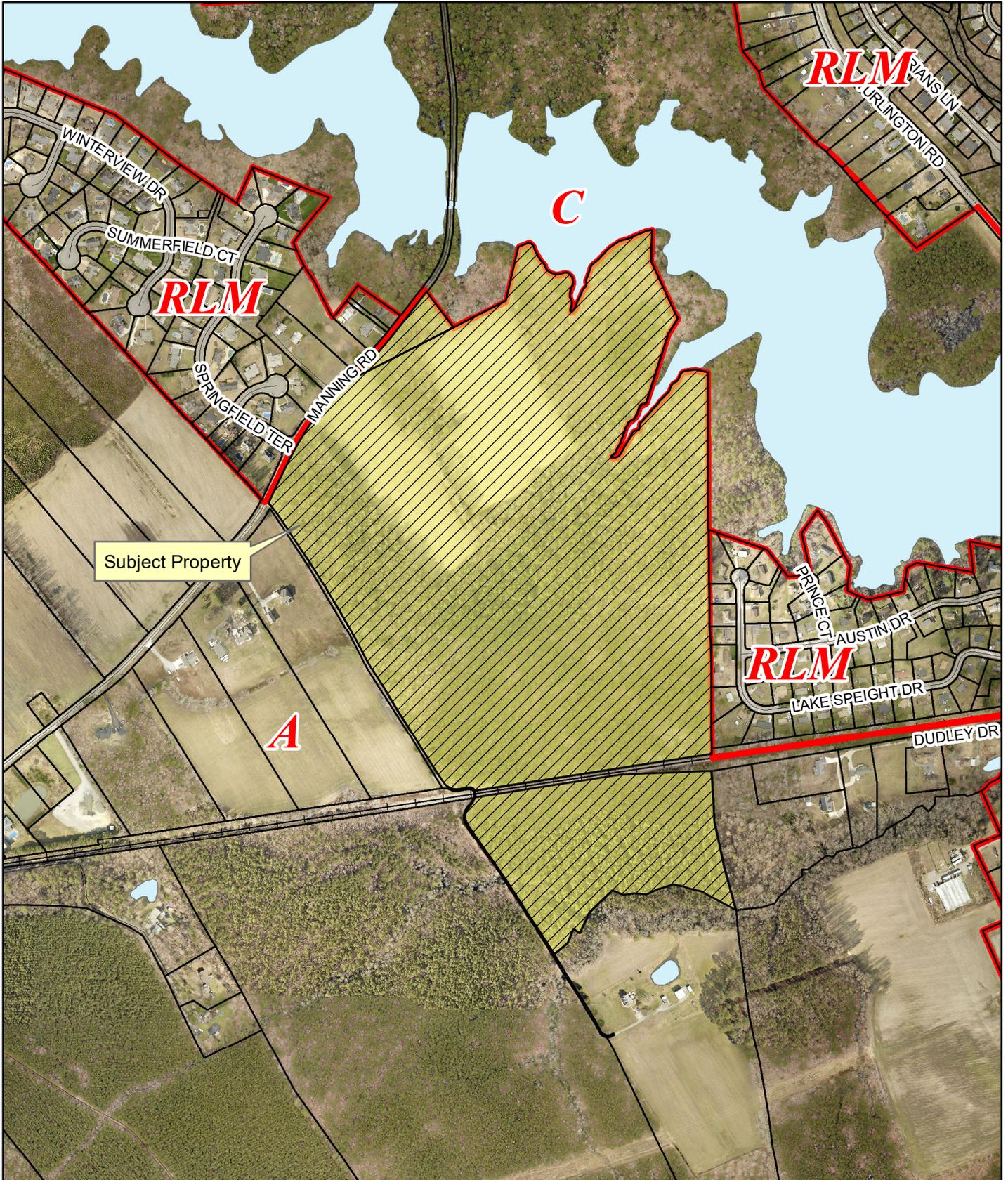
User Name: Awood
Date: 05/03/2022





ZONING / LAND USE MAP

RZN2022-007



User Name: Awood
Date: 05/03/2022



E. GRIER FERGUSON
FRANK M. RAWLS
RANDOLPH A. RAINES, JR.



EDWIN C. FERGUSON, JR.
1917-1998
J. LEWIS RAWLS, JR.
1923-1994
REBECCA R. HABEL
Of Counsel

EIN: 54-0976644

332 WEST CONSTANCE ROAD, SUFFOLK, VIRGINIA 23434

TELEPHONE: (757) 539-2400 FACSIMILE: (757) 923-1339 gferguson@frrlaw.com

October 5, 2022

Email: kwyne@suffolkva.us

Suffolk Department of Planning & Community Development

Attn: Kevin Wyne

Dear Kevin,

On behalf of Manning Road Development Group, I hereby respectfully request a postponement of the above referenced zoning issue from Tuesday, October 18th, 2022, at 2:00 p.m. to Tuesday, November 15th, 2022, at 2:00 p.m. We are requesting this postponement in order that we may have more time to address concerns with local residence as well as amend or add any proffers which we think could assist with this process. For purpose of avoiding inconvenience to other parties our preference would be to have this matter removed from the agenda on October 18th, 2022, in order that no vote is necessary, and no one needs to attend. While I do not mind attending myself, we do not wish for others who may be interested to attend simply for the purpose of hearing a matter postponed. Your attention and assistance in this matter is greatly appreciated.

Thanking you, I look forward to your response. I am

Yours Truly,

E. Grier Ferguson

cc: Bob Arnette (bobarnette@coastalva.org)

ELLIS FARM – MANNING ROAD

2) Narrative of Proposed Uses – 7/29/2022

Manning Road Development Group, L.L.C., the Applicant for RZN2022-000, proposes revision of the subject parcels comprising approximately 114 acres, to Residential Light Medium (RLM) zoning.

The parcels are bounded on the west by property zoned (A) Agricultural, on the north by properties zoned (RLM) Residential Light Medium, on the east by properties zoned (RLM) Residential Light Medium, and on the south by property zoned (A) Agricultural. Several hundred feet of the subject property borders on Lake Kilby, with the City of Portsmouth owning lengths of shoreline.

The Applicant requests amendment of the existing zoning for both parcels to RLM (Residential Light Medium). The proposed RLM zoning allows 2.9 dwelling units per acre where adequate public facilities are available, as is the case along Manning Road. As is indicated in the purpose statement for RLM zoning, the district is designed to allow for development of single family detached dwellings. The proposed project will consist of approximately 300 single family detached dwellings and community amenities such as (but not limited to) parks, common area open spaces, and a walking trail.

ELLIS FARM MANNING RD REZONING

3) Statement of the reasons for seeking such amendment and why the current zoning is incorrect:

The parcels which are the subject of this rezoning are in the Suburban Use District as defined by the City of Suffolk 2035 Comprehensive Plan and should be primarily composed of traditional residential subdivisions (p26). Applicable place types are the Traditional Neighborhood and the Suburban Neighborhood (p26). The proposed neighborhood will contribute to the need for varied housing types proximate to a major employment center and downtown Suffolk and will consist of single family detached homes. Suburban Neighborhoods by definition include public spaces such as parks, playgrounds, and schoolyards (pgs33, 60-62). RLM zoning fits within the Suburban Neighborhood place type (UDO A4 SEC 31-404). Shown in the conceptual plan, and defining of the Suburban Neighborhood place type, the lot configuration, streetscapes with public spaces, and consistent but flexible product type have all been taken into account to fit the vision for the future of Suffolk (pgs33, 60-62).

THEMES POLICIES & ACTIONS (p29)

Policy 2-1: Keep development focused in designated Growth Areas in the City.

- Action 2-1A: Ensure that the City's land use regulations support higher density/intensity development in focused Growth Areas.
- Action 2-1D: Consider amending the City's land use regulations to add guidelines for the review of exceptional development opportunities related to factors such as: the level of overall economic benefit to the City; adequacy of public facilities; compatibility with surrounding land uses; and advancement of the principles, values, and themes of the 2035 Comprehensive Plan.

Policy 2-2: Assure that development occurs in a predictable and orderly manner.

- Assess the City's zoning framework to identify locations where the City's current regulations do not reinforce the intent and spirit of the comprehensive plan, particularly for locations within the Growth Areas.

Policy 2-4: Promote compatibility in land use patterns.

- Action 2-4D: Consider allowing higher density residential development than that prescribed in the 2035 Comprehensive Plan in certain areas of the Suburban Use District where transportation corridors and infrastructure are already established and where the proposed use is compatible with adjacent uses and the established development pattern.

UDO ARTICLE 4 SEC. 31-403 RELATION OF ZONING DISTRICTS TO THE COMPREHENSIVE PLAN AND PURPOSE STATEMENTS

RLM (RESIDENTIAL LOW-MEDIUM DENSITY). {shortened} To provide areas for low-medium density, single-family residential uses {...}. Residential low-medium density provides a flexible minimum and maximum lot size in order to allow for market and design flexibility while preserving the neighborhood character {...}. ***RLM zoning is most appropriate for the Suburban Use District.*** Applicable Place Types***: Traditional Neighborhood Center, Traditional Neighborhood, Suburban Neighborhood, Corridor, and Special District.

***Note: Design elements of residential place types other than Suburban Neighborhood lend to higher density projects (shorter setbacks, alley loading single family detached products, and block site patterns; pgs44-65 "Place Types; Implementation Guidelines")

WHY THE CURRENT ZONING IS INCORRECT

Holland Road and its intersection with Manning Road are currently the subject of a 3.1 mile widening project on Route 58 / Holland Road Corridor, a government funded project which will dramatically improve traffic flows in this transportation thoroughfare including signalization at this intersection. This project supports the primary City theme to keep rezonings within its specified focused growth area, encouraging predictable and orderly development in residential areas with an auto-orientation. Additionally, location of residential housing near attractive family centers such as

the Downtown area, jobs at the intermodal commerce park, and schools further Suffolk's goals to limit by colocation of home, work and service areas. Almost three quarters of Suffolk's housing stock is in excess of 20 years old (p153). As the City has provided assistance in bringing business and jobs to the City, we are seeking to satisfy the parallel demand for housing this influx of taxpayers. In review of commercial and residential realty marketing and promotional materials, as well as discussing with those realtors, the major component missing in the immediate area that everyone is seeking are diverse housing options for clients. "{Suburban Neighborhoods} may abut Suburban Centers, other Neighborhoods, or farmland, and major thoroughfares often define their edges.(p60)" Given the immediately adjacent land use, this new neighborhood will be compatible with existing zoning, consistent with the City's focused growth theme and its policy of efficient land use.

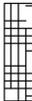
**CONCEPTUAL MASTER PLAN
CLUSTER LAYOUT**

SITE DATA:
 SINGLE FAMILY LOTS (60'x120' LOTS)
 TOTAL LOTS: 300
 TOTAL SITE AC: 114.4 AC
 TOTAL CRITICAL AC: 8.5 AC
 TOTAL DEVELOPABLE AC: 105.9 AC

RLM DUA: 2.9
 PROPOSED DUA: 2.8

REQUIRED OPEN SPACE: 51.5 AC (45%)
 PROPOSED OPEN SPACE: 44.6 AC
 OPEN SPACE FROM CRITICAL AREA: 6.9 AC
 TOTAL PROPOSED OPEN SPACE: 51.5 AC (45%)

SWM: 4.2 AC
 IMPACTED WETLANDS: 0.29 AC

	OPEN SPACE
	WETLANDS
	IMPACTED WETLANDS



**PUBLIC COMMENTS
FOR
RZN2022-007**

Brittany A. Colyer

From: Eryn S <erynsiegel@gmail.com>
Sent: Monday, September 19, 2022 1:44 PM
To: Brittany A. Colyer
Cc: Amy L. Bocchicchio
Subject: [EXTERNAL] Re: Ellis Farm Project - Rezoning

Caution: This email originated from a source outside of the **City of Suffolk**. Do not click on links or open attachments unless you recognize the sender and you know the content is safe.

Suffolk Planning Commission
City of Suffolk, Virginia

Re: Ellis Farm Project - Rezoning

Dear Ms. Coyler,

I represent a group of community members from Manning Road, its surrounding areas, and residents of the City of Suffolk who oppose the rezoning of the Ellis Farm.

We have four individuals prepared to speak on our behalf at the Planning Commission meeting on Tuesday, September 20, 2022. In addition to the speeches they will deliver, we have some documentation that we would like included and made available to the Planning Commission. We have included the information with this email. We would be very appreciative if you could please make sure it is made available.

Thank you for your time and assistance.



Sincerely,
Eryn Siegel
123 Springfield Terrace
erynsiegel@gmail.com
(585) 820-4310

Link to [Google Drive](#) with documentation.
Additionally, I have attached the documentation as a zip file.

Please let me know if you have any difficulty accessing the information.

Chapter 3: Land Use and Growth Management

1. Introduction

The key smart growth principal on which both the 2018 Comprehensive Plan and this update are founded is to manage and direct growth towards existing communities. Since its adoption, the 2018 Comprehensive Plan has been very successful at providing a basis for controlling the previously sprawling landscape of the City. The 2018 plan, as shown in Figure 3-1, identified two areas of the city designated as Suburban/Urban Growth Areas: one in the north and the other in the center. The central growth area is focused around the historic core city, and the northern growth is focused around major transportation routes. By accommodating development, the primary role of these growth areas is to provide a focus for development, reduce sprawl pressures in the rest of the City and provide for more efficient and effective delivery of city services. By accommodating growth in two discrete areas, one strategy of the Plan included reducing development pressures in southern areas and as a result, preserving much of the City's rural character.

In addition to the two growth areas, a key component of the 2018 Plan's growth management strategy was to designate a third large area of the City as a rural conservation / low density residential area. This area allows a lower density of residential development that was designed as a method of protecting the region's water supply reser-

voirs that Suffolk hosts. Three key rural villages (Holland, Whaleyville, and Chuckatuck) have been designated to provide some growth outside of the urban/suburban area. The remainder of the City was designated as an agricultural/conservation area with limited residential development potential. To a large degree, all of these goals have been successfully achieved and are continued under the 2026 Comprehensive Plan.

Since the 2018 plan was implemented, more than 80% of the City's growth has occurred in the two Suburban/Urban Growth Areas. This growth has been effectively balanced between the northern and central growth areas. Minor subdivisions and family transfers are continuing, allowing some new residential growth in the agricultural district.

As shown in Table 3-1, there are approximately 5,000 residential units in Suffolk's development pipeline. The pipeline consists of developments that have received some form of government approval but have not yet been constructed. Furthermore, based on existing zoning designations, the remaining vacant residentially zoned land in the City of Suffolk has the capacity for approximately 14,000 additional homes. Homes in Suffolk are presently being constructed at a rate of nearly 1,000 per year (Figure 3-2). This rate of residential growth in the City exceeds the 2018

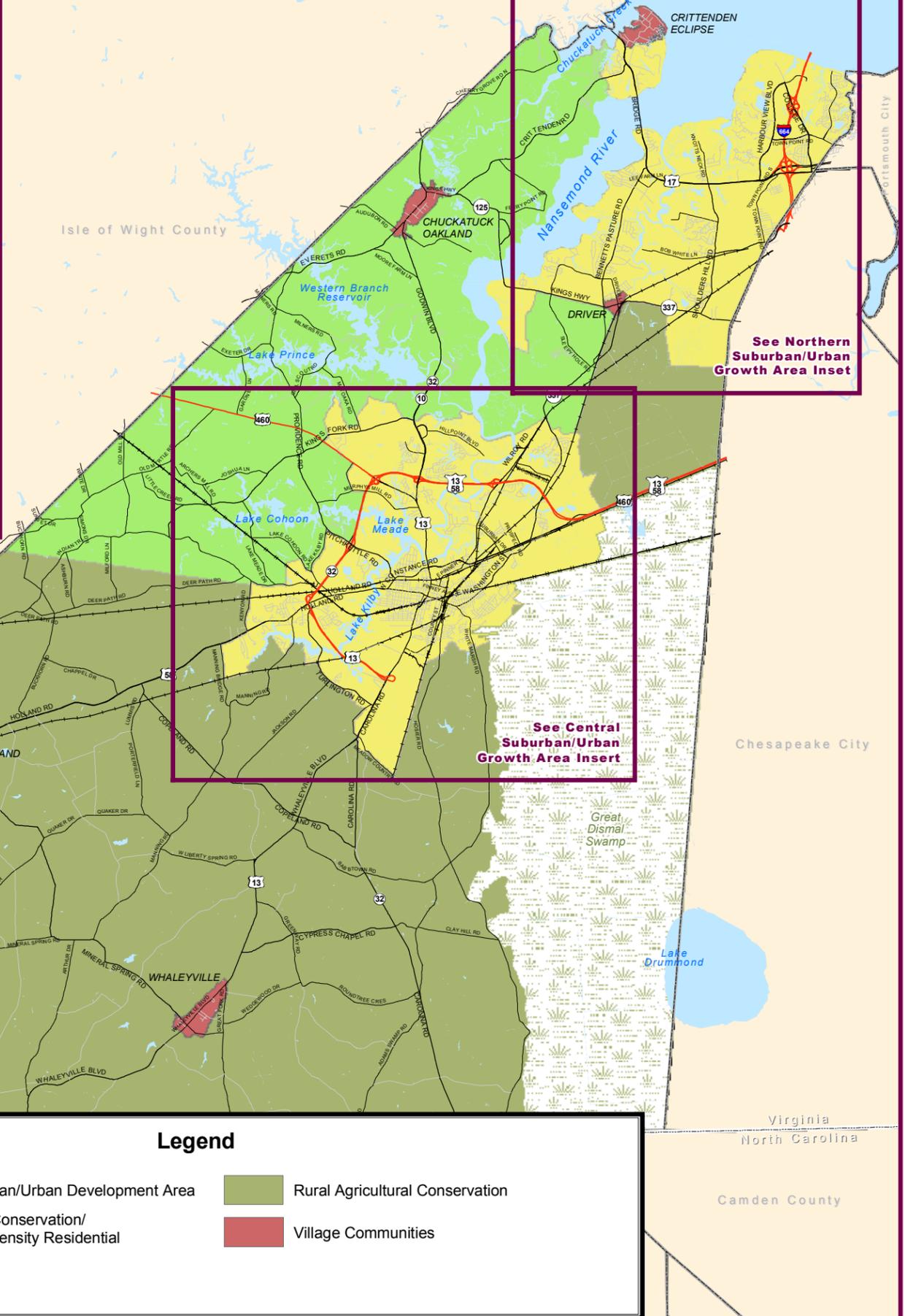
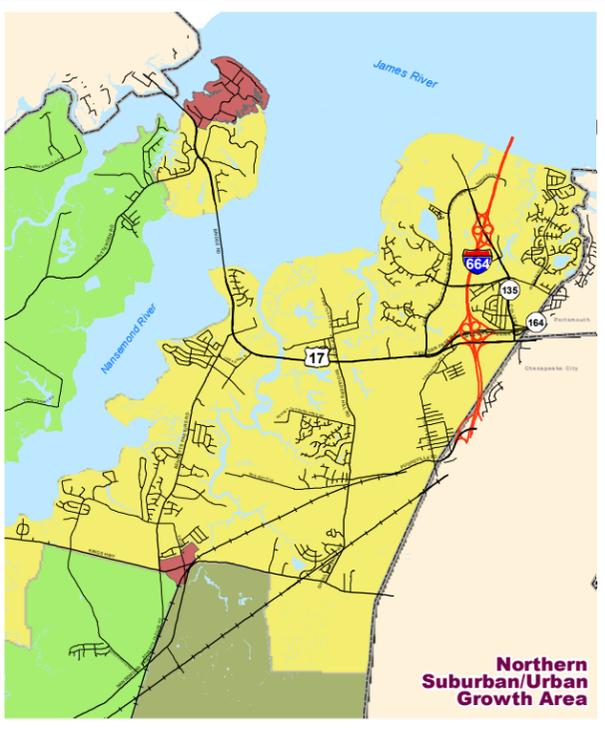
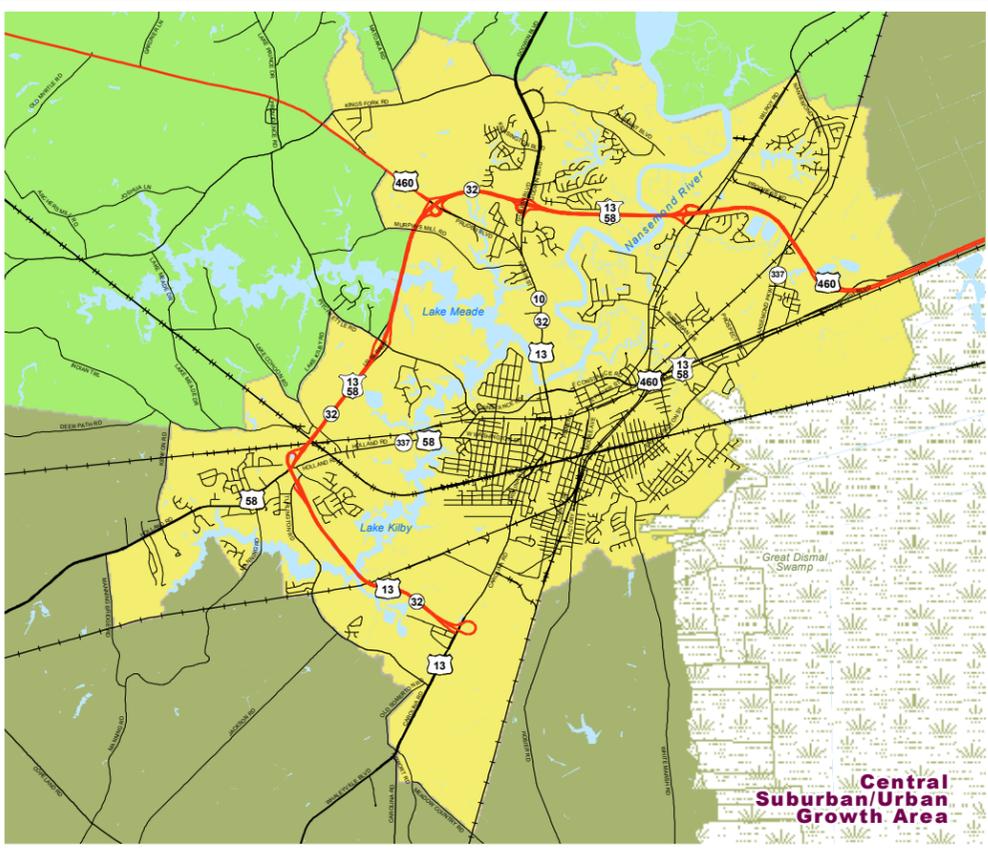
The 2018 Comprehensive Plan has been very successful at controlling the development pattern in the City of Suffolk ...

Plan's desired goal by 200 to 300 housing units per year.

Other goals included in the 2018 plan, such as balancing employment growth with residential development and expanding the commercial tax base relative to the residential tax base, have been on or near target since the plan's adoption. These indicators signify that from an economic and fiscal perspective, the rate of overall growth has been sustainable and has not been beyond the City's ability to adapt and accommodate.

While the 2018 Plan's growth management strategies have been very successful in containing and controlling development, the City's land resources within the Suburban/Urban Growth Area continue to be absorbed at a rapid rate.

Table 3-2 and Figure 3-3 show the distribution of existing zoning categories in the City. The 2018 plan, while designating areas for growth, did not provide significant guidance on how those growth areas should develop over time. What has resulted is the development of high-quality, attractive, single family neighborhoods, with relatively low density. Residential property values have increased rapidly, creating enormous equity in the market. However, rapid, low density growth has resulted in numerous challenges, including increasing traffic congestion, rapid demand for new schools, and decreasing opportunities to provide housing for a mix of incomes because of rising land costs. Figure 3-4 shows the location of the remaining residentially zoned land.



Legend

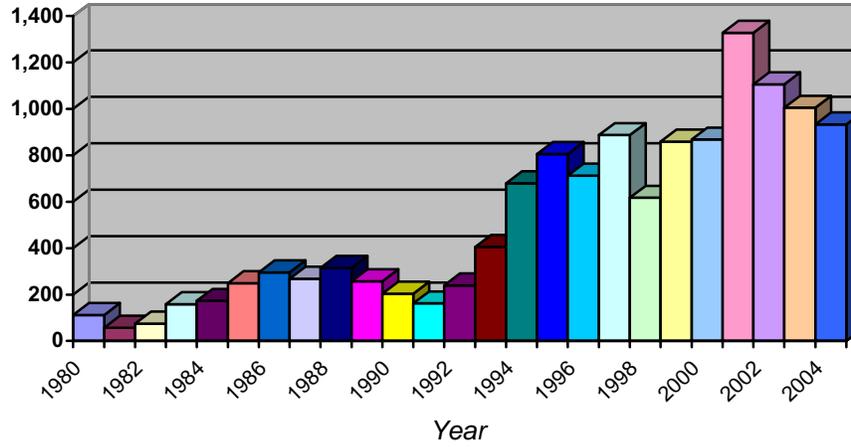
 Suburban/Urban Development Area	 Rural Agricultural Conservation
 Rural Conservation/ Low Intensity Residential	 Village Communities



City of Suffolk, Virginia
2026 Comprehensive Plan
2018 Comprehensive Plan
Development Areas



**Figure 3-2
Single Family Residential Units/Year
Development Activity
1980-2004**

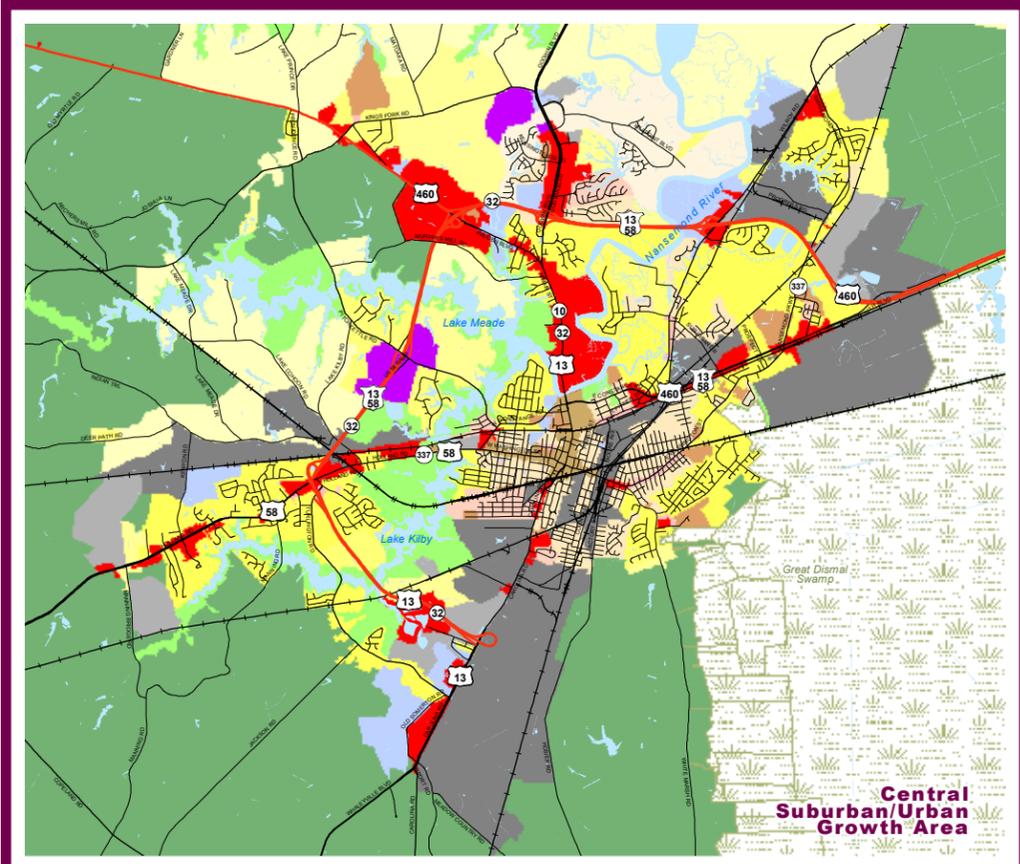


Source: City of Suffolk, 2005

**Table 3-1
Summary of Approved / Pipeline Residential Development
As of August 2005
(Not Built)**

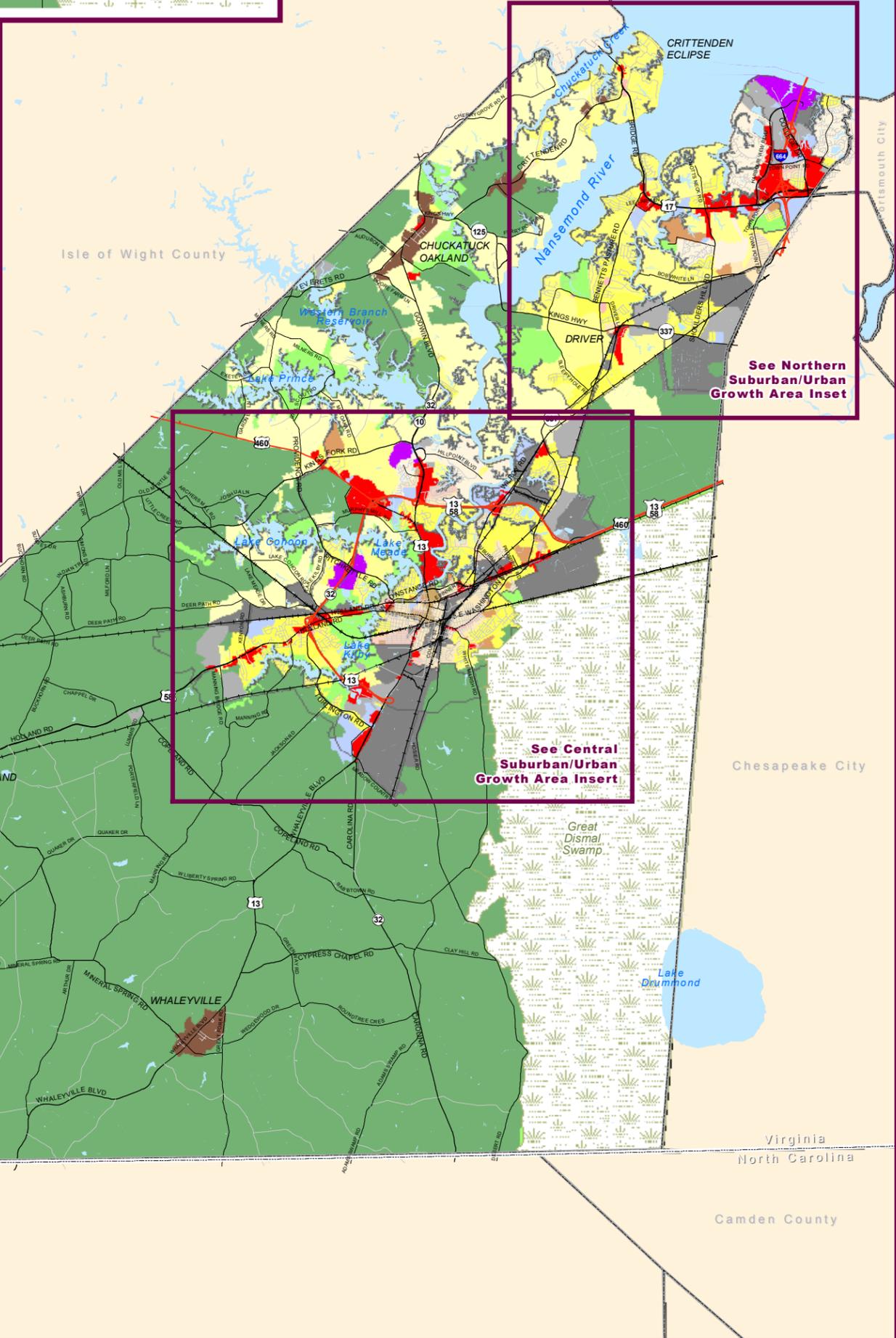
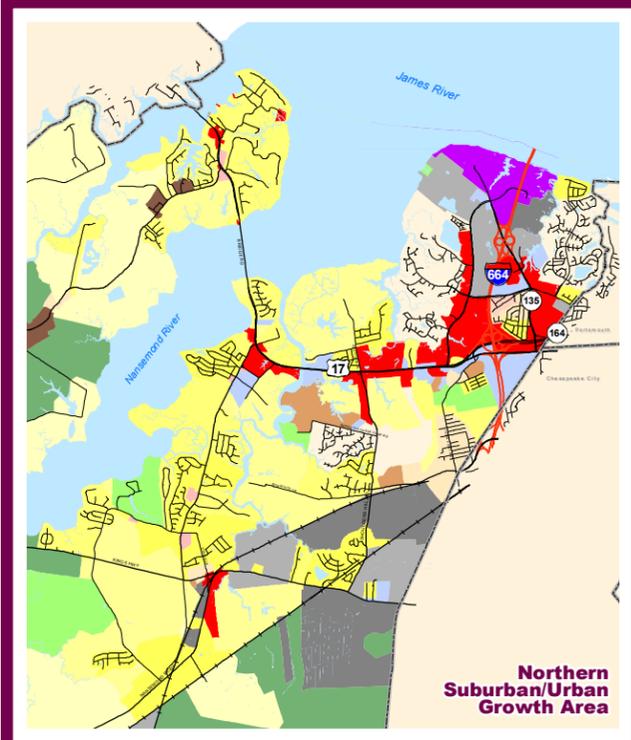
Type of Unit	Approved Residential Units	Developed Residential Units
Multi-Family	1,861	1,136
Retirement / Age Restricted Multi-Family	418	150
Single Family Detached	7,670	4,081
Single Family Semi-Attached	1,227	626
Total	11,176	5,993
Approved Pipeline Residential Units	5,183	

Source: City of Suffolk, 2005



Existing Zoning Categories

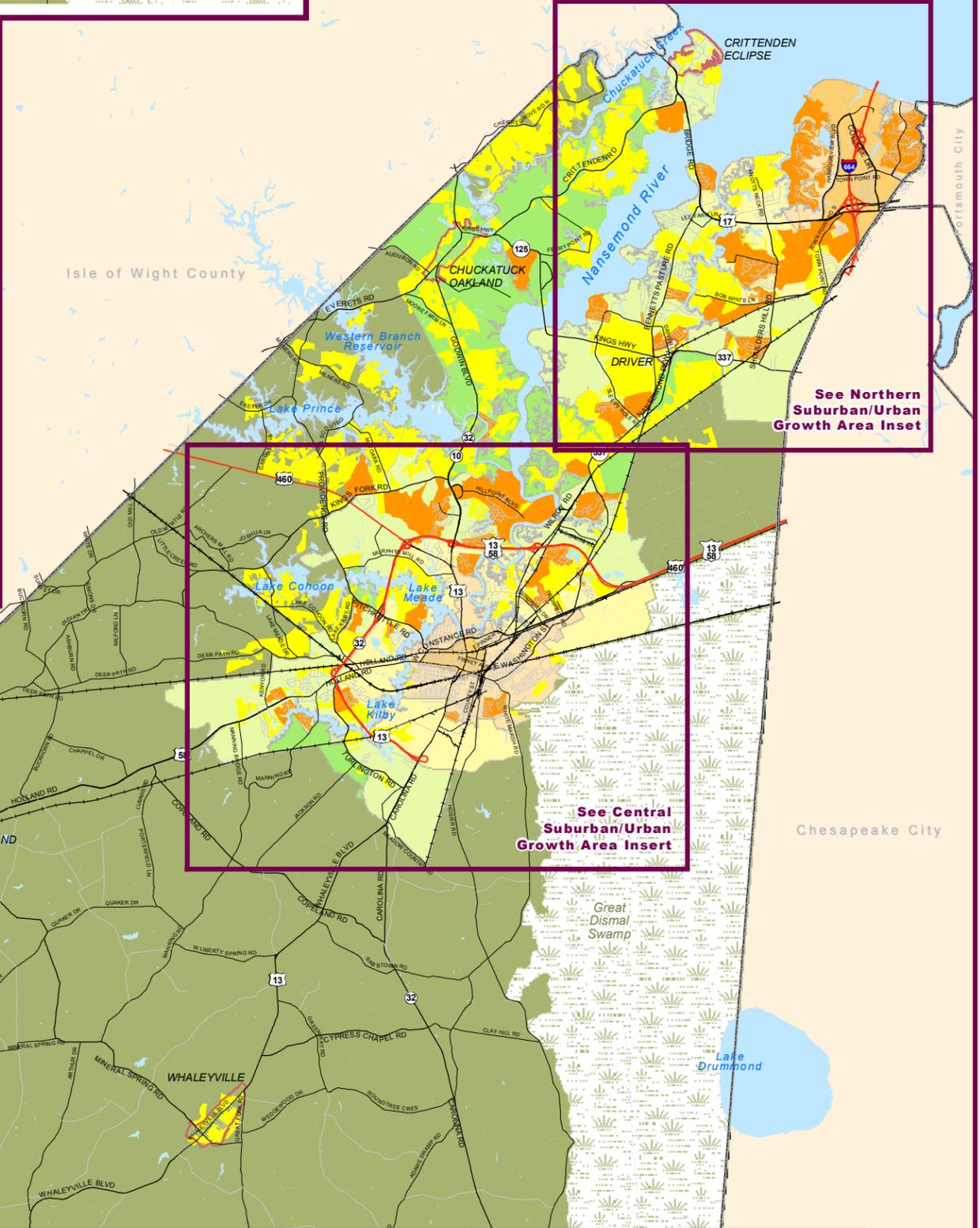
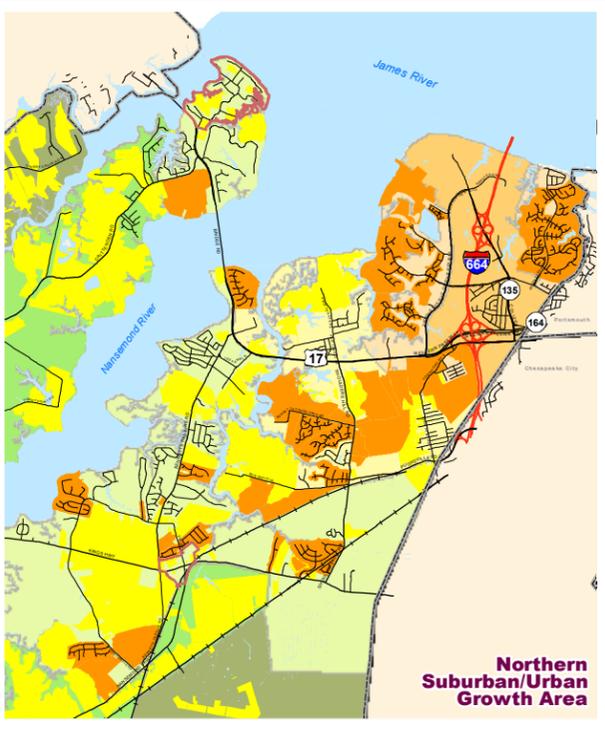
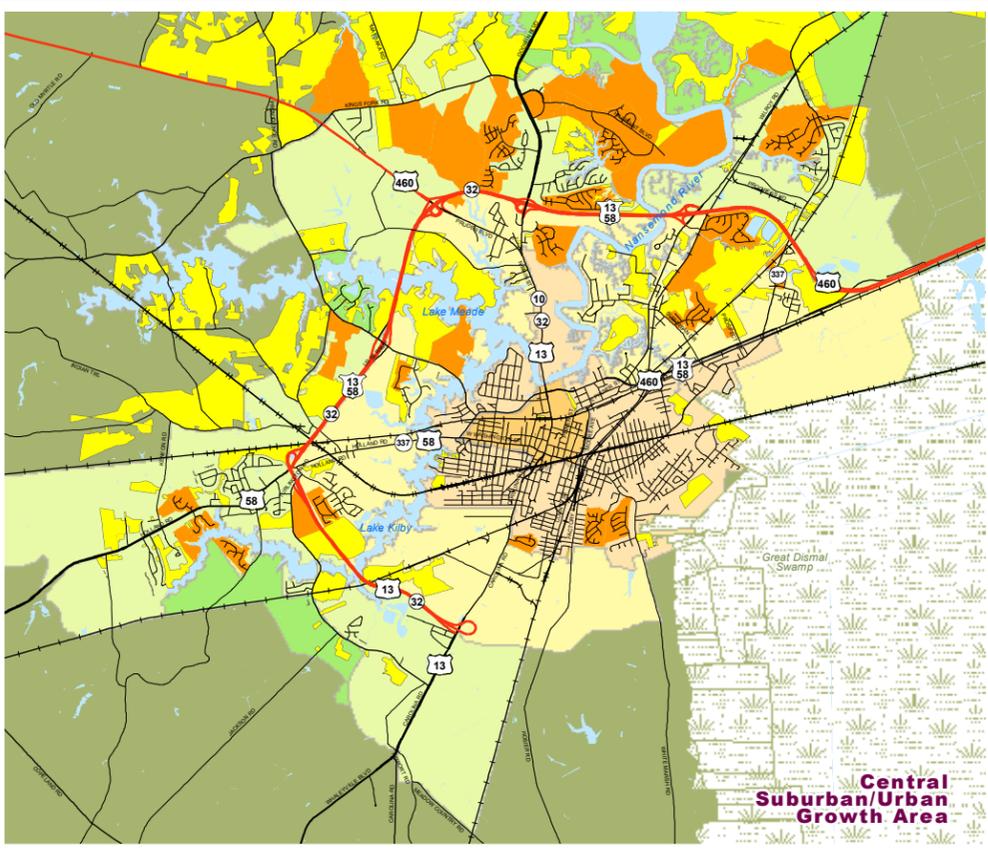
	Rural Estate District - RE		General Commercial District - B2
	Rural Resident District - RR		Commerce Park - CP
	Residential Low District - RL		Village Center District - VC
	Residential Low-Medium District - RLM		Central Business District - CBD
	Residential Medium District - RM		Light Industrial District - M1
	Residential Compact - RC		Heavy Industrial District - M2
	Residential Urban - RU		Conservation District - C
	Office-Institutional District - O/I		Agricultural District - A
	Neighborhood Commercial District - B1		



City of Suffolk, Virginia
 2026 Comprehensive Plan
Existing Zoning Categories

0 3
Miles

URS
Figure 3-3



Legend			
	Vacant Land Zoned for Residential Development (2004)		Rural Conservation/ Low Intensity Residential
	Land Currently in the Residential Development Pipeline		Inner-Ring Suburban
	Mixed Use Core		Suburban
			Rural Agricultural Conservation
			Village Boundaries



City of Suffolk, Virginia
2026 Comprehensive Plan
Undeveloped Residential Land (2004)



**Table 3-2
Land Area by Zoning District
2018 Land Use Plan**

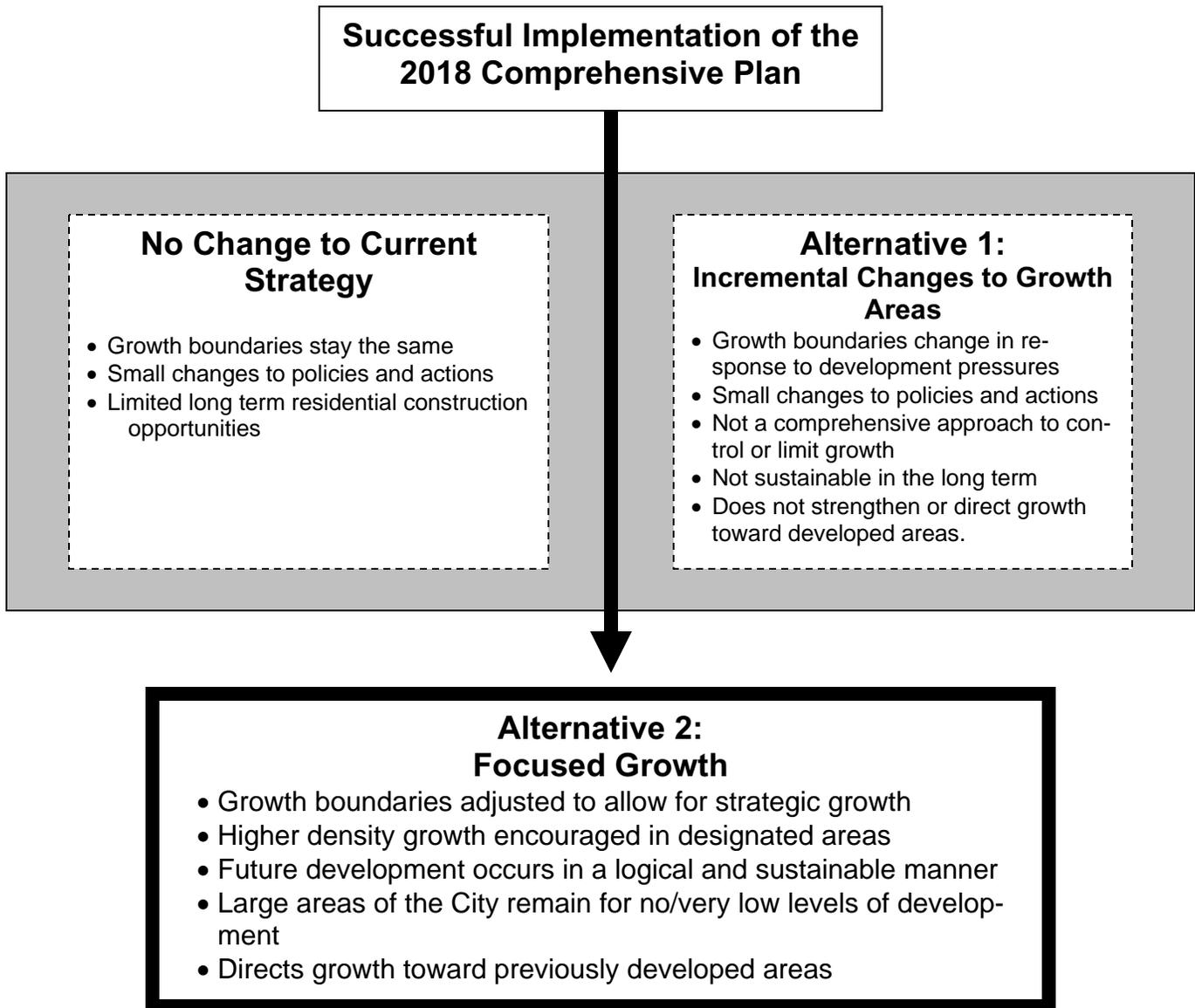
Zone	Name	Acres	% of Total
A	Agricultural District	163,248.3	59.4%
C	Conservation District	41,691.8	15.2%
RR	Rural Residential District	7,950.2	2.9%
RE	Rural Estate District	16,751.0	6.1%
RL	Residential Low District	7,597.4	2.8%
RLM	Residential Low-Medium District	8,619.2	3.1%
RM	Residential Medium District	2,185.0	0.8%
RC	Residential Compact	416.6	0.2%
RU	Residential Urban	778.2	0.3%
B-1	Neighborhood Commercial District	165.1	0.1%
B-2	General Commercial District	3,417.2	1.2%
CBD	Central Business District	245.8	0.1%
VC I	Village Center District	1,322.6	0.5%
O-I	Office-Institutional District	1,612.0	0.6%
CP	Commerce Park	4,737.9	1.7%
M-1	Light Industrial District	3,291.4	1.2%
M-2	Heavy Industrial District	7,316.3	2.7%
PD	Planned Development Overlay District	3,332.6	1.2%

*Source: City of Suffolk Geographic Information System, 2005
Compiled by: URS Corp., 2005*

2. Differing Approaches to Growth Management

As part of the 2018 Plan review and update process, the City of Suffolk evaluated the impacts of the current growth management strategies, as well as two alternative potential future growth patterns. Each of the alternative future growth frameworks that were examined recognized the strengths of the existing

plan and built upon them. Key to each framework was continuing the 2018 Plan's concept of two Suburban/Urban Growth Areas. After careful consideration, alternative framework 2, **Focused Growth**, was selected as the preferred alternative, and it serves as the basis of this review and update.



3. A Revised Growth Strategy: *Focused Growth*

The focused growth concept is based on the way in which cities historically have developed. By establishing a range of development densities and uses in relation to a central core, the concept models the pattern exhibited by dynamic and successful urban places. Cities evolved as centers of culture, trade and commerce. Mixed-use centers with business and residential areas in close proximity were and remain the hallmark of older urban places. Cities like New York, Philadelphia, Norfolk, and the historic downtown core of Suffolk have this quality. Urban form was compact—allowing people to walk to work, shop, and play close to where they lived.

Over time, especially in the post World War II-era, improvements in personal mobility have allowed for more dispersed urban areas. Core areas no longer needed to be diverse live/work centers. Cities spread out and large suburbs developed.

This auto-oriented form is the dominant pattern the City of Suffolk exhibits today. Long term trends in land development point toward the continued development of single-family residential subdivisions. However, as shown in the tables in the previous sections, this pattern is not sustainable. It is the purpose of the comprehensive plan to provide a framework for the City to move to a more sustainable development pattern.

While the 2018 Plan has been successful in controlling sprawl and reducing the pressure for development in rural areas of the City, it has been somewhat limited in defining the quality and type of development options within the two growth

areas. As a result, the City has been unable to target policies within the growth areas that would encourage development at specific locations that would be consistent with the City's goals. By providing a more detailed range of development types and locations, the focused growth framework is the next logical step in advancing the comprehensive plan.

The key concept behind the focused growth approach is an emphasis on using the City's existing development orientation as a transportation hub and its historic urban form as the basis for revising use patterns and densities. The highest densities are located in the middle of the growth area and the mix and density of uses decreases the further one travels from the central district. In

this way, a wider variety of uses from urban through rural can be located and accommodated.

Various types of land uses are designated in specified Use Districts that are generally located in concentric bands surrounding the central district, and the transition from one Use District to the next is based on increments of travel time and distance. This approach allows the City to include new use types and densities in a coordinated manner while still generally maintaining the current growth area boundaries.

One of the most important goals of the focused growth framework is to allow for development and redevelopment in areas of the City that are already experiencing growth. By providing density within the central Suburban/Urban Growth Area in and around the historic core of the City, the focused growth

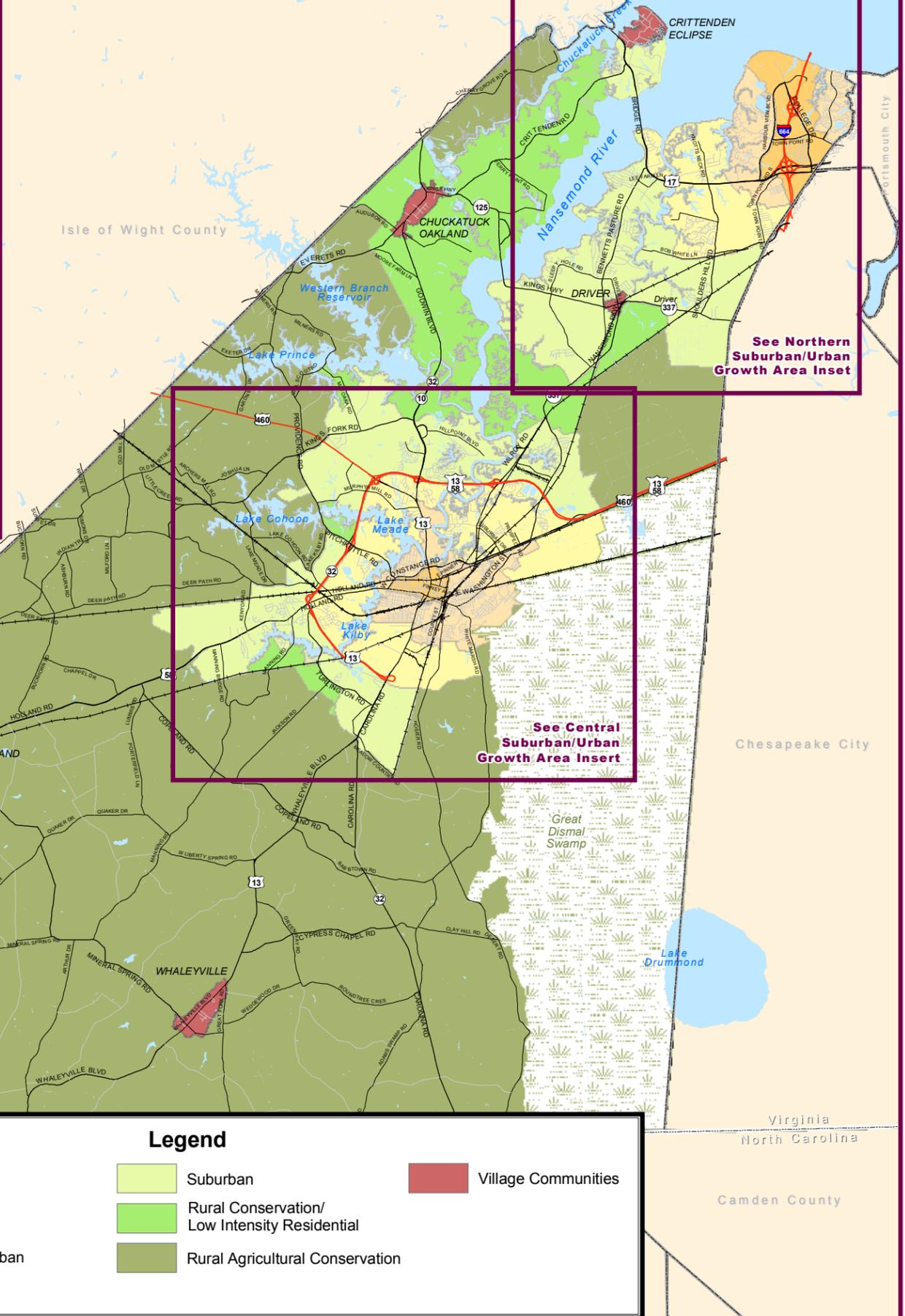
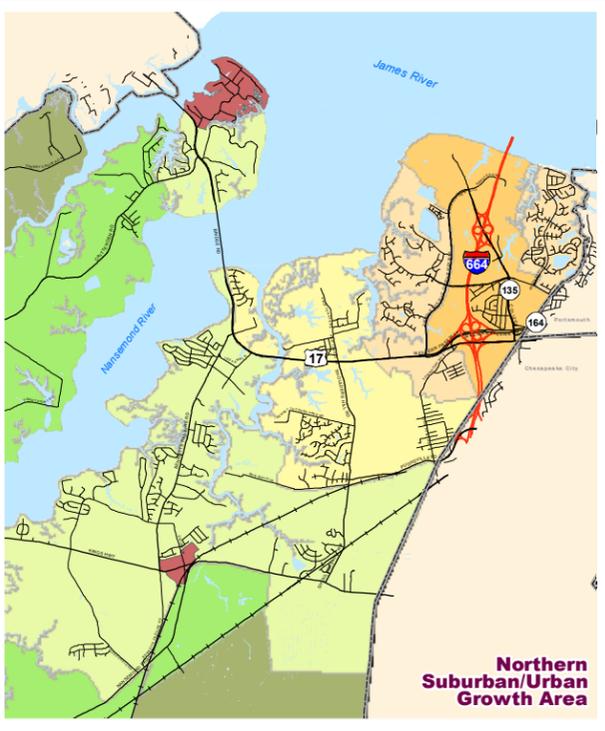
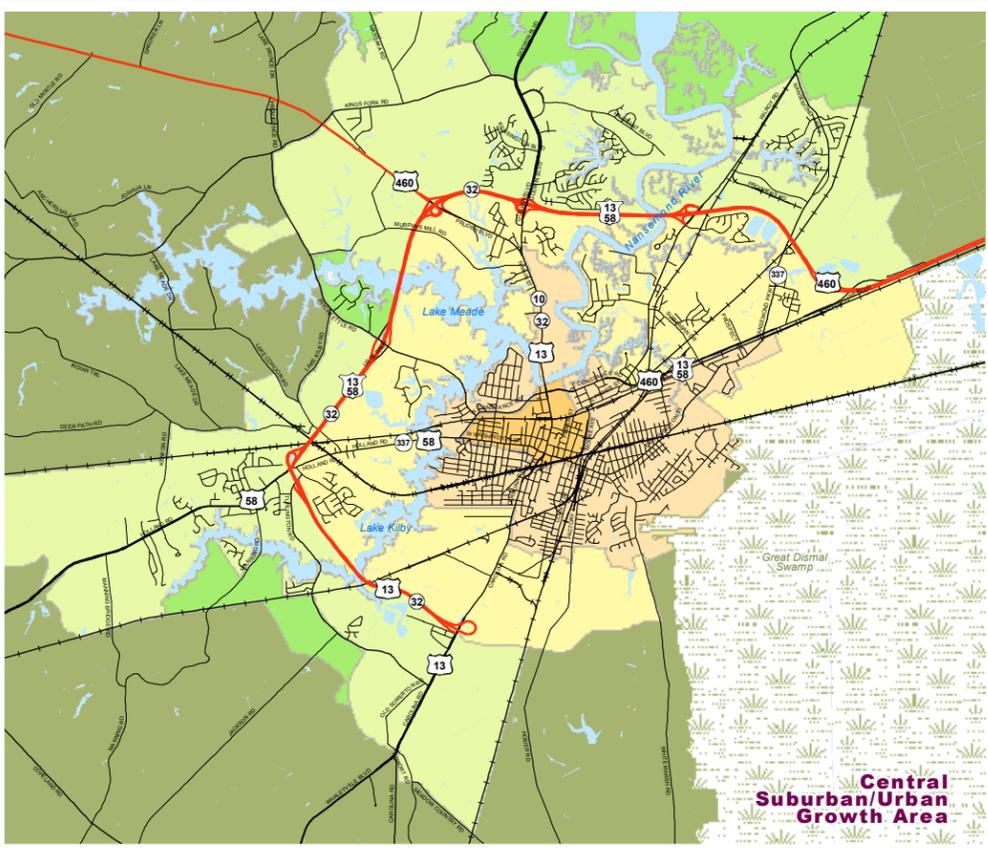
The focused growth framework is the next logical step in the development of the City of Suffolk.

framework will encourage more activity there, raising property values and encouraging further investment and redevelopment. The Northern Suburban/Urban Growth Area focuses development on the I-664 corridor and its successful high technology base.

The focused growth framework conversely discourages, or limits development in undeveloped areas of the City, areas of the City that are environmentally sensitive (such as the areas surrounding the regional water reservoirs), areas of prime farmland, and areas supporting the Great Dismal Swamp. These areas are protected and preserved, while other, less environmentally sensitive area are allowed to continue to grow. Limited residential and retail growth is targeted for these areas

in the existing rural villages of Whaleyville, Holland, and Chuckatuck.

Figure 3-5 shows the proposed growth districts for the City of Suffolk with detail of the Central Suburban/Urban Growth Area in Figure 3-6 and the Northern Suburban/Urban Growth Areas in Figure 3-7. As shown in Table 3-3, there are approximately 42,000 acres of land in the two designated growth areas -- 22,800 in the Central, and 18,800 in the Northern. Of this, as shown in Table 3-4, approximately 19,000 acres remains available for development. This accounts for approximately 11% of the total developable land area of the City. Table 3-5 provides a summary of the projected rate of growth over the twenty year horizon of the *Comprehensive Plan for 2026*.



Legend		
	Mixed Use Core	
	Core Support	
	Inner-Ring Suburban	

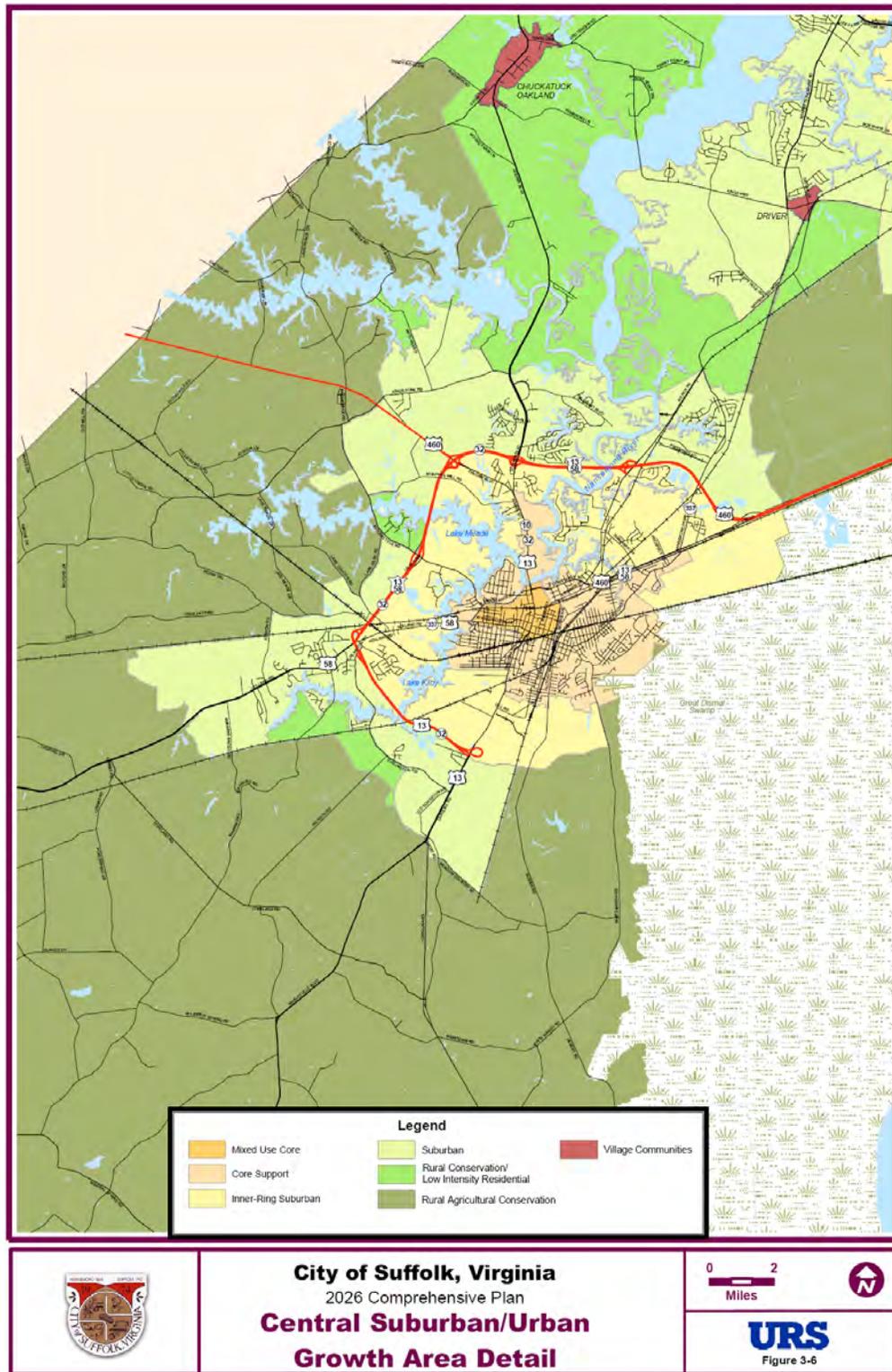


City of Suffolk, Virginia
2026 Comprehensive Plan

Focused Growth Areas

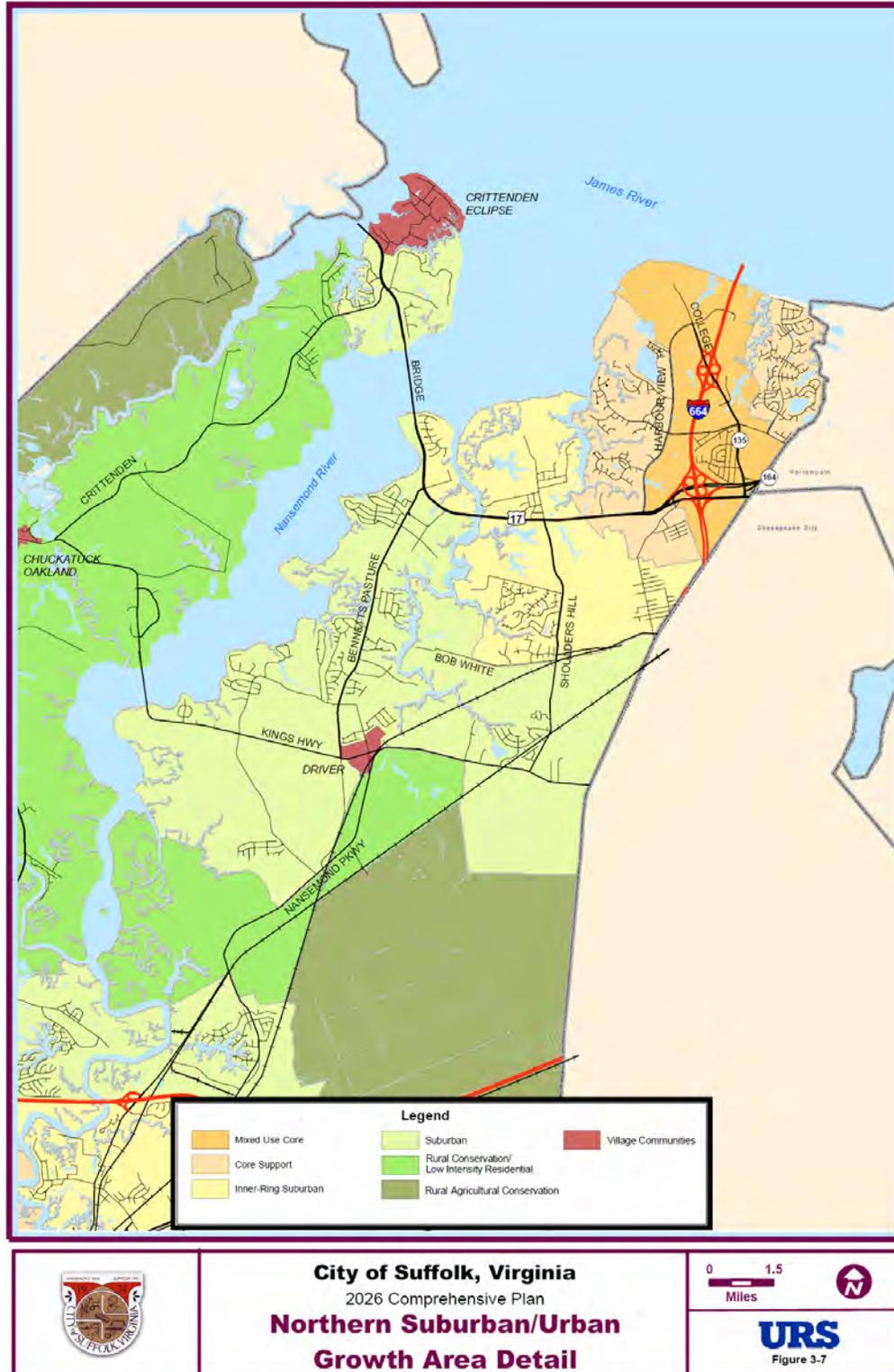


Figure 3-6
Central Suburban/Urban Growth Area Detail



Data Source: City of Suffolk GIS, 2005
Compiled by: URS Corp., 2006

Figure 3-7
Northern Suburban/Urban Growth Area Detail



Data Source: City of Suffolk GIS, 2005
Compiled by: URS Corp., 2006

**Table 3-3
Use District Distribution
Focused Growth Framework**

Growth Area	District	Total Area		
		Acres	% of District	% of Total
Central	Core	460.5	1.71%	0.2%
	Core Support	3,589.2	13.36%	1.4%
	Inner-Ring Suburban	8,133.0	30.26%	3.2%
	Suburban	14,690.4	54.67%	5.7%
Total Central		26,873.1	100.00%	10.5%
Northern	Core	2,313.6	12.27%	0.9%
	Core Support	2,325.8	12.33%	0.9%
	Inner-Ring Suburban	3,601.2	19.10%	1.4%
	Suburban	10,618.5	56.30%	4.1%
Total Northern		18,859.2	100.00%	7.3%
Rural Conservation/Low Intensity Residential		14,573.5	n/a	5.7%
Rural Agricultural Conservation Area		196,820.3	n/a	76.5%
Total		257,126.0		100.0%

Source: URS Corp., 2006

**Table 3-4
Remaining Developable Land
Focused Growth Framework**

Growth Area	District	Acres	% of Growth Area	% of District	% of City-wide Total
Central	Core	78.3	17.0%	0.66%	0.04%
	Core Support	724.4	20.2%	6.08%	0.40%
	Inner-Ring Suburban	5,190.7	63.8%	43.55%	2.84%
	Suburban	5,926.5	40.3%	49.72%	3.24%
Total Central		11,919.9	44.4%	100.00%	6.51%
Northern	Core	695.7	30.1%	7.73%	0.38%
	Core Support	529.9	22.8%	5.89%	0.29%
	Inner-Ring Suburban	1,627.3	45.2%	18.07%	0.89%
	Suburban	6,150.5	57.9%	68.31%	3.36%
Total Northern		9,003.5	47.7%	100.00%	4.92%
Rural Conservation/Low Intensity Residential		11,839.2	81.2%	n/a	6.47%
Rural Agricultural Conservation Area		141,238.5	71.8%	n/a	77.18%
Total		183,004.5			100.00%

Source: URS Corp., 2006

**Table 3-5
Summary of Total Projected Growth
Focused Growth Framework**

Growth Area	District	Plan Year 1-5				Plan Year 6-10				Plan Year 11-20			
		Housing Units	Population	School Children	Employment	Housing Units	Population	School Children	Employment	Housing Units	Population	School Children	Employment
Central	Core	65	131	33	260	90	180	45	361	245	491	123	913
	Core Support	420	841	210	820	467	934	234	1,141	1,121	2,242	560	2,882
	Inner-Ring Suburban	645	1,710	323	1,881	615	1,629	307	2,617	1,168	3,095	584	6,611
	Suburban	675	1,891	338	1,796	642	1,797	321	2,499	1,216	3,404	608	6,312
Total Central		1,807	4,573	904	4,756	1,813	4,540	907	6,618	3,750	9,232	1,875	16,718
Northern	Core	414	828	207	3,741	607	1,214	304	5,205	1,656	3,311	828	13,148
	Core Support	390	781	195	1,022	434	867	217	1,422	1,041	2,082	520	3,593
	Inner-Ring Suburban	756	2,003	378	249	706	1,872	353	347	1,342	3,556	671	877
	Suburban	1,295	3,626	648	679	1,118	3,131	559	945	2,119	5,933	1,060	2,387
Total Northern		2,855	7,237	1,428	5,692	2,865	7,085	1,433	7,919	6,158	14,883	3,079	20,005
Rural Conservation/Low Intensity Residential		280	741	140	479	254	674	127	666	432	1,145	216	1,682
Rural Agricultural Conservation Area		47	125	24	163	47	125	23	227	94	249	47	574
Total		4,988	12,676	2,494	11,090	4,980	12,423	2,490	15,430	10,434	25,509	5,217	38,979

4. Focused Growth Development Patterns

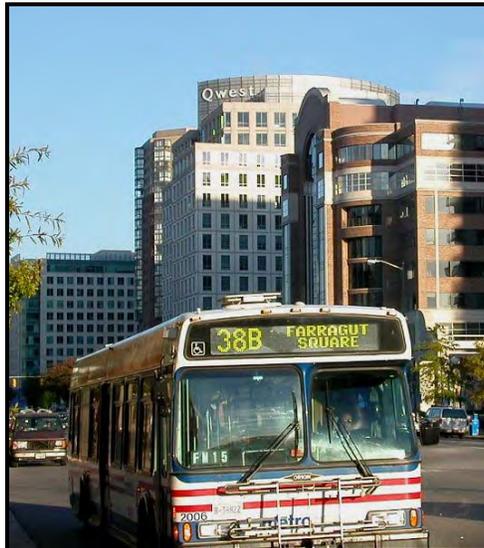
As explained above, the Focused Growth Framework is based on the intensity of development decreasing based on the distance away from the core. On the following pages is a description of the purpose and typical land uses for each of the focused growth areas. It is important to remember that these descriptions are not zoning districts, but rather describe the type of development that is desirable in each area.

Recommendations are shown for uses, floor area ratios, residential densities, and other development characteristics

that should be included in the individual zoning categories within each use district. It is also important to note that uses and densities will vary across each district based on existing land development patterns and environmental constraints. The purpose of these districts is to provide guidance as to the level and intensity of development of the remaining developable land in each area over the next 20 years. Figure 3-8 provides a matrix of existing zoning categories and how they relate to the revised growth strategy.

4.1 Mixed Use Commercial and Residential Core

The purpose of this use district is to provide an area for high intensity business, retail, residential, and civic uses. The Mixed Use Commercial/Residential core will enable Suffolk to compete regionally and nationally for the most intensive uses by providing both greenfield and redevelopment sites that are appropriate for high density urban-scale developments. This type and form of development has been frequently and successfully located in areas previously characterized as suburban, but where market conditions have been found to support development of an urban character of more intense uses.



Suffolk's development pattern has the unique opportunity to provide high density development opportunities in a mix

of settings. The northern core area, focused on the I-664 corridor, has significant amounts of greenfield development opportunities that can build upon the successes of the existing high technology businesses. The central core area of the existing downtown presents opportunities for redevelopment, rehabilitation and infill types of development.

While the two core areas are unique in character, to ensure the highest and best use of this district, new construction should be governed by minimum densities and maximum parking requirements. The street system should be highly interconnected (grid) pattern

with appropriate sidewalk widths, textures, and lighting to support an active pedestrian environment.

**Figure 3-8
Typical Development Patterns by
Use District**

Use District 6	Use District 5	Use District 4	Use District 3	Use District 2	Use District 1
Rural Agriculture Conservation District	Rural Conservation/Low Intensity Residential District	Suburban	Inner Ring Suburban	Core Support District	Mixed Use Commercial/Residential Core
Image Credit: Duany/Plater-Zyberk & Company					
A					
RR					
RE					
RL					
RLM		1			
RM		1			
RC			1	1	
RU					
B-1					
B-2					
VC					
CBD					
OI					
CP					
M-1					
M-2					

	Not allowed in this district
	Allowed
	May be appropriate depending on use, location, and density

1 With revised provisions for mixed use, TND, and clusters as appropriate

Buildings should contain street level features including a high percentage of windows, storefronts with active retail, and public spaces. The densities required in this district should support both bus and fixed guideway transit in the future. System planning and right of way preservation for transit should be incorporated into large-scale developments in this district.

Appropriate uses in the use district include offices, residential buildings, ho

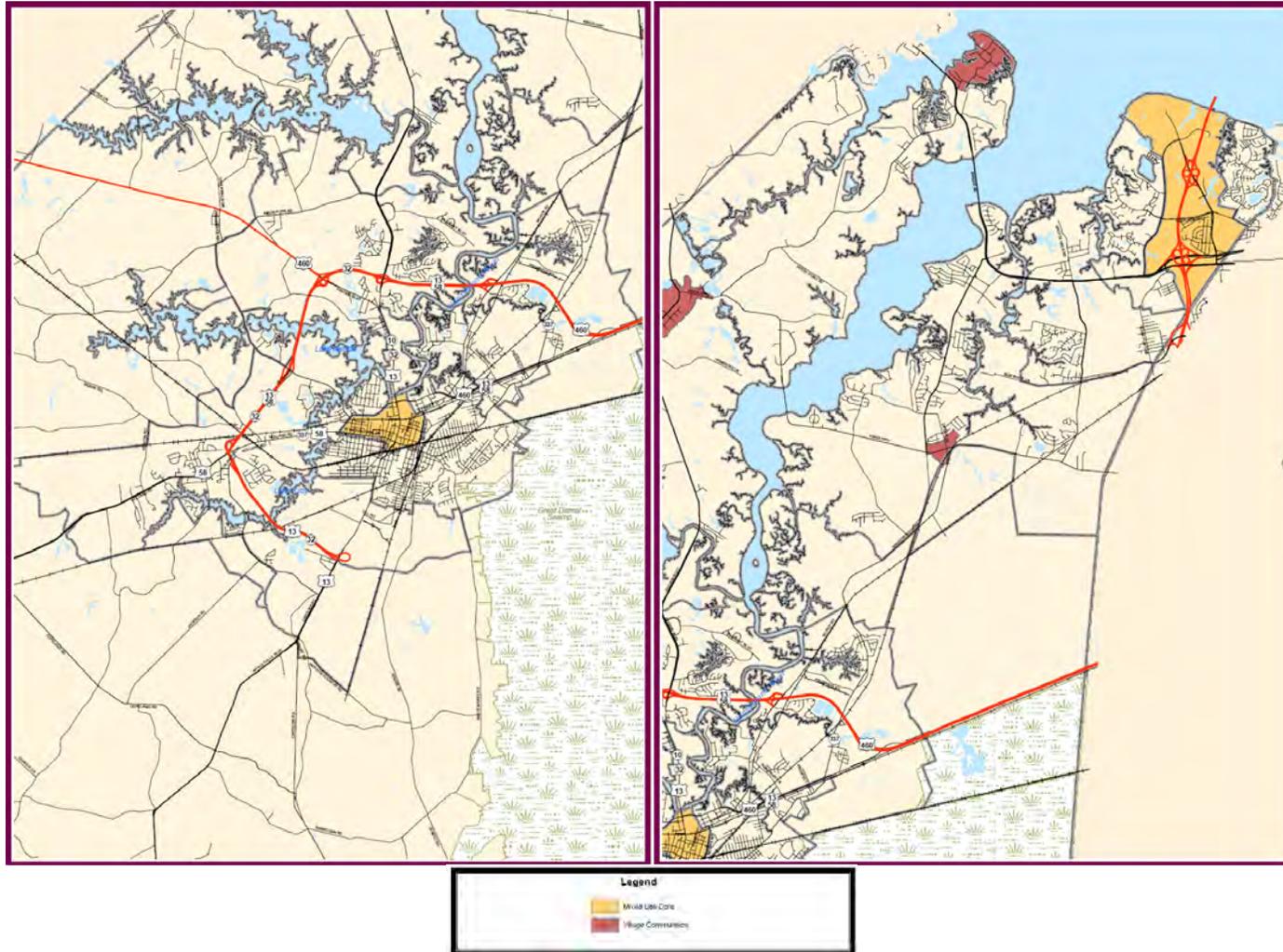
tels, colleges and universities, civic buildings, and other uses normally associated with urban areas. Buildings may either be single use (office buildings or apartments) or multi-use (office, residential condominiums, retail within the same structure), but no single type should dominate the district. The typical uses, density, and character of this district are shown in Table 3-6. The location of this district is shown in Figure 3-9.

**Table 3-6
Development Characteristics
Mixed Use Commercial and Residential Core**

Typical Uses	Densities	Development Character
<ul style="list-style-type: none"> • Regional scale retail in a vertical setting. • Office buildings. • Hotels. • Multiple family dwellings. • Public buildings. • Vertical mixed use buildings. • Research and development. • Civic building and community facilities including government offices, public safety buildings, colleges, primary and secondary schools. 	<ul style="list-style-type: none"> • Commercial/Mixed Use Floor Area Ratio: Minimum: 2; Maximum: 5 (6 for residential/hotel uses). • Residential Densities: Maximum: Up to 30 units/acre; Minimum: 8 units/acre. 	<ul style="list-style-type: none"> • Multistory (4+) buildings built at the street line. • Highly connected street pattern. • Formal streetscape landscaping of similar types of trees at a pedestrian scale. • Pedestrian-scale street lighting. • 70% or more of street frontages should consist of doors and windows. • Varied sidewalk materials including brick, concrete, granite, slate, etc. to provide a visually interesting walkway. Sidewalks to be constructed on every street. • Very high percentage of first floor uses should be shops and storefronts. • Structured parking is encouraged with entrances not on the main streets. • Where structured parking is not feasible, parking should be located away from the main streets and behind buildings. • Street design should accommodate future transit by using non-conductive piping, centrally locating utilities in the sidewalk. • Underground utilities consolidated into a single ductbank.

Source: URS Corp., 2005

**Figure 3-9
Location Map of
Mixed Use Commercial and Residential Core**



Data Source: City of Suffolk GIS, 2005
Compiled by: URS Corp., 2005

4.2 Core Support District

The purpose of this district is to provide a significant level of residential and ancillary retail and business activity to support the high density mixed-use core. The density and types of uses in the Core Support District should encourage walkable mixed-use neighborhoods at a moderate scale. There should be no perceptible break between the Core Support District and the Mixed Use Core. The proximity of this district to the core district should shorten travel times, expand travel options, reduce congestion, and improve air quality.

Land use densities in this district should be transit supportive (greater than 8 units/acre for fixed route bus service and greater than 15 units/acre for fixed guideway). Potential transit corridors should be identified early in the development process and appropriate right-of-way reserved. The highest density land uses should be clustered around these potential transit service corridors and stations.

Sub-regional auto dependent retail uses (large retail stores, large grocery stores, home improvement centers, multiplex movie theaters) can be accommodated in the district. These uses should be integrated in well-designed mixed-use centers focused on major arterials from which access should be exclusively channeled. Smaller, neighborhood-oriented stores (smaller grocery stores, drug stores, dry cleaners, restaurants, etc) should be integrated in traditional neighborhood developments and should be walkable (within ¼ mile) from their intended residential market areas.

A variety of housing types can be accommodated in this district, including single family, town homes, stacked town homes, small apartment buildings, and others. Providing for a range of housing types on smaller lots in this district should encourage the development of homes at a many different price points.

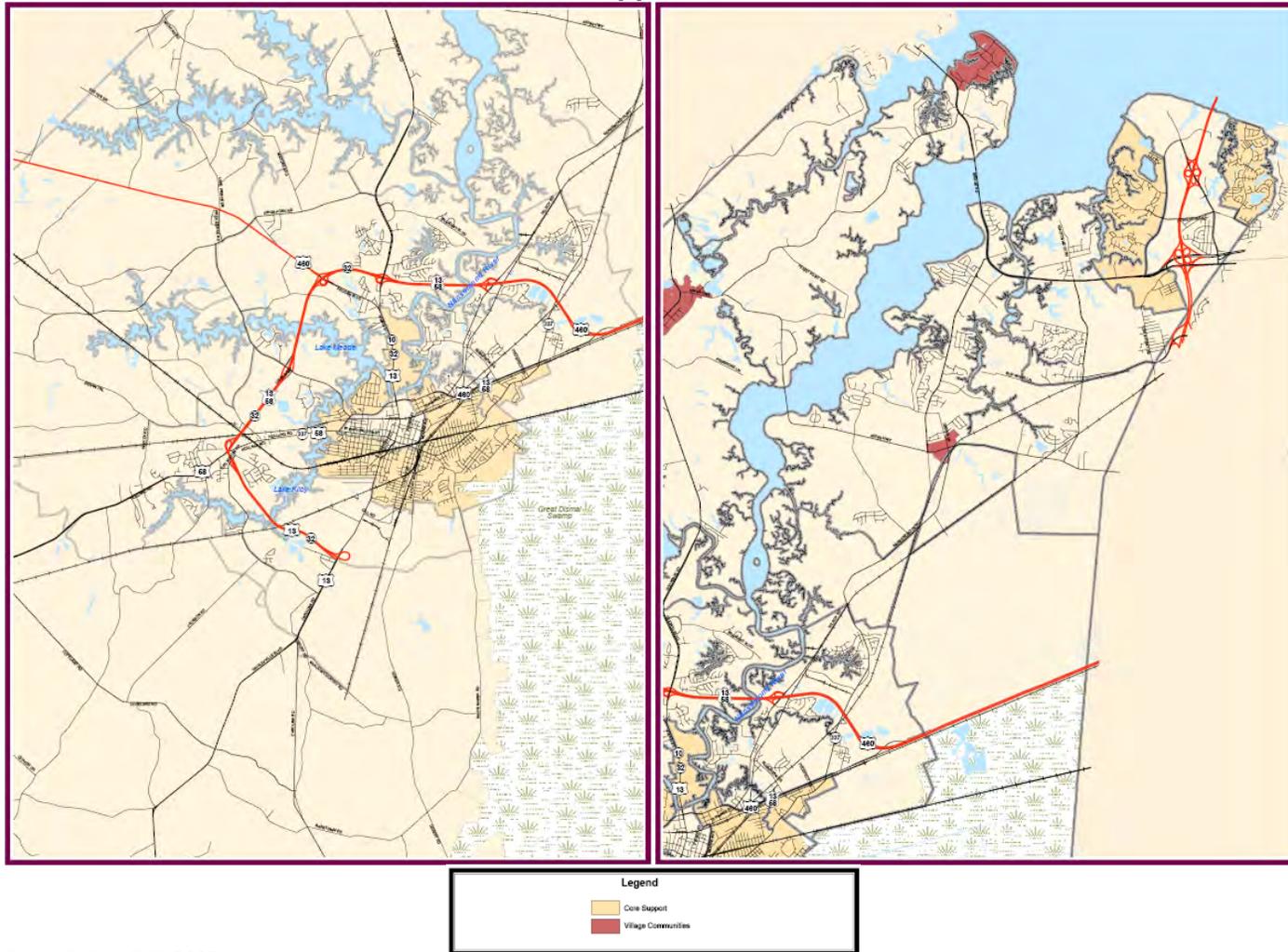
The typical uses, density, and character of this district are shown in Table 3-7. The location of this district is shown in Figure 3-10.



**Table 3-7
Development Characteristics
Core Support Districts**

Typical Uses	Densities	Development Character
<ul style="list-style-type: none"> • Single family attached/high density single family detached (Traditional neighborhood designs). • Office. • Light manufacturing. • Mixed-use developments including big box retail/office/residential uses. • Sub-regional level retail at designated locations. • Neighborhood-level retail and convenience uses within pedestrian walksheds. • Civic building and community facilities including government offices, public infrastructure buildings (pump stations, treatment facilities), public safety buildings, colleges, primary and secondary schools. 	<ul style="list-style-type: none"> • Floor Area Ratio: Minimum: .5; Maximum: 2. • Height Restrictions: 80 feet. • Residential Densities: 7 to 10 units/acre. • Mixed use development should be the predominant development type in this district. 	<ul style="list-style-type: none"> • Multistory (2+) Buildings built with no or shallow setbacks from street. • Highly connected street pattern. • Formal streetscape landscaping of similar types of trees at a pedestrian scale in commercial and high density residential areas • Naturalistic plantings in predominately lower scale residential areas. • Pedestrian-scale street lighting. • 70% or more of street frontages should be windows and doors in commercial districts • Varied sidewalk materials including brick, concrete, granite, slate, etc. to provide a visually interesting walkway. Sidewalks to be provided on all streets. • Very high percentage of first floor uses should be shops and storefronts. • Parking should be located away from the main streets, behind or between buildings and allowed on-street. • Street design should accommodate future transit by using non-conductive piping, centrally locating utilities in the sidewalk. • Underground utilities consolidated into a single ductbank.

**Figure 3-10
Location Map of
Core Support District**



*Data Source: City of Suffolk GIS, 2005
Compiled by: URS Corp., 2005*

4.3 Inner Ring Suburban Districts

Moving further from the Mixed Use Core, this district is the first area where exclusively residential neighborhoods should be located. Neighborhood design in this district should still be focused on walkable streets. Land efficient lot subdivision patterns can be explored in this district, such as zero lot lines, zipper lots, z-lots etc. Cluster development patterns allowing for the preservation of usable open space are also encouraged.



Neighborhood level retail nodes should be within walking distance from much of their intended markets. Sub-regional scale centers (large grocery stores, big box stores, home improvement centers, etc.) can be accommodated in this district at specific locations.

The line delineating the limits of the Inner Ring Suburban District along the southeast side of the downtown Core was the subject of the *Carolina Road Corridor Land Use Strategy*, performed by Urban Design Associates. The results of that study are incorporated by reference in this report. The Carolina Road Corridor Study looked at ways to extend the residential and commercial uses south of downtown without significantly impacting environmental resources or the economic development potential and importance of the Suffolk Executive Airport or significantly straining the City's finances. To summarize generally, the plan concluded that with ample development guidelines and good

planning practices the desire to provide opportunities for an additional 1,000 new homes south of greater downtown Suffolk can be accommodated. The plan also accommodates new opportunities for some mixed use commercial centers and industrial uses south of greater downtown Suffolk. Most of this new residential and commercial development will be nestled in between White Marsh and Hosier Roads. (See Figure 3-13). One significant component of this plan is the incorporation of an Aircraft Overflight District as a

strategy to protect the Suffolk Executive Airport from the encroachment of conflicting and non-compatible land uses, thereby preserving the airport as a valuable economic development engine. (See Figure 3-14).

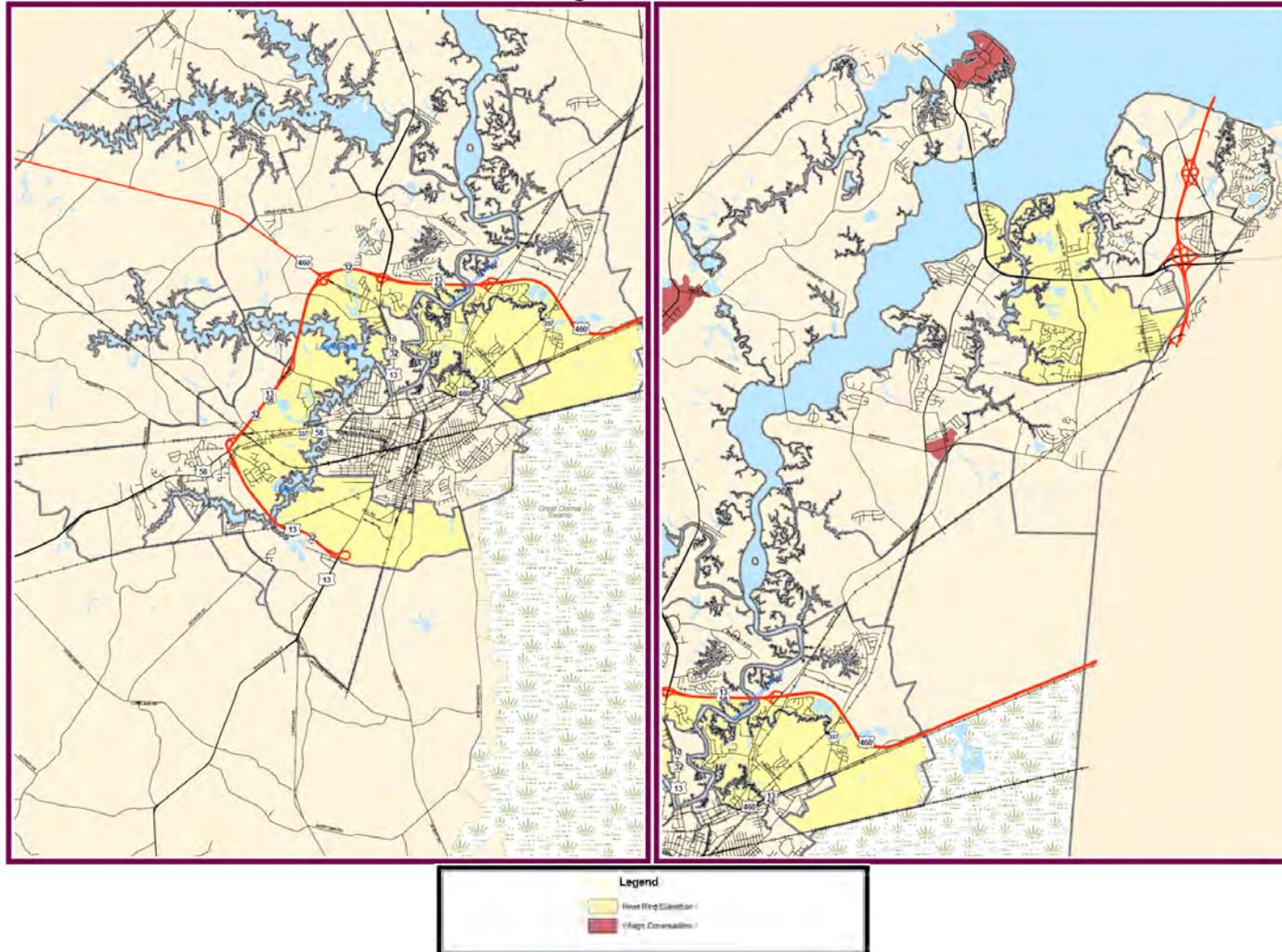
To accommodate this new residential growth while maintaining a policy of "no net increase" in new residential development potential due to the expansion of the urban / suburban development area boundaries, the plan calls for the reduction of an equal amount of development potential from other areas of the City; specifically the Rural Conservation / Low Intensity Residential Development Area. (See Figure 3-15).

The typical uses, density, and character of this district are shown in Table 3-8. The location of this district is shown in Figure 3-11.

**Table 3-8
Development Characteristics
Inner Ring Suburban Districts**

Typical Uses	Densities	Development Character
<ul style="list-style-type: none"> • Single family. • Traditional Neighborhood Developments (TND). • Light Manufacturing. • Neighborhood Retail Commercial (grocery, dry cleaners, etc). • Civic building and community facilities including government offices, public infrastructure buildings (pump stations, treatment facilities), public safety buildings, colleges, primary and secondary schools. 	<ul style="list-style-type: none"> • Floor Area Ratio: Maximum: .5 (1 for residential/hotel uses). • Height Restrictions: 60 feet. • On-Site Parking: Per existing requirements. • Residential Densities: 3 to 5 units/acre. 	<ul style="list-style-type: none"> • High density single family homes on small lots in mixed use developments. • Highly connected street pattern. • Formal streetscape landscaping of similar types of trees at a pedestrian scale in commercial areas. • Naturalistic plantings in predominately lower scale residential areas. • Pedestrian-scale street lighting. • Limited use of front-loading garages in residential areas, with preferences towards service alleys. • Varied sidewalk materials including brick, concrete, granite, slate, etc. to provide a visually interesting walkway. Sidewalks to be provided on all streets. • Parking should be located away from the main streets, behind or between buildings and allowed on street.

**Figure 3-11
Location Map of
Inner Ring Suburban Districts**



Data Source: City of Suffolk GIS, 2005
Compiled by: URS Corp., 2005

4.4 Suburban District

The Suburban District is the least dense area inside the Suburban/Urban Growth Area. This district should be primarily composed of traditional residential subdivisions. Single family dwellings are the most common use found in this district. Local and collector streets should be designed with sidewalks and be pedestrian friendly. Arterial and collector roads should have bicycle lanes and sidewalks that connect to neighborhoods and other key activity centers



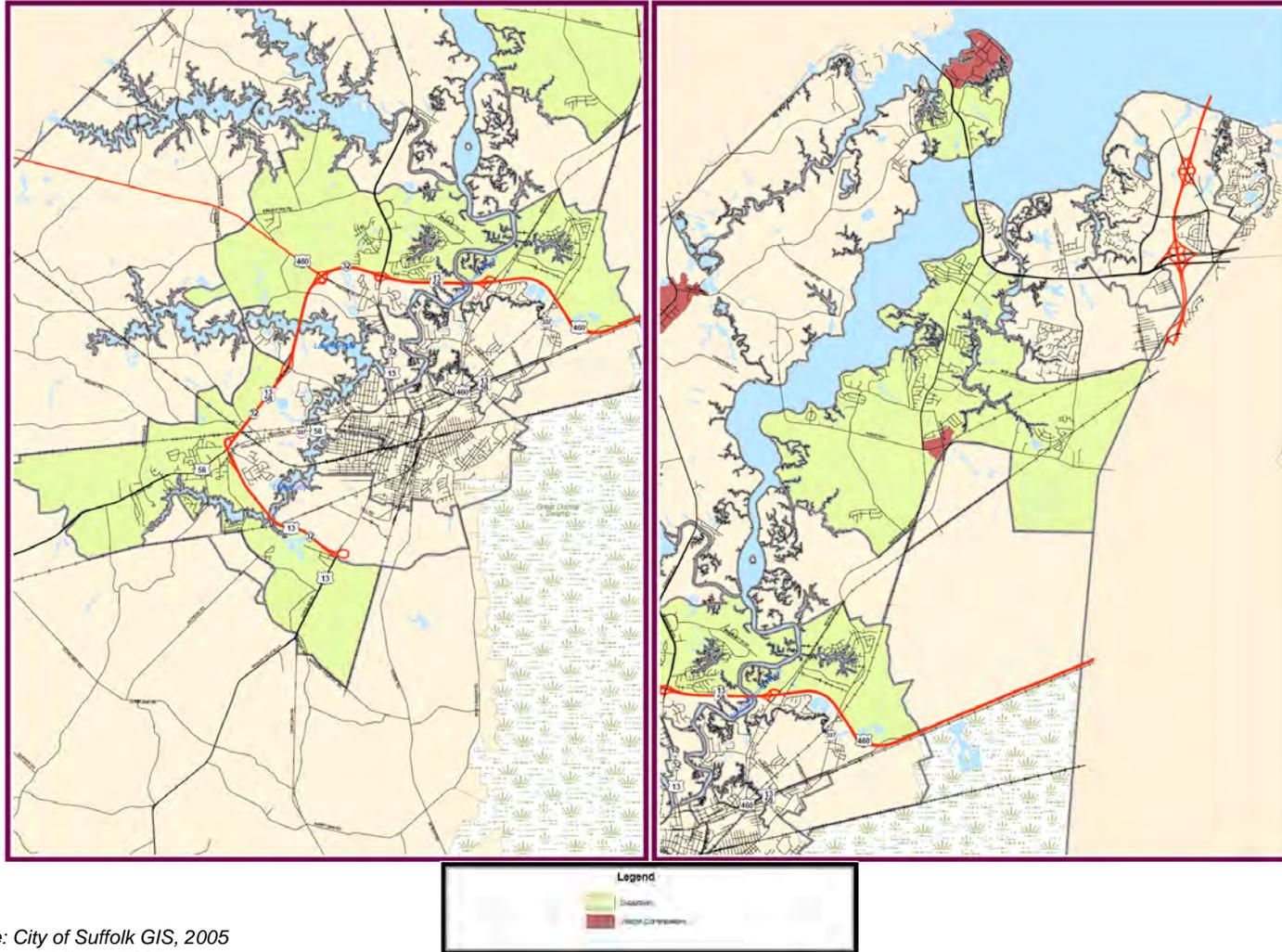
Retail uses in this district are primarily neighborhood-scale centers. Larger, sub-regional-scale uses may be accommodated on specifically-identified sites with direct access to major transportation routes.

The typical uses, density, and character of this district are shown in Table 3-9. The location of this district is shown in Figure 3-12.

**Table 3-9
Development Characteristics
Suburban Districts**

Typical Uses	Densities	Development Character
<ul style="list-style-type: none"> • Residential Subdivisions (Traditional/TND/ Cluster). • Small convenience retail. • Professional offices. • Industrial uses. • Civic building and community facilities including government offices, public infrastructure buildings (pump stations, treatment facilities), public safety buildings, colleges, primary and secondary schools. 	<ul style="list-style-type: none"> • Floor Area Ratio: Maximum: .5. • Height Restrictions: 45 feet. • Residential Densities: 1 to 4 units/acre. • On-Site Parking: Per existing requirements. 	<ul style="list-style-type: none"> • Single family homes at a suburban scale. • Varied materials and designs of housing. • High percentage of windows on all faces of homes. • Limited use of front-loading garages in residential areas, with preferences towards service alleys. • Streets built to accommodate shared and exclusive bicycle lanes. • Informal landscaping preserving the existing viewsheds where feasible using native trees. • Interconnected street systems in new developments. • On-street parking.

**Figure 3-12
Location Map of
Suburban Districts**



Data Source: City of Suffolk GIS, 2005
Compiled by: URS Corp., 2005

4.5 Rural Conservation/Low Intensity Residential District

The purpose of this district is to provide an area of protection between the developed portions of the City and the regional water supply reservoirs. In most areas of the City, the Rural Conservation District is the first use type outside of the Suburban/Urban Growth Area. The most common land use type in this district is low density residential in traditional, hamlet, and cluster subdivision patterns. Local and collector streets may or may not have sidewalks and pedestrian amenities, depending on the neighborhood design. The viewsheds from all major roadways should be maintained with a rural aesthetic using native trees and wide setbacks. Retail uses should be small and neighborhood-centered. Small retail uses supporting the rural character of the area (farmstands, agricultural supplier, etc.) are also allowed.

Moderately higher levels of residential and commercial development are allowed in the villages of Chuckatuck and Oakland.

The low-intensity nature also provides for resource protection of the regional surface water supplies and lakes. Development in this district is allowed on individual septic systems provided city water is available.



To concurrently maintain a policy of “no net increase” in new residential development potential due to the expansion of the Suburban/Urban Development Area boundaries while accommodating the desire for new residential growth south of greater downtown Suffolk, the plan calls for the reduction of an equal amount of development potential from the Rural Conservation /Low Intensity Residential Development Area.

The lands cited for this reduction in future development potential are currently vacant, not served by the City’s public central water supply, and do not have any development proposals under review or consideration for approval by the City of Suffolk.

The reduction of residential development potential in the Rural Conservation /Low Intensity Residential Development Area provides other important benefits including the better protection of the region’s water supply, and the preservation and protection of prime farm lands from destruction by land development activities.

The typical uses, density, and character of this district are shown in Table 3-10.

**Table 3-10
Development Characteristics
Rural Conservation/Low Intensity Residential District**

Typical Uses	Densities	Development Character
<ul style="list-style-type: none"> • Residential subdivisions (traditional/cluster). • Small convenience retail . • Agricultural. • Public safety facilities including fire and police stations as necessary. 	<ul style="list-style-type: none"> • Height Restrictions: 45 feet (agricultural buildings excluded). • Maximum Impermeable Area (non residential): .25. • On-Site Parking: Per existing requirements. • Residential Densities: 3 acres/unit. 	<ul style="list-style-type: none"> • Single family homes. • Varied materials and designs of housing. • High percentage of windows on all faces of homes. • Streets built to accommodate shared and exclusive bicycle lanes. • Informal landscaping preserving the existing viewsheds where feasible using native trees. • Use of buffers (both man-made and natural) to reduce the visual impact of new development from existing major roadways. • Major subdivisions must be serviced by public water, but may be on individual septic systems. • Large community facilities such as high schools, middle schools, and large primary schools, should be avoided in this district to maintain its rural character. Appropriately scaled elementary schools are encouraged in the village centers.

4.6 Rural Agriculture Conservation District

Predominantly located in the south, and northwest quadrants of the City, the purpose of this district is to maintain significant areas of the City for continued agricultural use. Retail, wholesale, and industrial uses directly related to the production of agricultural products are allowed on a limited basis. Development in this district is allowed with private drinking water wells and septic systems.



Included in the Rural Agriculture Conservation District (Agricultural District) are two of the City’s designated rural villages- Holland and Whaleyville. The villages once served as the hubs of the City’s agricultural community and continue to provide important residential and retail and development opportunities in the southern half of the City. The City Council has recognized that the villages are an important part of the character of Suffolk and has made revitalization of them a priority.

series of initiative plans for the rural villages of Holland and Whaleyville. The purpose of these plans was to establish themes and actions to support the villages as discrete places within the overall city of Suffolk. The Village Center zoning district allows a variety of compatible uses within villages, provided they meet design standards for building and site design that are consistent with village character.

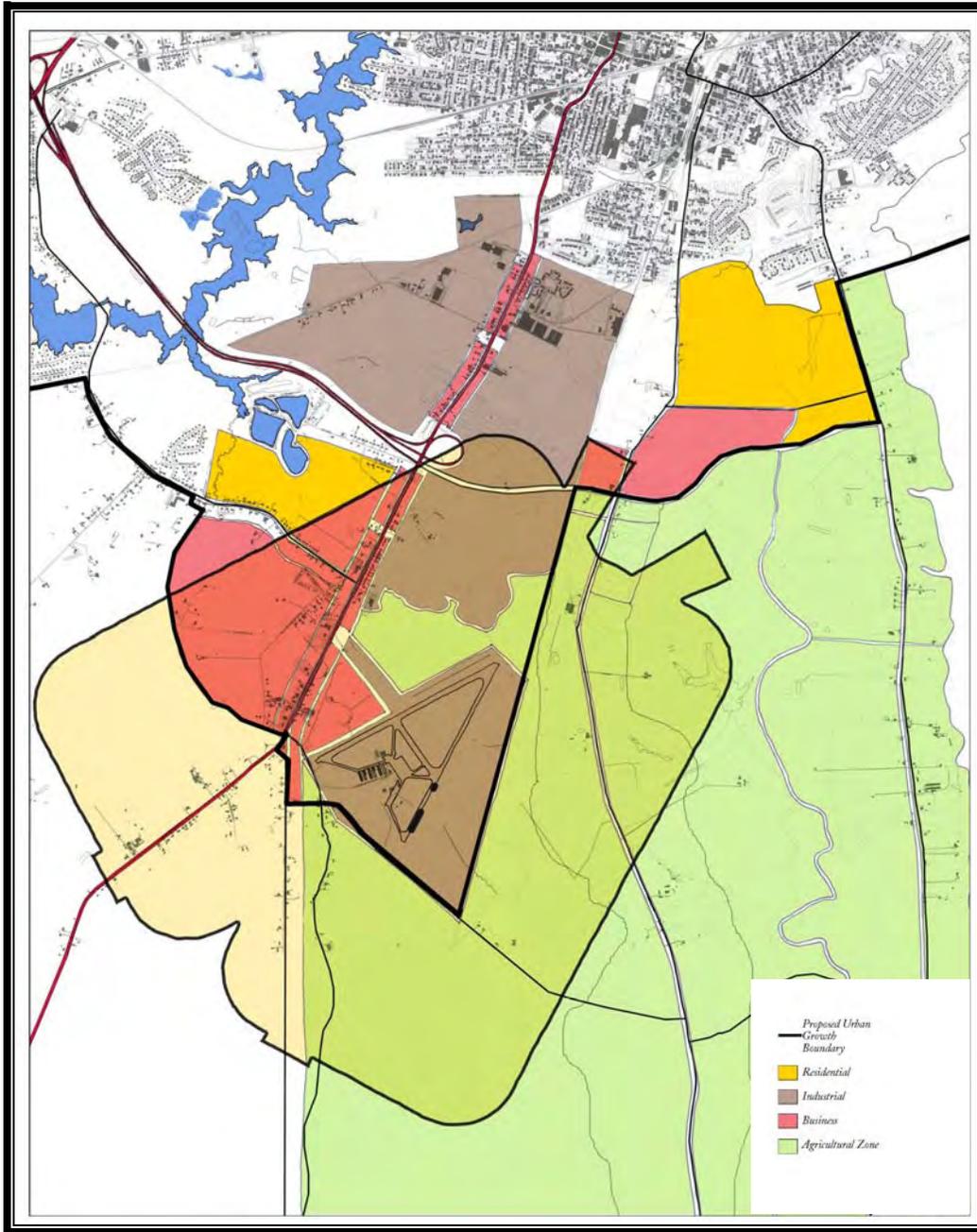
To accomplish this priority, over the past several years, the City has undertaken a

The typical uses, density, and character of this district are shown in Table 3-11.

**Table 3-11
Development Characteristics
Rural Agriculture Conservation District**

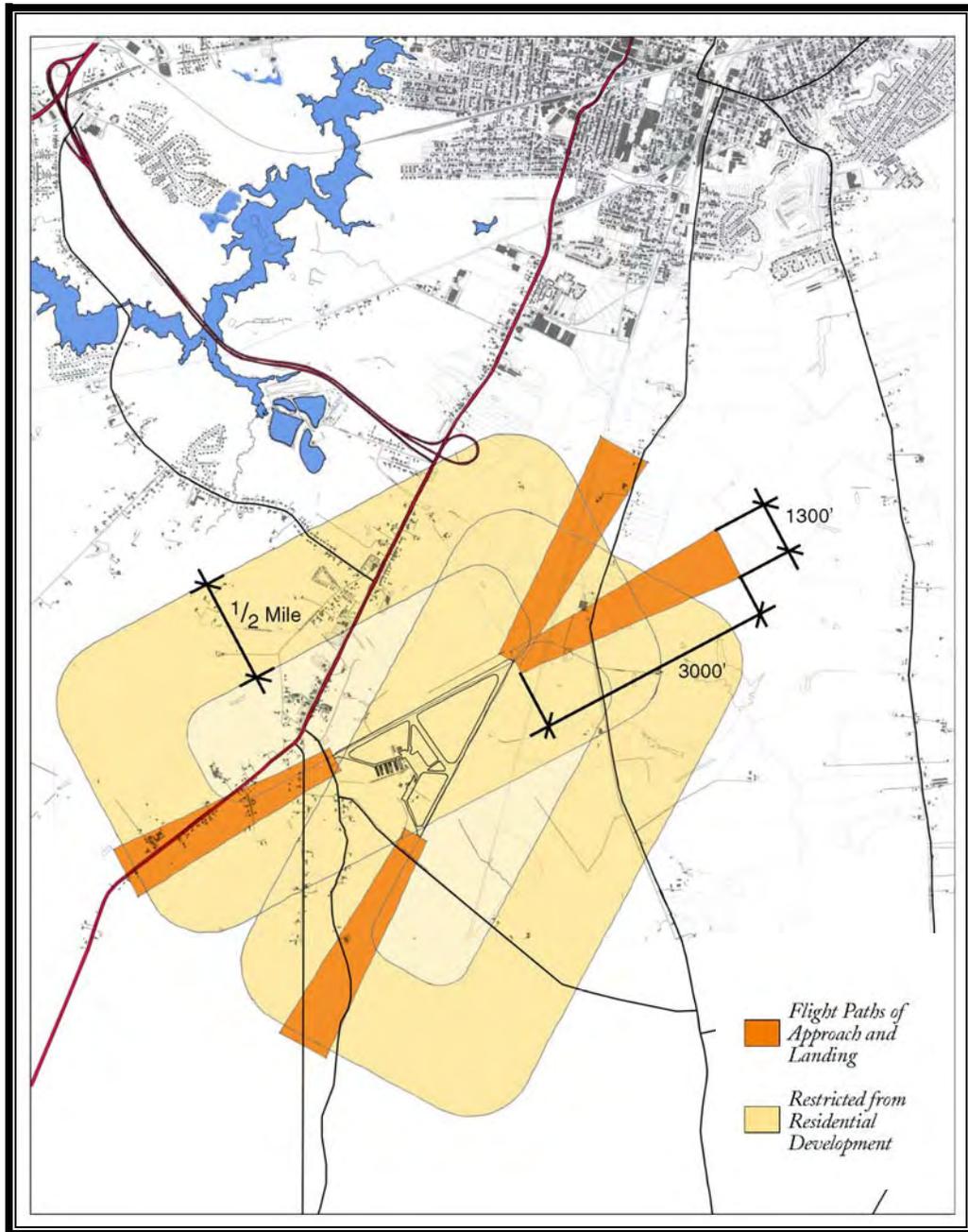
Typical Uses	Densities	Development Character
<ul style="list-style-type: none"> • Large-scale agricultural and forestry. • Small farming operations (hobby farms, small horse farms). • Agricultural processing and related manufacturing. • Small convenience retail. • Limited single-family homes. 	<ul style="list-style-type: none"> • Height Restrictions: 45 feet (agricultural buildings excluded). • Residential Densities: 1 unit/acre. • Major Subdivisions: Not allowed in this district. 	<ul style="list-style-type: none"> • New housing should be buffered visually from the existing streets using naturalistic tree plantings of various species along road frontages. • Encourage use of native grasses and plantings when visible from street. • Large community facilities such as high schools, middle schools, and large primary schools, should be avoided in this district to maintain its rural character. • Appropriately scaled community facilities including elementary schools are encouraged in the rural villages.

**Figure 3-13
Carolina Road Corridor Land Use Strategy**

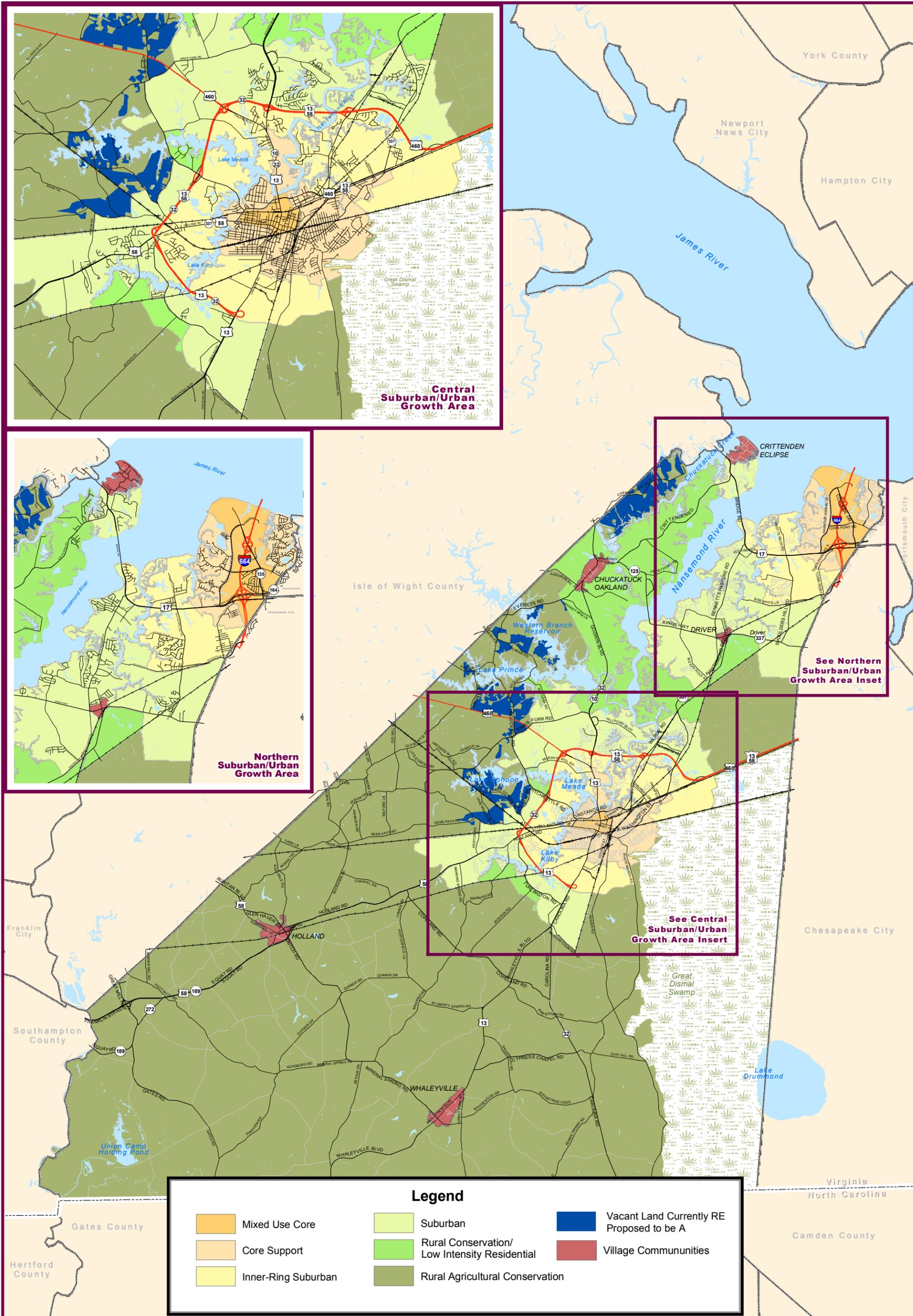


Graphic by Urban Design Associates

**Figure 3-14
Aircraft Over Flight District**



Graphic by Urban Design Associates



5. Themes, Policies, and Action

Theme: Balanced Growth

Policy 3-1: Create a system of focused growth development areas within the two main urban and suburban growth areas in the City.

Action 3-1A: Develop a coordinated system of focused growth zoning to support both the historic downtown central core and the northern core development areas.

The focused growth framework provides for a sustainable, environmentally sensitive method to manage growth for the next twenty years. The framework allows for areas of high density mixed uses, surrounded by development areas of supportive uses. . This development pattern encourages a mix of housing and economic development opportunities. The focused growth framework provides for continuation of the successful strategies of the 2018 Comprehensive Plan while expanding the range and types of development options.

Action 3-1B: Revise the existing growth area boundaries south of the central core to establish a pattern of development areas of decreasing densities consistent with the Focused Growth Framework.

To ensure that this development is consistent with the Focused Growth Framework, the growth area boundary between White Marsh Road and Carolina Road and in the area of Turlington Road should be extended to the south. The expanded development area will encourage higher density/mixed uses closest to the urban core, with lower density uses towards the edges.

Action 3-1C: Revise the existing growth area boundary north of the

Central Core Suburban / Urban Development Area to establish a pattern of development areas for a mixture of office and commercial uses consistent with the Focused Growth Framework that may include opportunities for related housing and public / semi-public uses.

To ensure that this development is consistent with the Focused Growth Framework, the growth area boundary located north of and between Kings Fork Road and the Western Branch Reservoir should be extended north so as to include those lands situated adjacent to Matoaka Road and Mockingbird Lane as shown in Figure 3-5. The boundary of the development area is being expanded to accommodate opportunities for a mixture of uses suitable for this area. Such uses may include office and commercial uses and related housing and public / semi-public development. Being at the edge of the Suburban Development District, adjacent to the Rural Conservation / Low Intensity Residential Development Area and agricultural uses and the Western Branch Reservoir, densities and intensities of future development should be kept at the minimum within the established range for the Suburban Development District.

Action 3-1D: Define and encourage accommodative zoning districts for two mixed-use core areas: one in the north and the other in the downtown core.

Key to the focused growth framework is the definition of two highly dense mixed-use centers. Zoning district changes to support these areas should be carefully evaluated to ensure that they are of sufficient size to stimulate growth, yet do

not impinge on historic areas, environmentally sensitive lands, or the ability of the City to provide services in an efficient and effective manner.

Action 3-1E: Promote low intensity development in the drinking watersheds and rezone some of the current RE lands to A to enhance protection of the regional water supply in the northwest quadrant and accommodate the policy of “no-net increase” in residential development potential due to modest expansion of central suburban / urban growth area boundary as shown on Figure 3-15.

The Focused Growth Map (Figure 3-5) illustrates the expansion of the Rural Agricultural Conservation District into the Northwest quadrant. Figure 3-15 identifies particular vacant lands that should be rezoned from Rural Estate (RE) to Agriculture (A) in order to create a larger buffer surrounding the regional water supply reservoirs and to encourage agricultural activity in an area where there are prime agricultural soils and reduce the residential development potential in this area of the City..

Action 3-1F: Continue the policy that there can be no justification for rezonings to residential uses outside the Comprehensive Plan growth areas.

The Focused Growth Framework provides sufficient land for residential use to meet forecasted demand for 20

years. The framework provides a logical and sustainable growth pattern that expands housing opportunities without accommodating sprawl development patterns.

Action 3-1G: There can be no justification for additional residential rezoning contrary and inconsistent with the Focused Growth Framework and associated themes, policies and actions, and smart growth principles of this 2026 Comprehensive Plan.

The extensive amount of vacant land already zoned for development (i.e.: future development potential) and the large amounts of development in the pipeline, mean that Suffolk should not be rezoning tracts of land for additional residential growth unless said action is consistent with this comprehensive plan. The City should deny rezoning requests that are not consistent with this plan, that do not demonstrate the need and demand for additional residentially zoned land, and where facilities are not adequate based on established standards. There will, of course, be some exceptions to this general rule by way of small, infill parcels and the like.

Policy 3-2: Moderate the pace of future residential growth to current levels

Action 3-2A: Assume an annual average growth rate of 1,000 residential units per year.

This average growth rate will produce the increase in population and employment forecasts shown in Table 3-12.

Table 3-12: Population and Employment Estimates (Numeric Increase)		Total Plan Years 1 - 20			
		Housing		Commercial Development	Industrial Development
		Units	Population	Employees	Employees
District	Zone				
Central	Core	401	802	1,532	2
	Core Support	2,008	4,017	4,438	404
	Inner-Ring Suburban	2,428	6,435	3,364	7,745
	Suburban	2,533	7,092	6,199	4,408
Total Central		7,371	18,346	15,533	12,559
Northern	Core	2,677	5,353	21,621	472
	Core Support	1,865	3,730	6,033	3
	Inner-Ring Suburban	2,804	7,431	1,473	0
	Suburban	4,532	12,691	1,992	2,019
Total Northern		11,878	29,204	31,120	2,495
Rural Conservation/Low Intensity Residential		966	2,560	2,044	783
Rural Agricultural Conservation		188	498	487	477
Total		20,402	50,608	49,185	16,314

Action 3-2B: Pursue expanded growth management authority from the General Assembly.

The City should continue to pursue the enabling authority to adopt innovative growth management practices. These may include collecting impact fees, requiring adequate public facilities for site plan and subdivision approval, and transfer of development rights.

- Smaller in size and fit well within context of the community in which they are located;
- Ease of accessibility;
- Function as centers and anchors of community;
- Support community uses after hours; and
- Mix of new construction and renovation programs.

This action is consistent with the principal of providing schools and employment opportunities near residential development. It promotes identifiable, cohesive and sustainable neighborhoods. Careful analysis will ensure that operating and capital needs of the school system are balanced with the smart growth ideal of neighborhood schools.

Action 3-2C: Closely coordinate school location planning to the identified growth areas and rural villages, focusing new schools in the areas of highest residential density in accordance with the following smart growth in schools planning principles:

- Provide highest quality education;
- Involve broad community involvement in school facility siting and planning;
- Site selection consistent with city’s long-range growth plan (Comprehensive Plan);

Action 3-2D: Provide sewerage and potable water service only to those areas that have been identified for growth, with the highest priority on core, core support, inner-ring subur-

ban, and suburban use districts. Exceptions can be made for existing developed areas that have a large number of failing septic systems or have been identified by the City's health department as having significant potable water quality concerns.

Coordination between water and sewer planning and land use planning is one of the most effective development timing mechanisms available to Virginia municipalities. Priority should be given to providing adequate sewer service within the designated growth areas to both encourage appropriate development and to protect environmental quality.

Policy 3-3: Enable high-quality, well planned development to occur in a predictable and orderly manner.

Appropriate modifications to the Zoning Ordinance and District Maps and design standards in the UDO, along with selective additions of new districts within the general boundaries established by the Focused Growth Framework, will make high-quality development more likely and predictable.

Action 3-3A: Develop incentives to better promote and encourage, as appropriate, mixed use development in more zoning categories.

Adding design standards for mixed use to the UDO, and specifying different types and intensities of mixed use within different zoning districts would complement this action by providing more guidance to applicants and more assurance to reviewers that submittals will meet the City's goals.

Action 3-3B: Continue incentives in the zoning ordinance to support "New Urbanist" and traditional neighborhood designs where appropriate in the City.

While the full-scale 'TND' is an option within the UDO, the process of creating smaller traditional neighborhood developments, or infill development, could be streamlined and simplified. Increasing the options for mixed-use at a variety of scales in more zoning districts will also facilitate traditional neighborhood design.

Action 3-3C: Continue the use of cluster developments to preserve and protect the natural environment with revisions to allow for more community-usable open space.

Cluster development patterns have been an effective tool for preserving large open spaces and natural features in new developments. This tool should continue to be part of the UDO in the future. Revisions to the UDO could help to make cluster development a more attractive option than conventional subdivision in certain zoning districts, including the RE zoning district. Revisions to the UDO could also help improve the aesthetics and design of cluster developments.

Action 3-3D: Amend the development regulations to assure that transportation system planning and the preservation of right of way for transit are incorporated into the design and construction of new development projects, particularly large scale developments in the Mixed Use Core and Core Support Districts.

Given Suffolk's strategic location within the region, the rate of new growth, and advances in transit system and other associated technologies, it is essential that the City position itself and reserve the capability to provide future services and to take advantage of unforeseen opportunities that may be presented.

Theme: Enhance Economic Vitality

Policy 3-4: Balance residential and non-residential land uses

Action 3-4A: Assume a future jobs/housing ratio of between 1.0 and 1.56. Continue to develop implementation tools that will help achieve help the higher number.

Establishing a good balance between jobs and housing is essential to maintaining the high quality of life in the City. Too low a ratio would mean that Suffolk was strictly a bedroom community to other cities in Hampton Roads. Estimates based on the focused growth framework, using existing housing and non-commercial construction trends show that the City could have a job to housing ratio in excess of 3 jobs for every household developed as a result of the comprehensive plan.

Policy 3-5: Facilitate the expansion of office, R&D and manufacturing activity in Suffolk.

Action 3-5A: Ensure that there are adequate amounts of land zoned to support the growing high technology corridor in the Northern Suburban/Urban Growth Area as well as office and industrial uses in other parts of the City.

Based on current construction trends, available land, and densities supported under the focused growth framework, there appears to be sufficient areas of the City for commercial and industrial activity. However, the zoning map must be revised to ensure that it matches the goals of the focused growth framework.

The design, timing and pace of development along the major transportation corridors needs to be master planned and coordinated by way of a series of

corridor studies and plans so as to assure the preservation of lands for economic development and job creation, and future right-of-way; promote the prioritization of investment in major regional improvements that are critical to the City's economic development; and assure the compatibility, efficiency and function of the City's transportation network and adjacent land uses.

In conjunction with these master corridor plans, the City needs to continue to develop and implement land use strategies that continue to preserve lands within one-half to one mile of major interchanges and intersections for employment uses (office, research and development). Such lands should not be zoned for residential uses.

Associated with these master corridor plans a comprehensive economic development plan and strategy needs to be adopted. This plan will document and articulate the vision Suffolk has in regard economic development, establishing the types and mix of industries desired, identifying where such industries are best located, and what strategies need to be implemented to achieve this vision. Such a comprehensive economic development plan must be developed and implemented in concert and consistent with this 2026 Comprehensive Plan.

Action 3-5B: Revise the existing growth area boundaries west of the central core suburban / urban development area to establish a pattern of development areas for continued economic development and job creation consistent with the Focused Growth Framework.

To ensure that this development is consistent with the Focused Growth Framework, the growth area boundary along the Holland Road corridor should be extended to the west as illustrated on

The Focused Growth Map (Figure 3-5). The expanded development area will provide for additional industrial development and job creation. Specifically, while the expanded development area may accommodate new industrial uses such as manufacturing, warehousing and distribution facilities, the expanded development area is intended to primarily provide opportunities for additional research and development facilities, professional office and services, office flex, and other significant employment generators.

In concert with Actions 3-5A and 6-5H the design, timing and pace of development along this corridor needs to be master planned and coordinated by way of a series of corridor studies and plans so as to assure the preservation of significant amounts of lands for economic development and job creation, and future right-of-way; promote the prioritization of investment in major regional improvements that are critical to the City's economic development; assure the compatibility, efficiency and function of the City's transportation network and adjacent land uses.

Furthermore the preservation of road capacity and access management are of the highest priority and consequently, direct access to all future development within the area must be provided by an internal road network and that direct access (entrance drives) from adjacent thoroughfares, particularly Holland Road (Rt. 58), should be minimized.

Action 3-5C: Revise the existing growth area boundary west of the Central Core Suburban / Urban Development Area to establish a pattern of development areas for continued economic development and job creation consistent with the Focused Growth Framework.

To ensure that this development is consistent with the Focused Growth Framework, the growth area boundary along the Pruden Boulevard (Rt. 460) corridor should be extended to the west to Kings Fork Road and south to Pitchkettle Road as illustrated on the Focused Growth Map (Figure 3-5). The expanded development area will provide opportunities primarily for additional regional scaled commercial retail, research and development facilities, professional office and services, and other significant employment generators.

In concert with Actions 3-5A and 6-5H the design, timing and pace of development along this corridor needs to be master planned and coordinated by way of a series of corridor studies and plans so as to: 1) assure the preservation of significant amounts of lands for economic development and job creation, particularly in the areas adjacent to the existing Pruden Boulevard (Rt. 460) corridor and the proposed Route 460 limited access highway corridor and future right-of-way; 2) assure the preservation of lands necessary for the proposed Route 460 limited access highway corridor; 3) promote the prioritization of investment in major regional improvements that are critical to the City's economic development, for example, the City in concert with the Virginia Department of Transportation should continue to encourage and plan for the establishment of an interchange where the proposed Route 460 limited access highway crosses Pitchkettle and King's Fork roads; and 4) assure the compatibility, efficiency and function of the City's transportation network and adjacent land uses. Furthermore the preservation of road capacity and access management are of the highest priority and consequently, direct access to all future development within the area must be provided by an internal road network and that direct access (en-

trance drives) from adjacent thoroughfares, particularly Pruden Boulevard, Pitchkettle Road and Kings Fork Road, should be minimized.

In conjunction with these master corridor plans, the City needs to continue to develop and implement land use strategies that continue to preserve lands within one-half to one mile of major interchanges and intersections, as well as those lands adjacent to and within one-half to one mile proximity to the existing Pruden Boulevard (Rt. 460) corridor and the proposed Route 460 limited access highway corridor and future right-of-way, for employment uses (office, research and development). Such lands should not be zoned for residential uses.

The expanded development area will also accommodate opportunities for related housing and mixed use development. Being at the edge of the Suburban Development District, adjacent to the Rural Conservation / Low Intensity Residential Development Area, Rural Agricultural Conservation Area and the Lake Meade water reservoir, densities and intensities for future development should be kept at the minimum within the established range for the Suburban Development District. The timing and pace of any new residential development should be tied directly with the timing and pace of commercial retail and professional office and services economic development activities and associated job creation within the area.

Policy 3-6: Ensure the long term viability, operation and function of the Suffolk Executive Airport and protect it from the encroachment of non-compatible land uses.

Action 3-6A: Establish an Airport Protection and Compatibility Overlay Zone where land use in general proximity to the airport are designated

for low intensity, non-intrusive and compatible employment or agricultural usage and not converted to suburban residential uses.

Airports and their related businesses are crucial to a community's ability to grow. Unfortunately, in today's environment it doesn't seem to matter if the airport existed long before incompatible uses encroached upon and surrounding it. The costs of dealing with public complaints and lawsuits associated with encroaching and incompatible land use issues incurred by airports can be considerable. If permitted, development will encroach upon airport boundaries and violate critical airspace; therefore, it is important that effective land use planning and control measures around airports be adopted establishing specific planning boundaries in the form of an Airport Compatibility Overlay Zone.

Comprehensive planning of land uses that tend to be more compatible to the airport operations and safety requirements minimize problems within communities and help to foster cooperation with many different interests as the community grows. Thus the simple solution is to mitigate existing compatibility issues and plan for compatible issues in the future.

To implement effective land use planning and control measures around airports, it is necessary to identify specific planning boundaries. These boundaries will define the airport environs for land-use planning purposes. It is essential to understand the components of an effective compatible airport land-use plan and incorporate federal and state airport design criteria, safety of flight requirements and land use provisions unique to the community into the plan and its associated implementation strategies. At a minimum these include: safety zones, traffic patterns, overflight areas, noise, and height restriction criteria must be

considered. Finally, a land use strategy for airport-compatible land-uses should include an area large enough to consider all these factors. This will ensure the long term survival of one of the city's key economic development tools.

Action 3-6B: Establish an Aircraft Over Flight District as shown on Figure 3-14, where land use in close proximity to the airport and located in the designated aircraft over flight areas as illustrated in the *Carolina Road Corridor and Southern Land Use Strategy* (incorporated herein by reference) are designated for low intensity, non-intrusive and compatible employment or agricultural usage and not converted to suburban residential uses.

Areas in the close proximity to airports experience the frequent over flight by

aircraft operating to and from the airport and will be perceived by citizens as a nuisance. The areas of frequent over-flight include areas under commonly used approach and departure routes for an airport, including areas under airport traffic patterns.

Non-compatible and intrusive uses such as residences, schools, churches, hospitals, daycare centers, nursing homes and other similar uses need to be avoided. Other uses that should be avoided include relatively high density and high intensity commercial and industrial that result in large assemblies of people. Compatible uses may include low density and low intensity commercial, industrial, agricultural, recreational such as golf courses and parks, and other similar uses.

Suffolk Public Schools
Capacity and Projected Enrollment Summary
2024

	School Name	Program Capacity	Mobile Unit Capacity	2024 Projected Enrollment	2024 Projected Utilization
Elementary Schools	Booker T. Washington	588	0	356	60.5%
	Creekside	865	7/154	720	83.2%
	Elephant's Fork	520	13/286	576	110.8%
	Florence Bowser	1,000	0	1,105	110.5%
	Hillpoint	869	0	818	94.1%
	Kilby Shores	497	8/176	517	104.0%
	Mack Benn	699	3/66	573	82.0%
	Nansemond Parkway	479	4/88	502	104.8%
	Northern Shores	780	13/286	813	104.2%
	Oakland	520	1/22	469	90.2%
	Southwestern/Pioneer	668	0	691	103.4%
Elementary School Totals		7,485		7,140	95.4%
Middle Schools	Col. Fred Cherry	800	0	720	90.0%
	Forest Glenn	410	5/110	447	109.0%
	John F. Kennedy	650	0	497	76.5%
	John Yeates	785	18/396	534	68.0%
	King's Fork	1,150	0	968	84.2%
	Middle School Totals		3,795		3,166
High Schools	King's Fork	1,634	0	1,597	97.7%
	Lakeland	1,498	0	986	65.8%
	Nansemond River	1,496	0	1,803	120.5%
	High School Totals		4,628		4,386

Facilities Master Plan February 2021

City of Suffolk **FOIA** Request Form

Request Receipt Date: 9/12/2022 Time: _____

Form completed by: Angela Schmeckenbecher

Name: Angela Schmeckenbecher

Address: 630 Manning Rd
Suffolk, Va 23434

Telephone Number(s) 757-338-6191 / _____

Email Address: arschmeck@icloud.com

Nature of Request:

~~With regards to rezoning application~~
~~no. RZN2022-007, I am requesting a copy of the~~
~~site plan, design narrative and any additional~~
~~information that shows the proposed property line~~
~~changes that run directly along our 1,634 adjoining~~
~~property line at 630 Manning Road~~

I am also interested in obtaining information on
proposed changes to Manning Rd and the reservoir
crossing.

Do you require a cost estimate prior to a response being
provided? YES NO

Received in FOIA Office by: _____

Date: _____ Time: _____

Response Completed by: _____

Date: _____ Time: _____



City of Suffolk
FOIA Office
P.O. Box 1858
Suffolk, VA 23439
757.514.4100 (phone) 757.514.4109 (fax)
foia@suffolkva.us (email)

ELLIS FARM PROPERTY

C. E. II, Virginia

09.15.2022



CITE DESIGN



*Masterplan is for conceptual use only. Base map is approximate and not based off of survey data.

Subject: Fwd: [EXTERNAL] Rezoning sign
From: "Angela R. Schmeckenbecher" <arschmeck@icloud.com>
Date: 9/19/2022, 10:18 AM
To: Eryn S <erynsiegel@gmail.com>

Here's the email chain.

Sent from my iPhone

Begin forwarded message:

From: "Brittany A. Colyer" <bcolyer@suffolkva.us>
Date: September 15, 2022 at 10:22:53 AM EDT
To: "Angela R. Schmeckenbecher" <arschmeck@icloud.com>
Subject: RE: [EXTERNAL] Rezoning sign

Good Morning,

I received the request yesterday afternoon and have sent over the documents to our Secretary. Once media has all the documents, someone should be reaching out to you shortly. They are large documents, so they will probably be provided to you through a sharefile link. Please let me know if you have any other questions.

Thank you,

Brittany Colyer
Planner II
City of Suffolk
Department of Planning and Community Development
City of Suffolk, Virginia
442 W. Washington Street
Suffolk, VA 23434
(757) 514-4060 (main)
(757) 514-4077 (direct)
(757) 434-2506 (cell)

Applicants are encouraged to continue to submit application materials electronically using the City's sharefile link here: <https://cityofsuffolk.sharefile.com/share/upload/r73c19f0337bc4f1cb6c76fd69a0434d8>

We kindly ask that prior to uploading materials, please name your files using the following format:

- For first submittals: "Project Name or Address – Type of Document (site plan, title report, design narrative, etc.)-1st Submittal ". The original signed hard copy of the application form must still be submitted either via mail or in person.
- For resubmittals: "– Application Number (such as SPL2021-00001) – Type of Document-2nd/3rd/4th Submittal."

-----Original Message-----

From: Angela R. Schmeckenbecher [mailto:arschmeck@icloud.com]
Sent: Thursday, September 15, 2022 10:20 AM
To: Brittany A. Colyer <bcolyer@suffolkva.us>
Subject: Re: [EXTERNAL] Rezoning sign

Good Morning Brittany,

I wanted to check in to see how things were progressing on this. Our neighbors are having a meeting tonight and were asking if I had received any of the info I requested.

I'm hoping I will at least get the info before Tuesday's meeting. Anything you can do to help move this along would be greatly appreciated.

Angela

Sent from my iPhone

On Sep 13, 2022, at 9:13 AM, Brittany A. Colyer <bcolyer@suffolkva.us> wrote:

Thank you I will let out Secretary know that they are sending that over so she can get working on it.

Brittany Colyer

Planner II

City of Suffolk

Department of Planning and Community Development City of Suffolk,

Virginia

442 W. Washington Street

Suffolk, VA 23434

(757) 514-4060 (main)

(757) 514-4077 (direct)

(757) 434-2506 (cell)

Applicants are encouraged to continue to submit application materials electronically using the City's sharefile link here: <https://cityofsuffolk.sharefile.com/share/upload/r73c19f0337bc4f1cb6c76fd69a0434d8>.

We kindly ask that prior to uploading materials, please name your files using the following format:

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- For resubmittals: "– Application Number (such as SPL2021-00001) – Type of Document-2nd/3rd/4th Submittal."

-----Original Message-----

From: Angela R. Schmeckenbecher [mailto:arschmeck@icloud.com]

Sent: Tuesday, September 13, 2022 9:13 AM

To: Brittany A. Colyer <bcolyer@suffolkva.us>

Subject: Re: [EXTERNAL] Rezoning sign

Good Morning,

I called them and they said it all depends on how quickly they get approval from the Department of Planning and Community Development. She found my request and logged it in and is sending it over to you guys for approval and suggested I reach out to you so you could be on the lookout for it for quick turnaround.

Angela

Sent from my iPhone

On Sep 13, 2022, at 8:27 AM, Brittany A. Colyer <bcolyer@suffolkva.us> wrote:

Good Morning,

I believe the time frame is 1-5 business days. You can contact the Media Office at 757-514-4100 to see if there is any way to expedite the FIOA request and receive the documents sooner, as the meeting is on Tuesday. Additionally, Staff's report will be available on our website this Friday, September 16, 2022. Please let me know if you have any other questions.

Thank you,

Brittany Colyer

Planner II

City of Suffolk

Department of Planning and Community Development City of Suffolk,

Virginia

442 W. Washington Street

Suffolk, VA 23434

(757) 514-4060 (main)

(757) 514-4077 (direct)

(757) 434-2506 (cell)

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-----Original Message-----

From: Angela R. Schmeckenbecher [mailto:arschmeck@icloud.com]

Sent: Monday, September 12, 2022 10:02 PM

To: Brittany A. Colyer <bcolyer@suffolkva.us>

Subject: Re: [EXTERNAL] Rezoning sign

Thank you Brittany for getting back to me. I have sent the completed FOIA form to the email address provided on the form. Do you know what kind of turnaround time I will be looking at since the meeting is scheduled for next week?

Angela

Sent from my iPhone

On Sep 12, 2022, at 9:54 AM, Brittany A. Colyer <bcolyer@suffolkva.us> wrote:

Good Morning,

I apologize for the delay in response, I was out of the office last week so I am playing catchup this morning. This application was submitted for a request to rezone the parcels from the Agricultural zoning district to RLM, Residential Low-Medium Density Zoning District. The applicant is proposing to construct no more than 300 dwelling units as a part of this request for a gross density of roughly 2.8 dwelling units per acre rather than the existing density that is permitted of 1 unit per acre. This application is being forwarded for consideration at the upcoming September 20, 2022, Planning Commission meeting at 2:00 p.m. in the City Council Chambers. If you would like to speak in opposition or express any concerns

regarding this application, there will be an opportunity for you to speak at the Planning Commission meeting during the public hearing portion. If you are unable to attend the meeting, you may submit a letter of opposition via email that I can include in staff's report. That email would need to be received no later than Wednesday, September 14, 2022, in order to meet the deadline for packet distribution.

In regards to your request for copies of the reports and exhibits, a request of this nature does require that Freedom of Information Act (FOIA) request be submitted; that form can be found here:

https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fwww.suffolkva.us%2fDocumentCenter%2fView%2f90%2fCity-of-Suffolk-Freedom-of-Information-Act-Request-Form-PDF%3fbidId%3d.%c=E,1,Ctk-vAnuyLS1aruNyPk8YUDaRIZ-Q-pF5JNA5RrfUe4rYRV42bNRjfkJ873KccnepFOpYP9znrVRJs355eEjdL10V7u3JMMiER439Ny_7S0GuJE4MEOxTA,,&typo=1

Request-Form-PDF%3fbidId%3d.%c=E,1,Ctk-vAnuyLS1aruNyPk8YUDaRIZ-

Q-pF5JNA5RrfUe4rYRV42bNRjfkJ873KccnepFOpYP9znrVRJs355eEjdL10V7u3JMMiER439Ny_7S0GuJE4MEOxTA,,&typo=1 Please be sure to send the request to the email listed on the form. Please let me know if you have any other questions.

Brittany Colyer

Planner II

City of Suffolk

Department of Planning and Community Development City of Suffolk,

Virginia

442 W. Washington Street

Suffolk, VA 23434

(757) 514-4060 (main)

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- For resubmittals: "– Application Number (such as SPL2021-00001) – Type of Document-2nd/3rd/4th Submittal."

-----Original Message-----

From: Catina M. Myrick On Behalf Of PlanningEmail

Sent: Thursday, September 08, 2022 11:46 AM

To: Brittany A. Colyer <bcolyer@suffolkva.us>

Subject: FW: [EXTERNAL] Rezoning sign

-----Original Message-----

From: Angela R. Schmeckenbecher [mailto:arschmeck@icloud.com]

Sent: Wednesday, September 07, 2022 7:38 AM

To: PlanningEmail <PlanningEmail@suffolkva.us>

Subject: [EXTERNAL] Rezoning sign

Caution: This email originated from a source outside of the City of Suffolk. Do not click on links or open attachments unless you recognize the sender and you know the content is safe.

We noticed a zoning sign posted on the property that shares a 1,634.46 ft property line with us on Manning Rd, application no. RZN2022-007. We would like more information about this application, what's being proposed for its use and any site plan or design narratives that show proposed property line changes that run directly along our property line at 630 Manning Rd.

We would also like to know what we can do if we oppose the proposed change in zoning that could directly affect our adjoining property.

Thank you and I look forward to hearing from someone soon.

John & Angela Schmeckenbecher

Sent from my iPhone

Suffolk man dies in fatal crash

Published 9:02 am Friday, February 21, 2020

By Staff Reports



Listen to this article now
Powered by Trinity Audio



00:00

00:01

A Suffolk man died in a single-vehicle accident early Friday morning.

The victim was identified as 61-year-old Byron K. Burney, according to a city press release.

Suffolk Police and Suffolk Fire & Rescue responded to the 100 block of Manning Road after receiving the report at 5:40 a.m., the press release stated. Burney was transported to the hospital with life-threatening injuries and succumbed to his injuries while at the hospital.



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Burney was operations manager for 13News Now for many years and most recently worked for the company I-Soft Solutions, the news channel wrote on its website.

"He will be missed by many people here at 13News Now, and our thoughts are with his family," the news channel's story stated.

The roadway was closed for an extended period of time while the investigation continues.

SUFFOLK

Pedestrian killed in hit-and-run on Manning Road in Suffolk, suspect arrested

by: [Julius Ayo](#)

Posted: Oct 2, 2021 / 10:51 AM EDT

Updated: Oct 5, 2021 / 05:57 PM EDT



SHARE    

SUFFOLK, Va. (WAVY) — Suffolk police have made an arrest after a hit-and-run crash that took the life of a pedestrian on October 1.

According to police, they got the call for the incident around 11 p.m. Friday for a hit-and-run in the 3000 block of Manning Road.

When they got to the scene, they found the man, later identified as 35-year-old Christopher Lea Stine, dead on the scene.

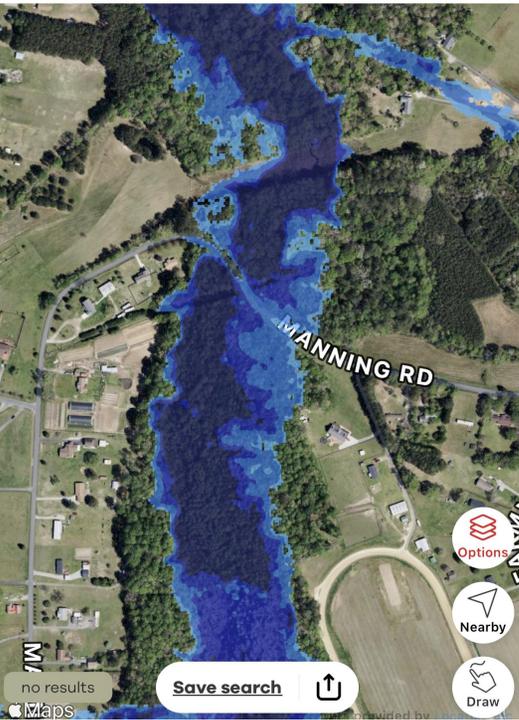
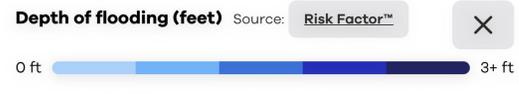
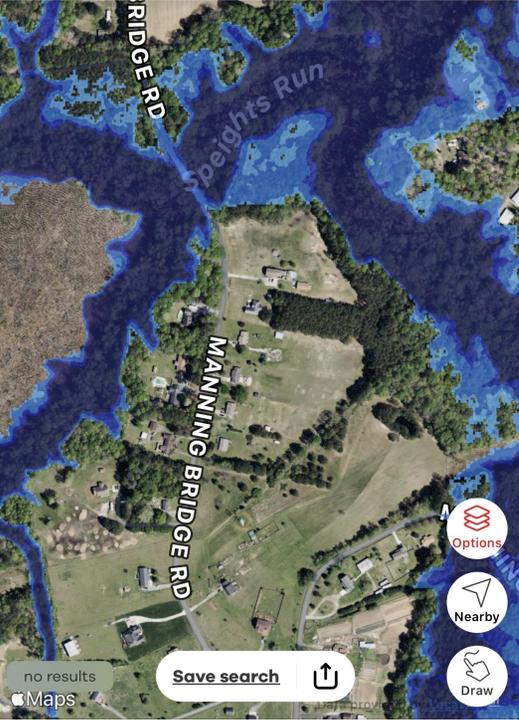
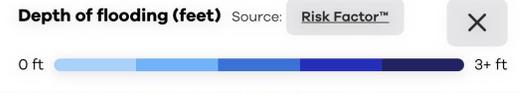
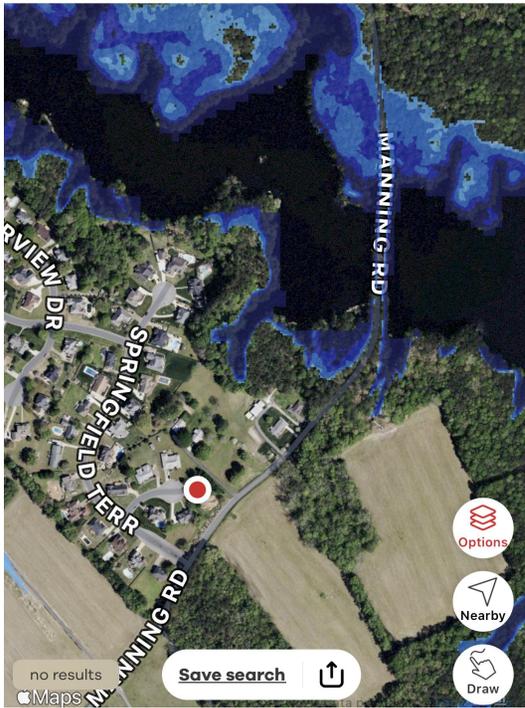
On October 5, police announced they arrested 36-year-old Mark Allen Wilson, Sr. He's been charged with fail to appear after charged with felony, victim injured – driver fails to stop, report or assist, suspended sentence violation – felony, no insurance, driving under suspension and damage to attended property – driver fails to report.



Mark Allen Wilson, Sr. (Photo courtesy: Suffolk Police)

Police say the crash remains under investigation and Wilson is being held at Western Tidewater Regional Jail. More charges are expected.

Flood Maps



Manning Road

This image below from Google Maps shows that Manning Road is a narrow road with each lane 8 feet wide and having no shoulders.



Views of Manning Road from Google Maps:



Image of Tractor Trailer Stuck on Manning Road at Wilkins Drive (September 12, 2022):



Trip Generation Summary

Alternative: Alternative 1

Phase:

Project:

Open Date: 9/14/2022

Analysis Date: 9/14/2022

ITE	Land Use	Weekday Average Daily Trips			Weekday AM Peak Hour of Adjacent Street Traffic			Weekday PM Peak Hour of Adjacent Street Traffic		
		* Enter	Exit	Total	* Enter	Exit	Total	* Enter	Exit	Total
210	SFHOUSE 1	1416	1416	2832	56	166	222	187	110	297
	300 Dwelling Units									
	Unadjusted Volume	1416	1416	2832	56	166	222	187	110	297
	Internal Capture Trips	0	0	0	0	0	0	0	0	0
	Pass-By Trips	0	0	0	0	0	0	0	0	0
	Volume Added to Adjacent Streets	1416	1416	2832	56	166	222	187	110	297

Total Weekday Average Daily Trips Internal Capture = 0 Percent

Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

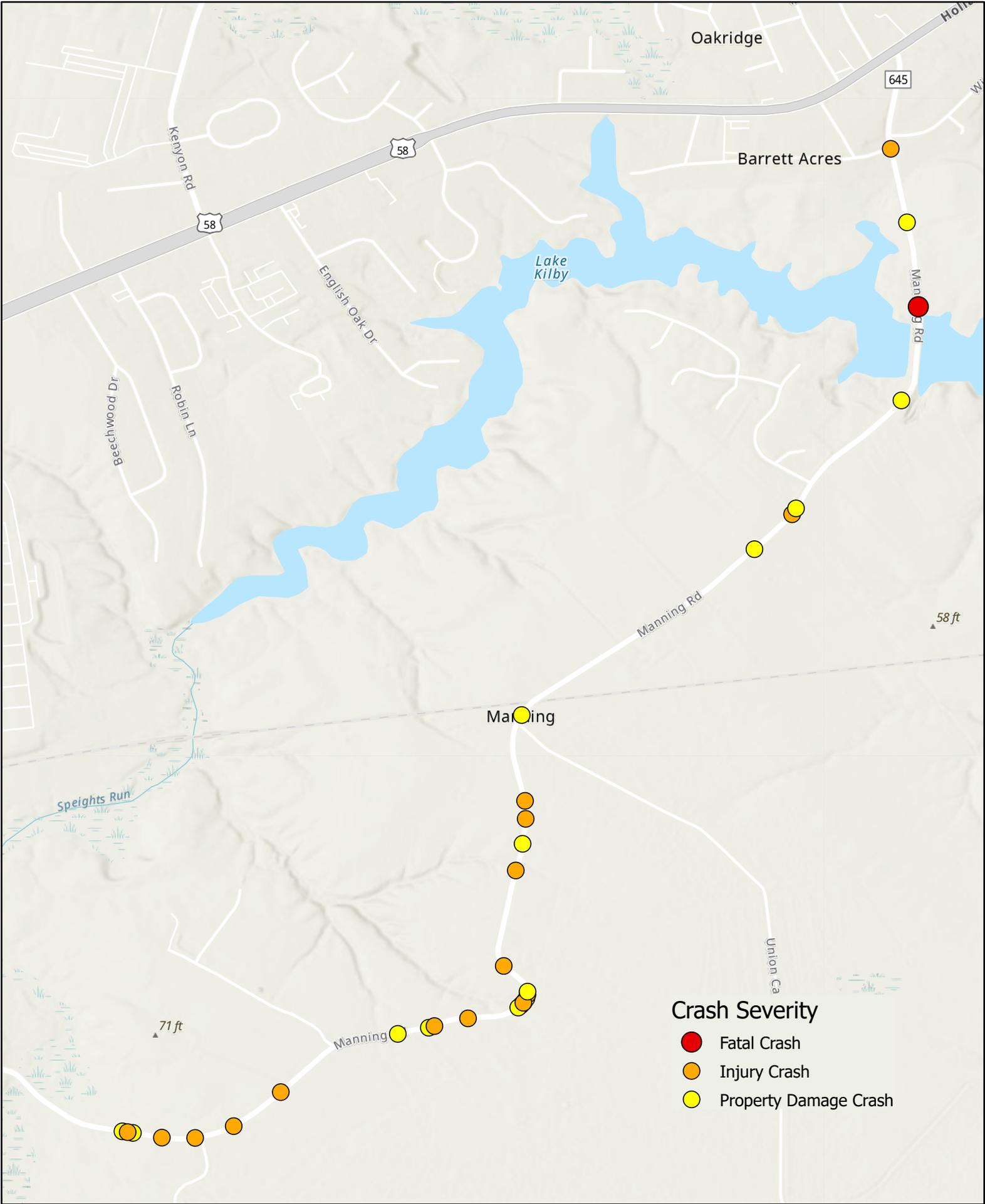
Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

TRIP GENERATION 10, TRAFFICWARE, LLC

Manning Road Crash Incidents



Name	City	State	Postal Code	Commented	Comment
Dr. Sherri Johnston				9/8/2022	"I want to keep our neighborhood peaceful." "To much growth in Southern Suffolk without infrastructure support (roads, schools for a couple)"
Kiera Rustay	Suffolk	VA	23434	9/8/2022	"Already too much housing in Suffolk, need to focus on other things than this! Leave the Farm land alone, not much left as is!!!"
Deborah Parker	Suffolk	VA	23434	9/8/2022	"I live there and bought for the rural life not suburban living"
Jean Bonnette	Suffolk			9/8/2022	"Suffolk is building WAY TOO MANY homes. We are getting over crowded!! I have lived in Suffolk all my life. .58 years. The wonderful thing about Suffolk is the country feel. Please stop building crowded neighborhoods!!! Let the country remain COUNTRY!! 58 is already being built up and is a great place to build an outlet mall or something like that. We don't need WAREHOUSES!!! OR NEIGHBORHOODS! We need shopping, entertainment, and restaurants!!!"
carol wright	Suffolk	VA	23434	9/8/2022	"How can we be a city about agriculture when farm land is being taken/rezoned left and right for homes and solar farms. The schools couldn't handle the kids when I graduated in 2015, so I know the schools can't handle what they have now let alone the amount of kids coming in if things like this keep happening. Manning Road has never been fully paved and is not in the condition to handle what it needs to now let alone what this development could bring!! This is Southern Suffolk not northern Suffolk. Stop building it up!!!! SUPPORT YOUR LOCAL FARMERS!!!"
Courteney Simpson	Suffolk	VA	23437	9/8/2022	"SAVE THE FARMLAND! Our schools & infrastructure cannot support anymore new homes."
Kristen Gardner	Suffolk	VA	23434	9/9/2022	"Leave rural and ag spaces, rural and ag. Can't believe how much this city has been built up in the last 6 years since I first visited. Slow it down, keep the country feel, stop overpopulating an infrastructure that can't support it."
Ryan Zick	San Diego	CA	92113	9/9/2022	

Melinda Stevenson	Hampton	VA	23666	9/9/2022	<p>"Where are kids to go to school at. Already crowded and short teachers. Not to mention this is taking land from farmers to make a living. Where will animals go? We have people that are only thinking about a dollar they can make. Funny how all of a sudden houses going up everywhere take a ride through what use to be country roads. Houses everywhere. I know people that are building a house in the time for them to get approval from city, Complete neighborhoods have gone up. Who is approving these neighborhoods and who is benefiting from them. Surely not farmers, animal's or children that will not have space to learn in our schools. Perfect example of money is the root of evil."</p> <p>"There is already more traffic on Manning Rd. than there should be. The schools are already overcrowded. There is a teacher shortage and bus driver shortage. The animals are running out of room to live. They have nowhere to go and then people want to kill them because they become a nuisance in the place that was their home first."</p>
Lisa Shannon	Suffolk	VA	23437	9/9/2022	<p>"Suffolk used to to be a beautiful place but with this many homes being built here it will ruin the attraction Suffolk held as country and farm land. It will also bring in too many people for the area!"</p>
Andrew Shaffer	Suffolk	VA	23434	9/9/2022	
Dana Carr				9/9/2022	<p>"We don't need any homes on Manning Rd.!!!!"</p> <p>"We do not need to overdevelop Suffolk! We can hardly support the population we currently have with the infrastructures in place. Leave our community rural!"</p>
Sharon Criner	Suffolk	VA	23437	9/9/2022	
Robert Buckmaster	Suffolk	VA	23434	9/9/2022	"To much to soon in this area."

Susan Longley	Suffolk	VA	23435	9/9/2022	"I disagree, whole heartedly, with this rezoning. The zoning commission are making poor decisions for the city's growth and improvement. The proposed rezoning is detrimental to our city. We don't need more warehouses and warehouse truck traffic. This will in no way, shape, or form be what the city needs. These warehouses will just be empty, ugly shells within the master of a few years anyway. We have enough warehouses. Planning commission needs a huge over haul of members . They do not have the city's best interest at heart." "Too many developments are in the works now. We need to improve the roads, built more schools, hire more police fire and rescue. Let's stop moving forward before putting these upgrades in place. One day there will be no food because all the land has been built up with homes and warehouses! Our grandchildren will want to know how we could have done this to them. Let's STOP and think about the long range outcome of these actions, before it is too late."
June Cooley	Suffolk	VA	23434	9/9/2022	"Raymond Dail"
Raymond DAIL	Chesapeake	VA	23321	9/9/2022	"I am absolutely against this."
Jessica I. chaney	Suffolk	VA	23434	9/9/2022	"Our schools and roads are overcrowded and at capacity!! The Growth is Out of Control!!"
Kevin McKean	Suffolk	VA	23434	9/9/2022	"The Moore family has lived on (Bethlehem) Manning Road since January 1938 and enjoyed the farming/farm land in the country! We are not in favor of the development as the plans include way-too many homes surrounding our lake area. We would not object to custom-built homes in price range of \$300,000 to \$500,00 and where homeowners would be proud of their home. The proposed homes will cause depreciation in our home and those surrounding us. We like our "country living"! Please reconsider your proposal for the Ellis farm to resemble our homes in Springfield!!" "We're losing too much of our farmland to residential. Save our farmland!"
Mollie Moore	Suffolk	VA	23434	9/9/2022	
Mollie Moore	Suffolk	VA	23434	9/9/2022	

Neal Quinton	Suffolk	VA	23434	9/9/2022	"Suffolk needs to slow the building projects. Not only do many of the current residents not want these project in the first place but the infrastructure isn't there to support it."
Monica Eure	Suffolk	VA	23434	9/9/2022	"Too many houses in downtown Suffolk area. Not enough shops / grocery / schools to support the people"
Debra Kelly	Suffolk		23437	9/9/2022	"We got run out of Chesapeake by this and I don't feel like moving again"
Barbara Newsome	Suffolk	VA	23434	9/9/2022	"Over development in the city will cause more unbearable congestion."
Amber Theodorou	Suffolk	VA	23434	9/9/2022	"Our city has already become so overcrowded and with that more dangerous. Our streets are crowded with traffic at all hours. People chose to live her for the quiet slower life. Leave our agricultural land alone."
Penny Harcum	Suffolk	VA	23437	9/10/2022	"This area is not a safe entry or exit. Residents purchased their homes for tge seclusion not one neighborhood after another. The school system cannot accommodate the students they have so why add more before that has been addressed. Not to mention the traffic issues on 58."
Pam Carr	Suffolk	VA	23434	9/10/2022	"I feel the Fram land is too important to our community to rezone just so the city can make a buck! Our schools can't even handle the number of children who currently attend our schools. Manni g road is a narrow two lane road that would not be able to handle the amount of traffic generated with the addition of 490 homes. 58 is already so congested that I even hate having to get on it, I can't even imagine how bad it will get with the addition of 300 homes. Get smart city council, for once stop thinking about the almighty Dollard and think about what is best for our community....much needed farm land!"
Greyson Milburn	Suffolk	VA	23434	9/10/2022	"Suffolk is already overcrowded, if more developments or apartments keep popping up it'll be just like va beach"
Michele Faulk	Suffolk	VA	23434	9/10/2022	"Manning rd. is already a speed way.it's narrow it can't handle more traffic. our schools already overcrowded we cannot handle additional students."

Joanne Mullen	Suffolk	VA	23434	9/10/2022	<p>"There is already enough traffic on our pot-holed roads.....not supporting "greed"& our city won't even trim trees around powerlines, over-charge us for utilities & continue to pass the buck when covering up their mistakes or laziness.</p> <p>Hey....you asked. I'm just being honest."</p> <p>"There is too many homes being built in this area and warehouses and the schools , roads and resources we have to serve the citizens of Suffolk are struggling. Before anymore homes and business are built we should fix these things that we need to fix"</p>
kelly wilson	Suffolk	VA	23434	9/10/2022	<p>"Our children are already struggling in the Suffolk Piblic School system due to overpopulation. I have not heard any talk of any new schools being built to support all of the new neighborhoods being built all over Suffolk. Our children are the future please consider how this is affecting them. They need proper education. We have a teacher shortage already!!!"</p>
Leigh Rice	Suffolk	VA	23434	9/10/2022	<p>"This would be to many houses in a very small area. Adding so many people and vehicles to an already crowded area! Roads and schools can't handle the overload!"</p>
Joyce Brinkley	Suffolk	VA	23435	9/11/2022	<p>"Suffolk is getting way to crowded. Manning road is much to small to handle a 100 new cookie cutter house all stacked on top of each other. The school is already to crowded and they can't even run the buses routs now."</p>
Donald Adams	Henrico	VA	23229	9/11/2022	<p>"Manning Road cannot support all the new traffic. The schools are already overcrowded.</p>
Breena Ray	Chesapeake VA		23323	9/11/2022	<p>There are spotted owls in the woods."</p>
Destiny Becker	Suffolk	VA	23435	9/11/2022	<p>"We moved out here because it was like living in the country while still being close enough to the city is we needed something. Our road is not big enough to handle the amount of traffic this would bring, it's basically a paved one way road as it is. Heaven help anyone who comes up in a school bus or large truck. They never fix our road, just "patch and pray" it. This is a ridiculous idea"</p>

Angela Schmeckenbecher	Suffolk	VA	23434	9/12/2022	<p>"My husband and I share a 1,634 foot property line with this property. We moved further out in Suffolk for the quiet country setting and wildlife not to have 50+ homes looking into our backyard. Large acreage estates is one thing, but 300 homes is a completely different animal. We attempted to reach out to the current owner to offer to purchase the woods and open field next to us but received no response. We not only wanted to preserve our privacy and security, but wanted to save the wildlife habitat that seems to be evaporating. We have seen deer, turkeys, raccoons, grey foxes, rabbits, coyotes, bald eagles, etc. all coming from and going to the woods next door. They will be forced out with 300 homes. Crime, trespassing and traffic issues will certainly go up. I believe most people move to Suffolk for the quiet country setting otherwise they would move to Virginia Beach. Preserve the country lifestyle of Suffolk!"</p> <p>"Does the other two neighborhood at the entrance of manning road know about this matter if so we need to join forces with those neighborhood. I. All for capitalism but not at our expense. Besides will the city of Suffolk infrastructure be able to support all this people coming in , I don't think so, their downtown still look like from the twilight zone . Stop this nonsense and concentrate first on your downtown you can't hardly support the existing inhabitants and you're thinking of building more homes. No DEVELOPMENT across Springfield HELL NO!!!!!!"</p>
Ernesto Barrameda	Suffolk	VA	23435	9/12/2022	
Donald wleklinski	Terre Haut	IN	47803	9/12/2022	<p>"Needs looking into"</p> <p>"Manning Road is already a busy road that is hardly maintained by the city. There aren't any shoulders on either side of the road. With the speed of traffic, I often have to stop to allow a larger vehicle to pass in order to keep from being hit. In addition, trucks and cars and tractor trailers are often rerouted when there's a bad accident on Route 58. This started long before the lane widening. And lane widening won't prevent this when one directional traffic is halted."</p>
Brenda Faulk	Suffolk	VA	23435	9/12/2022	

Joseph Butler	Richmond	VA	23224	9/13/2022	"Local schools are overcrowded and in poor condition and it's not a tax issue. Suffolk City does a poor job of maintaining Manning now -- imagine the road with 300 more vehicles per day!"
Darlene Simpson	Suffolk	VA	23434	9/14/2022	"overbuilding and the roads are not up to standard to handle the traffic now. It will put a burden on the already overflowing traffic on Rt 58."
Cynthia Weeden	Suffolk	VA	23438	9/14/2022	"Suffolk needs to slow down...our schools and roads are already overcrowded."
Ruth Casey	Suffolk	VA	23435	9/15/2022	"I live off 58 and more houses will make the traffic even worse!!"
Lynn Kleisler	Suffolk	VA	23434	9/16/2022	"There is too much development of our farm land in Suffolk. It is causing traffic issues as well as depleting the possibility of growing crops. Look at what is going on in Northern Suffolk."
Jeanne Sperling	Suffolk	VA	23434	9/17/2022	"Suffolk does not have the infrastructure to handle more houses. We need shopping, and entertainment for the people who already live here"
Pat Robinson	Suffolk	VA	23434	9/18/2022	"Manning Road is a rural and farming community. We do not need a large development and the road is not suited for such developments. We do not want it here. We are for farming and livestock in our area and believe that needs to be preserved."
Katherine Robinson	Suffolk	VA	23437	9/18/2022	"The reason why I signed this is because we do not need any more houses, especially on such dangerous roads like Manning. That land is agricultural for a reason. What we really need is a pet supply store, or a veterinary clinic for exotic animals near Main Street."
Kathleen Coyne	Suffolk	VA	23434	9/18/2022	"1. Our schools are already over crowded and lack funding2. Too many of our roads are already in need of repair and this will increase that 3. Utilities already cost too much for residents - water is astronomical 4. We have plenty of jobs, employers already can't find employees - let's make the situation worse and ruin it for the little guy. 5. A lot of these "workers" may not even come to Suffolk except to work and leave so there will be no tax revenue from them6. It's over crowding"
Eddie Atkins	suffolk	VA	23434	9/18/2022	"There is too much traffic in the area already. Please say NO to rezoning this area"

"I sure hope the city of Suffolk considers
improving the schools and our roads before they
allow more housing developments or other
rezonings away from agriculture!"

Kim Burnop

Suffolk

VA

23434

9/18/2022

Name	City	State	Postal Cod	Country	Signed On
Dr. Sherri Johnston				US	9/8/2022
Robin Broc	Suffolk	VA	23434	US	9/8/2022
Breena Bræ	Suffolk	VA	23434	US	9/8/2022
Randy Bro	Suffolk	VA	23434	US	9/8/2022
Kiera Rust	Suffolk	VA	23434	US	9/8/2022
Jessica Car	Capitol He	MD	20743	US	9/8/2022
K. Michele	Suffolk	VA	23434	US	9/8/2022
Melanie W	Suffolk	VA	23434	US	9/8/2022
Vicki Turne	Chesapeake	VA	23320	US	9/8/2022
Pammy Gr	Suffolk	VA	23434	US	9/8/2022
Lacey Lort	Suffolk	VA	23434	US	9/8/2022
Jennifer W	Suffolk	VA	23434	US	9/8/2022
Wyndi Bal	Los Angeles	CA	90015	US	9/8/2022
Roger Carç	Suffolk	VA	23434	US	9/8/2022
Anton Johı	Suffolk	VA	23434	US	9/8/2022
Doris Chan	Suffolk	VA	23434	US	9/8/2022
Judy Bosw	Suffolk	VA	23434	US	9/8/2022
Linda Wilk	Suffolk	VA	23434	US	9/8/2022
Roger Kell	Warren	OH	44485	US	9/8/2022
Deborah P	Suffolk	VA	23434	US	9/8/2022
Keith Simp	Suffolk	VA	23437	US	9/8/2022
Travis Will	Suffolk	VA	23434	US	9/8/2022
Melissa Th	Suffolk	VA	23435	US	9/8/2022
Heather W	Suffolk	VA	23434	US	9/8/2022
Courtney	Suffolk	VA	23437	US	9/8/2022
Jean Bonn	Suffolk			US	9/8/2022
carol wriç	Suffolk	VA	23434	US	9/8/2022
Susan Wer	Suffolk	VA	23434	US	9/8/2022
Judith Beç	Suffolk	VA	23434	US	9/8/2022
Toni Haup	Suffolk	VA	23434	US	9/9/2022
Kaylene Tr	Suffolk	VA	23437	US	9/9/2022
Jennifer St	Elberon	VA	23846	US	9/9/2022
Erica Perry	Suffolk	VA	23434	US	9/9/2022
Jennifer M	Suffolk	VA	23435	US	9/9/2022
Nicole Rog	Newport N	VA	23601	US	9/9/2022
Tanner Hu	Gloucester	VA	23061	US	9/9/2022
Nathan Lo	Suffolk	VA	23434	US	9/9/2022
Layla Mon	Granada Hills		91344	US	9/9/2022
Ann Harris	Suffolk	VA	23435	US	9/9/2022
Jennifer Si	Suffolk	VA	23437	US	9/9/2022
Kyle Hone	Richmond	VA	23237	US	9/9/2022
Shashwat	Grapevine		76051	US	9/9/2022
Paula Smit	Suffolk	VA	23434	US	9/9/2022
Landon Jer	Southlake		76092	US	9/9/2022
Maurice R	Valencia		91354	US	9/9/2022
..	Oklahoma City		73110	US	9/9/2022

Aaliyah Riv Miami	33161 US	9/9/2022
Mariah Ru Gloucester VA	23061 US	9/9/2022
Brandon H Suffolk VA	23434 US	9/9/2022
Wanda Ro Suffolk VA	23434 US	9/9/2022
Wendy Wi Suffolk VA	23437 US	9/9/2022
Jen Parker Franklin IN	46131 US	9/9/2022
Tyler Bunc Suffolk VA	23434 US	9/9/2022
Ryan Creel Suffolk VA	23434 US	9/9/2022
Bianca Fre Roanoke VA	24019 US	9/9/2022
Hala Abdu San Bernar CA	92411 US	9/9/2022
Cathy Culb Suffolk VA	23434 US	9/9/2022
Nicholas G Suffolk VA	23434 US	9/9/2022
M T Moorhead	56560 US	9/9/2022
Ashley Per Alexandria	22305 US	9/9/2022
Madison N Suffolk VA	23434 US	9/9/2022
Hugo Pere Miami	33178 US	9/9/2022
dan pan Green Bay	54313 US	9/9/2022
Baillee Ber Brazil	47834 US	9/9/2022
Meaghan I Richmond VA	23220 US	9/9/2022
Tyler Jewe Rocklin	95677 US	9/9/2022
Jennifer W Norfolk VA	23502 US	9/9/2022
Jena Hallal Grapevine	76051 US	9/9/2022
Selena Suc Eau Claire	54701 US	9/9/2022
April Johns Suffolk VA	23435 US	9/9/2022
Guillermo Caguas	US	9/9/2022
April Bent Suffolk VA	23434 US	9/9/2022
Randy Brai Suffolk VA	23434 US	9/9/2022
Amy Price Suffolk VA	23347 US	9/9/2022
Kelly Oneil Chesapeake VA	23321 US	9/9/2022
Dabney Lo Suffolk VA	23434 US	9/9/2022
Chris Gaml Virginia Be VA	23455 US	9/9/2022
Kristen Ga Suffolk VA	23434 US	9/9/2022
Judy Duke Suffolk VA	23437 US	9/9/2022
Shelly Smit Suffolk VA	23435 US	9/9/2022
Julianne G Suffolk VA	23434 US	9/9/2022
Tiffany Sut Suffolk VA	23434 US	9/9/2022
Calee Raw Suffolk VA	23438 US	9/9/2022
Pam Parke Suffolk VA	23434 US	9/9/2022
Allen Olive Suffolk VA	23434 US	9/9/2022
Cody Smitl Suffolk VA	23437 US	9/9/2022
Mona Raw Suffolk VA	23438 US	9/9/2022
Keisha Wil Suffolk VA	23434 US	9/9/2022
Dana Fowl Suffolk VA	23438 US	9/9/2022
Delores Sa Suffolk VA	23434 US	9/9/2022
Amy Hardy Suffolk VA	23434 US	9/9/2022
Kenneth N Richmond VA	23221 US	9/9/2022
Taylor Bari Suffolk VA	23435 US	9/9/2022

Dylan Farr	Suffolk	VA	23437	US	9/9/2022
Amanda Fi	Suffolk	VA	23434	US	9/9/2022
Brittany Tr	Atlanta	GA	30301	US	9/9/2022
Laura Fran	Hampton	VA	23666	US	9/9/2022
Kelsey Hor	Suffolk	VA	23437	US	9/9/2022
Darlene Ræ	Suffolk	VA	23434	US	9/9/2022
Devin Wal	Suffolk	VA	23438	US	9/9/2022
Charles Ra	Suffolk	VA	23434	US	9/9/2022
Kurt Hollar	Suffolk	VA	23437	US	9/9/2022
Jake Rawls	Suffolk	VA	23434	US	9/9/2022
Tamme Ge	Washington	DC	23438	US	9/9/2022
Maureen F	Suffolk	VA	23434	US	9/9/2022
Raven Oliv	Suffolk	VA	23438	US	9/9/2022
Kelly Griffi	Suffolk	VA	23435	US	9/9/2022
Jackelyn D	Brodnax	VA	23920	US	9/9/2022
Autumn La	Suffolk	VA	23435	US	9/9/2022
Cody Rose	Suffolk	VA	23434	US	9/9/2022
Kristin Bou	Suffolk	VA	23434	US	9/9/2022
Tiffany Ber	Franklin	VA	23851	US	9/9/2022
Misty Keet	Suffolk	VA	23434-664	US	9/9/2022
Karen McC	Suffolk	VA	23434	US	9/9/2022
Garrett Blæ	Richmond	VA	23234	US	9/9/2022
Danica Me	Zuni	VA	23898	US	9/9/2022
Lynsey Le	Suffolk	VA	23434	US	9/9/2022
David Kiml	Smithfield	VA	23430	US	9/9/2022
Joey Carro	Suffolk	VA	23437	US	9/9/2022
Pam Good	Powhatan	VA	23139	US	9/9/2022
Donnie Bræ	Chesapeake	VA	23325	US	9/9/2022
Sullivan M	Virginia Be	VA	23464	US	9/9/2022
Fallon Oliv	Suffolk	VA	23438	US	9/9/2022
Matthew S	Henrico	VA	23238	US	9/9/2022
Lauren Var	Suffolk	VA	23434	US	9/9/2022
Bonnie Dræ	Norfolk		23500	US	9/9/2022
Mary Cox	Suffolk	VA	23434	US	9/9/2022
Cindy Sims	Suffolk	VA	23434	US	9/9/2022
Courtney F	Suffolk	VA	23434	US	9/9/2022
Karen Bou	Suffolk	VA	23434	US	9/9/2022
Savannah !	Suffolk	VA	23434	US	9/9/2022
Lindsey Da	Suffolk	VA	23437	US	9/9/2022
Krista Ridd	Suffolk	VA	23434	US	9/9/2022
Rj Andleto	Suffolk	VA	23434	US	9/9/2022
Paula Hass	Suffolk	VA	23434	US	9/9/2022
Jessie Rick	Suffolk	VA	23435	US	9/9/2022
Herbert Ziæ	Suffolk	VA	23434	US	9/9/2022
Melinda St	Hampton	VA	23666	US	9/9/2022
Jordan Adæ	Hope Mills	NC	28348	US	9/9/2022
Charles Ca	Suffolk	VA	23434	US	9/9/2022

Carol Pribk Suffolk	VA	23434	US	9/9/2022
Sarah Lam suffolk	VA	23435	US	9/9/2022
April Parris Suffolk	VA	23434	US	9/9/2022
Carpenter Smithfield	VA	23430	US	9/9/2022
GILBERT S; Suffolk	VA	23434	US	9/9/2022
Sarah Blair Suffolk	VA	23434	US	9/9/2022
Madisen N Suffolk	VA	23437	US	9/9/2022
Stephanie Suffolk	VA	23434	US	9/9/2022
Charles Fe; Suffolk	VA	23434	US	9/9/2022
Julia Ellen Kill Devil HNC		27948	US	9/9/2022
Victoria H; Blacksburg	VA	24060	US	9/9/2022
Rob Brinkl; Suffolk	VA	23434	US	9/9/2022
Heather H; Suffolk	VA	23434	US	9/9/2022
Dr. Dawn; Suffolk	VA	23434	US	9/9/2022
Denise Do; Smithfield	VA	23430	US	9/9/2022
Curt Pulley Suffolk	VA	23437	US	9/9/2022
Mcculloug Suffolk	VA	23437	US	9/9/2022
Ashley Hav; Suffolk	VA	23434	US	9/9/2022
Kimberly F Suffolk	VA	23438	US	9/9/2022
Grace Sim; Atlanta		30045	US	9/9/2022
Josh Stand Lake Zurich		60047	US	9/9/2022
Mohamm; Tampa		33612	US	9/9/2022
april n Dallas		76244	US	9/9/2022
Colin Deck Flint		75762	US	9/9/2022
Lauren Ch; Franklin	VA	23851	US	9/9/2022
Lisa Shann Suffolk	VA	23437	US	9/9/2022
jill mazon Staten Island		10310	US	9/9/2022
John Brink Colonial H; VA		23834	US	9/9/2022
Vera Whit; Atlanta		30342	US	9/9/2022
Kolby Heg; Clayton		99110	US	9/9/2022
Andrew B; Southlake		76092	US	9/9/2022
Andrew B; Southlake		76092	US	9/9/2022
Alicia Dou; Suffolk	VA	23434	US	9/9/2022
Sehar Sab; Washington		56972	US	9/9/2022
Chris Scott Newnan	GA	30263	US	9/9/2022
Nutan Nat Ann Arbor	MI	48103	US	9/9/2022
Lindsay Hu Morehead	NC	28557	US	9/9/2022
George Kh Brooklyn		11209	US	9/9/2022
Cecilia Day Los Angeles		90042	US	9/9/2022
Patricia Le; Suffolk	VA	23434	US	9/9/2022
Adele War Suffolk	VA	23437	US	9/9/2022
Whitney U Seattle	WA	98126	US	9/9/2022
Austin Wa Corvallis	OR	97330	US	9/9/2022
Jade Jones Suffolk	VA	23434	US	9/9/2022
Misty Hecl Suffolk	VA	23436	US	9/9/2022
Logan Will Kill Devil HNC		27948	US	9/9/2022
Jen Ward Washington DC		20002	US	9/9/2022

Andre Pitc Suffolk	VA	23435 US	9/9/2022
Jason Baile Petersburg	VA	23803 US	9/9/2022
Cody Stark Richmond	VA	23234 US	9/9/2022
Andrew Sh Suffolk	VA	23434 US	9/9/2022
Dana Carr		US	9/9/2022
Amber Doi Suffolk	VA	23434 US	9/9/2022
Johanna Le Suffolk	VA	23434 US	9/9/2022
CHRISTABE Suffolk	VA	23435 US	9/9/2022
Thomas Gr Suffolk	VA	23435 US	9/9/2022
Sean McG Suffolk	VA	23438 US	9/9/2022
Courtney S Suffolk	VA	23434 US	9/9/2022
Nichole Br Suffolk	VA	23438 US	9/9/2022
Christine S Suffolk	VA	23435 US	9/9/2022
Marc Delgi Suffolk	VA	23434 US	9/9/2022
Susana Mu Madrid		28019 Spain	9/9/2022
Keisha Har Suffolk	VA	23434 US	9/9/2022
Ashlee Wa Suffolk	VA	23435 US	9/9/2022
Casey Garc Henrico	VA	23228 US	9/9/2022
Veronica V Suffolk	VA	23435 US	9/9/2022
Sharon Cri Suffolk	VA	23437 US	9/9/2022
Tyler Lilley Suffolk	VA	23437 US	9/9/2022
Virginia As Suffolk	VA	23434 US	9/9/2022
Corey Bou Newport N	VA	23602 US	9/9/2022
Deborah T Suffolk	VA	23434 US	9/9/2022
Holly Bruff Suffolk	VA	23434 US	9/9/2022
Arik Hartn Cromwell		6416 US	9/9/2022
Erin Clemc Suffolk	VA	23434 US	9/9/2022
Kimberly T Atlanta		30314-200 US	9/9/2022
Diyana Mc Alexandria		22314 US	9/9/2022
Chase Dau Newport N	VA	23602 US	9/9/2022
Caydence I Crawfordsville		47933 US	9/9/2022
Brandon T Richmond	VA	23237 US	9/9/2022
Regina Brc Pittsburgh		15209 US	9/9/2022
Rebecca St Suffolk	VA	23435 US	9/9/2022
Luradine E Chicago		60602 US	9/9/2022
Vicky Pincl Suffolk	VA	23435 US	9/9/2022
Susan Lam Suffolk	VA	23435 US	9/9/2022
Jessica Har Suffolk	VA	23434 US	9/9/2022
Kelli Spind Lima		45805 US	9/9/2022
Jeremy Br Suffolk	VA	23434 US	9/9/2022
Claudette . Henrico	VA	23231 US	9/9/2022
Carrie Purs Suffolk	VA	23438 US	9/9/2022
Moya Hasl Suffolk	VA	23434 US	9/9/2022
Danielle C Suffolk	VA	23434 US	9/9/2022
Tina Gordi Suffolk	VA	23434 US	9/9/2022
Stephanie Windsor	VA	23487 US	9/9/2022
Cheryl Grif Suffolk	VA	23434 US	9/9/2022

Robert Bur	Suffolk VA	23434 US	9/9/2022
Sherri Syke	Suffolk VA	23434 US	9/9/2022
Jennifer M	Suffolk VA	23434 US	9/9/2022
sarah jung	suffolk VA	23437 US	9/9/2022
Ben Delug	Suffolk VA	23434 US	9/9/2022
Traci Riddl	Suffolk VA	23437 US	9/9/2022
Jason Hanl	Virginia Be VA	23452 US	9/9/2022
Elizabeth H	Virginia Be VA	23454 US	9/9/2022
Kimberlyn	Suffolk VA	23434 US	9/9/2022
Breanna T	Suffolk VA	23434 US	9/9/2022
Frank Whe	Richmond VA	23237 US	9/9/2022
Christy Co	Suffolk VA	23434 US	9/9/2022
Cindy Bess	Suffolk VA	23434 US	9/9/2022
Bridgette S	Suffolk VA	23437 US	9/9/2022
Heather L	Suffolk VA	23435 US	9/9/2022
Meghan W	Suffolk VA	23435 US	9/9/2022
Angela Gol	Marietta GA	30066 US	9/9/2022
Martin Wi	Suffolk VA	23434 US	9/9/2022
Liddycoat	Suffolk VA	23434 US	9/9/2022
David Syke	Yorktown VA	23693 US	9/9/2022
Kiara Barn	Suffolk VA	23434 US	9/9/2022
Lynn Fore	Suffolk VA	23437 US	9/9/2022
Sarah Bow	Suffolk VA	23437 US	9/9/2022
Jaclyn Bish	Branchville VA	23828 US	9/9/2022
Dana Kase	Suffolk VA	23435 US	9/9/2022
Rebecca P	Suffolk VA	23435 US	9/9/2022
Owen Blar	Richmond VA	23226 US	9/9/2022
Nicole Dix	Virginia Be VA	23451 US	9/9/2022
Joshua But	Suffolk VA	23435 US	9/9/2022
Jacquelyn	r Plymouth NC	27962 US	9/9/2022
Regina Jon	Cameron NC	28326 US	9/9/2022
Bruce Flee	Suffolk VA	23437 US	9/9/2022
K'Shona El	Suffolk VA	23434 US	9/9/2022
Matt DeW	Virginia Be VA	23456 US	9/9/2022
Susan Lon	Suffolk VA	23435 US	9/9/2022
Heather C	Suffolk VA	23434 US	9/9/2022
Adam Park	Suffolk VA	23434 US	9/9/2022
Jennifer B	Suffolk VA	23434 US	9/9/2022
Ashley Gre	Ruskin FL	33570 US	9/9/2022
KATLYN T	II Suffolk VA	23435 US	9/9/2022
David Carr	Hampton VA	23666 US	9/9/2022
Yvonne W	I Suffolk VA	23435 US	9/9/2022
Wes Newn	Williamsbu VA	23188 US	9/9/2022
Bobby Rou	Suffolk VA	23438 US	9/9/2022
Sandra Gr	WINDSOR VA	23487 US	9/9/2022
Kristi Whit	Suffolk VA	23437 US	9/9/2022
Carol Turn	Canon City CO	81212 US	9/9/2022

Kathy Lew Newport N	VA	23606	US	9/9/2022
Melissa M: Williams	bu VA	23185	US	9/9/2022
David Snel	Suffolk VA	23434	US	9/9/2022
Tiffany Re	Suffolk VA	23437	US	9/9/2022
Jolene Dicl	Suffolk VA	23434	US	9/9/2022
Jessica Yer	Suffolk VA	23434	US	9/9/2022
Jada Rae	Suffolk VA	23435	US	9/9/2022
Sara Carrie	Suffolk VA	23434	US	9/9/2022
Susan Hoff	Suffolk VA	23434	US	9/9/2022
Kelsey Will	Suffolk VA	23434	US	9/9/2022
Chris John: Gates	NC	27937	US	9/9/2022
Todd Carte	Alexandria VA	22310	US	9/9/2022
Bailie Frale	Newport N VA	23601	US	9/9/2022
Kelley Bau	Suffolk VA	23434	US	9/9/2022
Taylor Dicl	Suffolk VA	23434	US	9/9/2022
Karen Hed	Suffolk VA	23434	US	9/9/2022
Diane Balo	Suffolk VA	23434	US	9/9/2022
Wendy Co	Suffolk VA	23437	US	9/9/2022
Stephanie	Suffolk VA	23434	US	9/9/2022
Logan Sigl	Suffolk VA	23434	US	9/9/2022
Amy Kopin	Gates NC	27937	US	9/9/2022
Nana's Gei	Richmond VA	23234	US	9/9/2022
kim derby	Richmond VA	23220	US	9/9/2022
Hutton Th	Suffolk VA	23433	US	9/9/2022
Evelyn Th	Suffolk VA	23434	US	9/9/2022
Heidi Sparj	Suffolk VA	23701	US	9/9/2022
Jo Anne H:	Suffolk VA	23434	US	9/9/2022
Mary Ellen	Norfolk VA	23513	US	9/9/2022
Henry Tayl	Suffolk VA	23434	US	9/9/2022
Stacey Bro	Suffolk VA	23435	US	9/9/2022
Kelly Ann	Suffolk VA	23434	US	9/9/2022
Robbin Sh	Suffolk VA	23434	US	9/9/2022
Robert Lea	Suffolk VA	23434	US	9/9/2022
Michael St	Suffolk VA	23434	US	9/9/2022
Hunter Br	Suffolk VA	23434	US	9/9/2022
Charles Ca	Lebanon CT	6249	US	9/9/2022
Nikki Heck	Suffolk VA	23434	US	9/9/2022
Scott smitl	Suffolk VA	23434	US	9/9/2022
June Coole	Suffolk VA	23434	US	9/9/2022
Dan Dailey	Suffolk VA	23434	US	9/9/2022
Raymond I	Chesapeake VA	23321	US	9/9/2022
Stephanie	Suffolk VA	23434	US	9/9/2022
Natalie Wi	Richmond VA	23234	US	9/9/2022
Stephen B	Suffolk VA	23437	US	9/9/2022
Tiffany But	Suffolk VA	23437	US	9/9/2022
Ashleigh N	Colonial H VA	23834	US	9/9/2022
James Mc	Portsmouth VA	23434	US	9/9/2022

John Reid Virginia Be VA	23454 US	9/9/2022
Alyssa Dan Suffolk VA	23434 US	9/9/2022
Wills Wen Norfolk VA	23505 US	9/9/2022
Laura Garc Chesapeake VA	23321 US	9/9/2022
Jake Mors North Berge NJ	7047 US	9/9/2022
Michelle V Charlotte NC	28217 US	9/9/2022
Brandy Arr Suffolk VA	23433 US	9/9/2022
Tracy Brin Suffolk VA	23434 US	9/9/2022
Gayle ONe Norfolk VA	23518 US	9/9/2022
Faye Beale Suffolk VA	23434 US	9/9/2022
addie thon Suffolk VA	23435 US	9/9/2022
Tina Swille Richmond VA	23237 US	9/9/2022
Germainr I Suffolk VA	23434 US	9/9/2022
Aurora Sm San Anton TX	78225 US	9/9/2022
james mo Suffolk VA	23434 US	9/9/2022
Ann Culley Suffolk VA	23434 US	9/9/2022
Carrie Mat Suffolk VA	23434 US	9/9/2022
Thomas Re Suffolk VA	23435 US	9/9/2022
Jason Balo Suffolk VA	23434 US	9/9/2022
Brad Land Suffolk VA	23437 US	9/9/2022
Breanne Pi Suffolk VA	23434 US	9/9/2022
Debra Rizz Suffolk VA	23435 US	9/9/2022
Logan Chri Mechanics VA	23111 US	9/9/2022
Holland Rc Suffolk VA	23434 US	9/9/2022
Brett Cuml Suffolk VA	23434 US	9/9/2022
Steven Ro Hampton VA	23666 US	9/9/2022
Jessica I. cl Suffolk VA	23434 US	9/9/2022
David Fritz Suffolk VA	23434 US	9/9/2022
Kimberly T Suffolk VA	23434 US	9/9/2022
Jenna Lan Suffolk VA	23334 US	9/9/2022
KHRISTOPI Suffolk VA	23434 US	9/9/2022
Mya Holla Suffolk VA	23434 US	9/9/2022
Dianne Ew Suffolk VA	23434 US	9/9/2022
Rainey Dai Virginia Be VA	23453 US	9/9/2022
Tony Fowl Suffolk VA	23434 US	9/9/2022
Kevin McK Suffolk VA	23434 US	9/9/2022
Jennifer M Suffolk VA	23434 US	9/9/2022
Nick busch Suffolk VA	23435 US	9/9/2022
Lane Hare Suffolk VA	23434 US	9/9/2022
Mark McC Richmond VA	23224 US	9/9/2022
Anne Dau Suffolk VA	23434 US	9/9/2022
Renee Akir Suffolk VA	23434 US	9/9/2022
Emily Gay Suffolk VA	23434 US	9/9/2022
DEBORAH Suffolk VA	23434 US	9/9/2022
Mary Baus Chesapeake VA	23322 US	9/9/2022
RONALD Iv Suffolk VA	23434 US	9/9/2022
Al Perry Suffolk VA	23434 US	9/9/2022

Landon Vic	Suffolk	VA	23434	US	9/9/2022
Tabitha M	Suffolk	VA	23437	US	9/9/2022
Owen Smit	Suffolk	VA	23435	US	9/9/2022
Joyce Onk	Suffolk	VA	23434	US	9/9/2022
Trevor Lan	Virginia Be	VA	23453	US	9/9/2022
Shaun Ellir	Winter Ga	FL	34787	US	9/9/2022
Jennifer T	Suffolk	VA	23437	US	9/9/2022
Timothy C	Colonial H	VA	23834	US	9/9/2022
Amanda C	Chesapeak	VA	23321	US	9/9/2022
Brandon T	Suffolk	VA	23434	US	9/9/2022
David Robi	Hampton	VA	23666	US	9/9/2022
Devin Johr	Richmond	VA	23234	US	9/9/2022
Mollie Mo	Suffolk	VA	23434	US	9/9/2022
Sharlene V	Suffolk	VA	23434	US	9/9/2022
David Peac	Lenoir	NC	28645	US	9/9/2022
Elisabeth C	Norfolk	VA	23523	US	9/9/2022
Lynn Byrur	Suffolk	VA	23434	US	9/9/2022
Javier Fern	Jacksonvill	FL	32246	US	9/9/2022
Elizabeth J	Newport N	VA	23601	US	9/9/2022
Robert Var	Suffolk	VA	23435	US	9/9/2022
Kristie Sm	Suffolk	VA	23434	US	9/9/2022
Shelby Jac	Suffolk	VA	23434	US	9/9/2022
Scott Sieb	Hampton	VA	23666	US	9/9/2022
PENNY SM	Suffolk	VA	23434	US	9/9/2022
Tre Turner	Suffolk	VA	23434	US	9/9/2022
Kasey Win	Suffolk	VA	23434	US	9/9/2022
Corey Pipp	Richmond	VA	23237	US	9/9/2022
Shelby Th	Suffolk	VA	23434	US	9/9/2022
Jennifer O	Virginia Be	VA	23434	US	9/9/2022
Dawn Arcl	Suffolk	VA	23434	US	9/9/2022
Christine E	Suffolk	VA	23434	US	9/9/2022
DIANE BO	Suffolk	VA	23434	US	9/9/2022
Robert Qu	Suffolk	VA	23434	US	9/9/2022
Jazi Porter	Suffolk	VA	23437	US	9/9/2022
Maureen S	Chesapeak	VA	23321	US	9/9/2022
Gary Hedri	Suffolk	VA	23434	US	9/9/2022
Alvin Oldal	Richmond	VA	23237	US	9/9/2022
Neal Quint	Suffolk	VA	23434	US	9/9/2022
Lee Pacher	Suffolk	VA	23434	US	9/9/2022
Summer B	Suffolk	VA	23434	US	9/9/2022
Staphanie	Chesapeak	VA	23320	US	9/9/2022
Laura Ray	Suffolk	VA	23437	US	9/9/2022
Ashley Pie	Suffolk	VA	23434	US	9/9/2022
Paul Arrin	Suffolk	VA	23434	US	9/9/2022
Patricia De	Suffolk	VA	23434	US	9/9/2022
Glenda Sm	Suffolk	VA	23434	US	9/9/2022
David Pfei	Suffolk	VA	23434	US	9/9/2022

Brandy Du Virginia Be VA	23464 US	9/9/2022
Bre Easton Suffolk VA	23434 US	9/9/2022
Erin Burch Suffolk VA	23434 US	9/9/2022
William M Suffolk VA	23434 US	9/9/2022
Randy Blie Suffolk VA	23434 US	9/9/2022
Brynne Tur South Mill NC	27976 US	9/9/2022
Jason Fanr Suffolk VA	23435 US	9/9/2022
Mark Sant Suffolk VA	23434 US	9/9/2022
Doris Dilla Suffolk VA	23437 US	9/9/2022
Bridget Du Suffolk VA	23437 US	9/9/2022
Katrina Mc Suffolk VA	23434 US	9/9/2022
Katy Dami Suffolk VA	23437 US	9/9/2022
Deborah D Suffolk VA	23434 US	9/9/2022
Monica Eu Suffolk VA	23434 US	9/9/2022
Tracey Bar Newport N VA	23606 US	9/9/2022
Norman W Suffolk VA	23434 US	9/9/2022
Cassidy An Suffolk VA	23432 US	9/9/2022
Philip Whe Suffolk VA	23438 US	9/9/2022
Ellen Tapr Suffolk VA	23438 US	9/9/2022
Tracy Gellε suffolk VA	23434 US	9/9/2022
Jeanne Ire Washington DC	20019 US	9/9/2022
Joey Copel Suffolk VA	23434 US	9/9/2022
Debra Kell Suffolk	23437 US	9/9/2022
Daniel Peri Richmond VA	23237 US	9/9/2022
Alvin Oldal Suffolk VA	23435 US	9/9/2022
Amanda W Norfolk VA	23513 US	9/9/2022
Amber Wa Suffolk VA	23435 US	9/9/2022
Austin Will Washington DC	20016 US	9/9/2022
Serena Wil Washington DC	20002 US	9/9/2022
Jason Harr Suffolk VA	23434 US	9/9/2022
Logan Ellis Virginia Be VA	23455 US	9/9/2022
Cody Louk Suffolk VA	23434 US	9/9/2022
Melissa Joi Portsmout VA	23701 US	9/9/2022
Amber Bak Colonial H VA	23834 US	9/9/2022
Dylon Ada Suffolk VA	23434 US	9/9/2022
Steven Bus Suffolk VA	23434 US	9/9/2022
Kathleen C Suffolk VA	23434 US	9/9/2022
Sami Mccr Smithfield VA	23430 US	9/9/2022
Sarah Wet Bedford	47421 US	9/9/2022
Nighya Spe Yuma	80759 US	9/9/2022
Kwonta St DeLand	32724 US	9/9/2022
Barbara Ne Suffolk VA	23434 US	9/9/2022
Francis S. Chicago	60608 US	9/9/2022
Nancy Slac Suffolk VA	23434 US	9/9/2022
Grace Reze Fall River	2720 US	9/9/2022
Bridgett Re Baytown	77521 US	9/9/2022
Grace Ado Huntington Park	90255 US	9/9/2022

Jaime Benı La Mirada	90638 US	9/9/2022
Barillas Xic Los Angeles	90008 US	9/9/2022
yellow bar Nampa	83686 US	9/9/2022
Melody Ru Chesapeak VA	23322 US	9/9/2022
Kalyani Saı Milpitas	95035 US	9/9/2022
Carolyn Be Arlington	76010 US	9/9/2022
John I Vazı San Diego	92102 US	9/9/2022
LeeAnn Trı Pendleton	97801 US	9/9/2022
Alexis Lew Suffolk VA	23435 US	9/9/2022
Kira Lowe Richmond VA	23237 US	9/9/2022
Joshua Cur Peterborough	PE7 US	9/9/2022
Amber Thı Suffolk VA	23434 US	9/9/2022
Cathy Wall Suffolk VA	23434 US	9/9/2022
Lisa Chamı Suffolk VA	23434 US	9/9/2022
Malcolm S Cumberlar VA	23040 US	9/9/2022
David Hası San Diego CA	92105 US	9/9/2022
Robert Goı Henrico VA	23228 US	9/9/2022
Lori Simpsı Franklin VA	23851 US	9/9/2022
Amber Rot Chesapeak VA	23321 US	9/9/2022
Raven Shiı Suffolk VA	23434 US	9/9/2022
Janice Muı Suffolk VA	23437 US	9/9/2022
Dennis Haı Suffolk VA	23434 US	9/9/2022
Penny Harı Suffolk VA	23437 US	#####
Lisa Myers Suffolk VA	23434 US	#####
Jennifer W Newport N VA	23601 US	#####
Samantha Philadelph PA	19104 US	#####
Jamie Thoı Suffolk VA	23434 US	#####
Robert Cru Suffolk VA	23434 US	#####
Leigh Rice Suffolk VA	23434 US	#####
Samuel Bo Portsmout VA	23703 US	#####
Lelia Harre Newport N VA	23601 US	#####
Kimberly V Suffolk VA	23437 US	#####
Carolyn Pa Richmond VA	23220 US	#####
Melissa Sk Suffolk VA	23435 US	#####
Jaslin Cook Suffolk VA	23434 US	#####
Kalea Sattı Suffolk VA	23434 US	#####
Brandon A Suffolk VA	23435 US	#####
Ann Bailey Suffolk VA	23435 US	#####
Jessica Loı Suffolk VA	23434 US	#####
David Edw Suffolk VA	23434 US	#####
Pamela Ca Suffolk VA	23444 US	#####
Greyson N Suffolk VA	23434 US	#####
Michele Faı Suffolk VA	23434 US	#####
Brenda Faı Suffolk VA	23434 US	#####
Michelle C Suffolk VA	23434 US	#####
Heather Gi Suffolk VA	23434 US	#####
Shirley Mc Suffolk VA	23434 US	#####

Kyrielle Bo Newport N	VA	23601	US	#####
Kerry Acha Franklin	VA	23851	US	#####
Jessica Tur Suffolk	VA	23434	US	#####
Kelly Vesse Suffolk	VA	23435	US	#####
Mary Hern Suffolk	VA	23434	US	#####
Richard Fo Henrico	VA	23231	US	#####
Ellen Mooi Taylor	MI	48180	US	#####
Teresa Alb Oak Harbo	WA	98277	US	#####
Britanie Pe Suffolk	VA	23435	US	#####
Samantha Suffolk	VA	23435	US	#####
Miaoling T Seattle		98118	US	#####
gisell moni Long Beach		90808	US	#####
Fanjun Rac San Francisco		94188	US	#####
Carolyn Fa Southfield	MI	48034	US	#####
Lisa Creeki Yorktown	VA	23693	US	#####
Danette St Suffolk	VA	23434	US	#####
Jennifer Cc Huntingto	MD	20639	US	#####
Bradley Eu Suffolk	VA	23434	US	#####
Michael Cc Suffolk	VA	23434	US	#####
Wendy Hu Suffolk	VA	23438	US	#####
Robert Mc Hampton	VA	23666	US	#####
Renee Cov Suffolk	VA	23434	US	#####
Cole Mate Suffolk	VA	23434	US	#####
Darlene Sii Suffolk	VA	23434	US	#####
Edward Co Huntingto	MD	20639	US	#####
Joanne Ml Suffolk	VA	23434	US	#####
Brandi Hal Suffolk	VA	23435	US	#####
Devin Payt Norfolk	VA	23518	US	#####
Gina Such Asheboro	NC	27205	US	#####
Gail Zirk Suffolk	VA	23434	US	#####
Kendra Osl Suffolk	VA	23434	US	#####
Brenna We Suffolk	VA	23438	US	#####
Jeffery Re Suffolk		23438	Belgium	#####
Jami Ferdc Suffolk	VA	23434	US	#####
Justin Johr Suffolk	VA	23437	US	#####
Paul Heck Suffolk	VA	23434	US	#####
kelly wilso Suffolk	VA	23434	US	#####
Hannah Ca Suffolk	VA	23434	US	#####
Sarah Salt Suffolk	VA	23435	US	#####
sam Viscar Lawton	OK	73505	US	#####
Blake Woc Chesapeak	VA	23324	US	#####
April Salm Suffolk	VA	23437	US	#####
Chris Dure Suffolk	VA	23434	US	#####
ryan tripp suffolk	VA	23437	US	#####
Kevin Perr Suffolk	VA	23434	US	#####
Pamela Ba Norfolk	VA	23523	US	#####
Margaret I Wilmingto	NC	28401	US	#####

Jason Ellis Suffolk	VA	23434	US	#####
Ashley Chr Suffolk	VA	23437	US	#####
Richard Fa Suffolk	VA	23434	US	#####
David Park Virginia Be	VA	23453	US	#####
Barbara G; Suffolk	VA	23434	US	#####
Michael G; Chelsea	MA	2150	US	#####
Cheryl Wir Suffolk	VA	23434	US	#####
Ken winscl Suffolk	VA	23434	US	#####
Melissa Hc Suffolk	VA	23437	US	#####
Ryan Frale Hampton	VA	23666	US	#####
Joseph Jac Suffolk	VA	23434	US	#####
Michelle Si Chesapeak	VA	23321	US	#####
Cathy Fres Suffolk	VA	23434	US	#####
James Tho Suffolk	VA	23437	US	#####
Michael Ev Suffolk	VA	23434	US	#####
Lem Liverr Chesapeak	VA	23325	US	#####
MICHELLE Suffolk	VA	23435	US	#####
Tanya Prof Virginia Be	VA	23451	US	#####
Carson Bla Suffolk	VA	23434	US	#####
Sandy Tob Williamsb	VA	23185	US	#####
Tim Chrisn Suffolk	VA	23237	US	#####
Terri Chrisi New York	NY	10118	US	#####
Micaela Fi; Sedley	VA	23878	US	#####
angela edv Suffolk	VA	23435	US	#####
dylan Corn Suffolk	VA	23434	US	#####
Kimberly F Suffolk	VA	23666	US	#####
Cade Herr Oak Ridge	NJ	7438	US	#####
Charlene E Smithfield	VA	23430	US	#####
Kevin Mull Portsmout	VA	23707	US	#####
Melissa Ar Virginia Be	VA	23456	US	#####
Yvonne Po Suffolk	VA	23434	US	#####
Gabrielle C Chesapeak	VA	23321	US	#####
MaKayla V San Anton	TX	78201	US	#####
James Rair Suffolk	VA	23434	US	#####
Kelly Heng Suffolk	VA	23434	US	#####
Regina Cul Portsmout	VA	23701	US	#####
Jake Weis; Campo	CA	91906	US	#####
Kimberly N Belleville	MI	48111	US	#####
Catherine I Suffolk	VA	23434	US	#####
Joyce BrinI Suffolk	VA	23435	US	#####
Victoria Sn Chesapeak	VA	23321	US	#####
Jordan Har Columbus	IN	47201	US	#####
Mien Chu Suffolk	VA	23434	US	#####
Donald Ad Suffolk	VA	23434	US	#####
Lisa Horne Suffolk	VA	23434	US	#####
Andrew Hc Suffolk	VA	23434	US	#####
Gerald Fra Suffolk	VA	23434	US	#####

Joanne Da Suffolk	VA	23435	US	#####
Alex Harris Suffolk	VA	23434	US	#####
Kay Nelsor Hampton	VA	23666	US	#####
Lauren Ric Suffolk	VA	23434	US	#####
Missy Tilt Colonial H	VA	23834	US	#####
Jesse Fede Richmond	VA	23234	US	#####
Sarah Paris Suffolk	VA	23434	US	#####
Riley Davis Suffolk	VA	23434	US	#####
Jackalyn N Suffolk	VA	23434	US	#####
Madelyn L Coram		11727	US	#####
XD XD Naugatuck		6770	US	#####
Meychou I Miami		33168	US	#####
Abraham E Union		7083	US	#####
George Joy Knoxville	TN	37923	US	#####
Jacob Sieg Suffolk	VA	23435	US	#####
Nathan Su Suffolk	VA	23434	US	#####
Kate Berge Satellite B	FL	32937	US	#####
Nolan Ta Suffolk	VA	23434	US	#####
KRISTINE N Suffolk	VA	23434	US	#####
Brooke Bai Suffolk	VA	23434	US	#####
Robert Be Suffolk	VA	23438	US	#####
Debbie Wi Suffolk	VA	23435	US	#####
Destiny Be Suffolk	VA	23435	US	#####
Bridget Be Suffolk	VA	23434	US	#####
Jazmyne Ir Suffolk	VA	23435	US	#####
Rachael M Suffolk	VA	23434	US	#####
Aaron Dar Hampton	VA	23666	US	#####
Melissa Ru Waynesbo	VA	22980	US	#####
Billy Teste Suffolk	VA	23434	US	#####
Kevin Trull Gloucester	VA	23061	US	#####
Austin Fow Como	NC	27818	US	#####
Destinee Ji Richmond	VA	23225	US	#####
Jessica Ho Suffolk	VA	23434	US	#####
Anthony Fi Henrico	VA	23231	US	#####
Shannon C Suffolk	VA	23434	US	#####
Collin Hoy Suffolk	VA	23434	US	#####
Noreen Tu Suffolk	VA	23434	US	#####
Nate Dolar Gloucester	VA	23061	US	#####
Stephanie Suffolk	VA	23434	US	#####
kristin pal Virginia	VA	23437	US	#####
Matthew F Suffolk	VA	23437	US	#####
Steven Be Suffolk	VA	23435	US	#####
Richard De Suffolk	VA	23434	US	#####
Wendy Cai Suffolk	VA	23434	US	#####
Jason Bulg Virginia Be	VA	23455	US	#####
Andry Mar Houston		77090	US	#####
clo waters appleton		54915	US	#####

Bianca tho North Hollywood	91606 US	#####
emeraldro La Mesa	91942 US	#####
Jsjj Jfjkr Woodland Hills	91367 US	#####
Cale Acha Zanesville	43701 US	#####
Ahmed Os Denver	80208 US	#####
Gigi Jacksc Frisco	75033 US	#####
gary marti Roanoke	24013-243 US	#####
Alma Agco Mexicali	29100 US	#####
tere Becke Kansas City	66104 US	#####
María Gon Beaverton	97007 US	#####
Timothy U Hampton VA	23666 US	#####
coty kilgo Waco	76708 US	#####
Samara Ql Worcester	1605 US	#####
Collin Pers Mukwonago	53149 US	#####
Victor Ord Bartow	33830 US	#####
Teresa Fro Suffolk VA	23434 US	#####
Sara Huffn Suffolk VA	23434 US	#####
Josh Kline Wakefield VA	23888 US	#####
Cecil Swair Midlothiar VA	23112 US	#####
Angela Sch Suffolk VA	23434 US	#####
Amy Millai Clarkston	48348 US	#####
Daria Tolk Waukesha	53189 US	#####
Paulina Pa Laredo	78043 US	#####
Craig Hanc Boardman	44511 US	#####
Jordan Kirl Noblesville IN	46062 US	#####
Michelle Lynn Simpson	US	#####
Janet Butlk St. Louis	63117 US	#####
Keshav Lin Washington	20500 US	#####
Amer Elzai Philadelphia	19135 US	#####
Patricia Sc Suffolk VA	23434 US	#####
Anonymous User	US	#####
Tyler Schr Suffolk VA	23437 US	#####
Patricia Mi Virginia Be VA	23464 US	#####
Luther Mil Suffolk VA	23434 US	#####
Trevon Bai Williamsbi VA	23188 US	#####
Vivkie Lon Suffolk VA	23433 US	#####
Charles Du Suffolk VA	23434 US	#####
Jayden Lav Suffolk VA	23434 US	#####
Jane beam Suffolk VA	23434 US	#####
Nekoda Ch Suffolk VA	23434 US	#####
Ernesto Ba Suffolk VA	23435 US	#####
Andy Bean Washingto DC	20011 US	#####
Lauretta P Sullivan IN	47882 US	#####
Annette Di Smithfield VA	23430 US	#####
Donald wk Terre Haut IN	47803 US	#####
Kay power Raleigh NC	27603 US	#####
david tagg Woodbrid Suffolk VA	22193 US	#####

Kay Hurley Suffolk	VA	23434	US	#####
Shirley We Hampton	VA	23666	US	#####
Kimberly N Suffolk	VA	23434	US	#####
Diana betr griffith	IN	46319	US	#####
Jim Head Oak Park	MI	48237	US	#####
marissa se va beach	VA	23452	US	#####
John Lemb Corpus Chi	TX	78418	US	#####
Candy LeD Suffolk	VA	23434	US	#####
kristi conn Suffolk	VA	23434	US	#####
Samantha Keller	VA	23401	US	#####
Haley Keet Newport N	VA	23607	US	#####
Liz Garratt	FL	3	US	#####
Deloise Po Suffolk	VA	23434	US	#####
Courtney \ Suffolk	VA	23434	US	#####
Michelle L Washingto	DC	20016	US	#####
Brandon Fi Hampton	VA	23666	US	#####
Adrienne F Suffolk	VA	23434	US	#####
Faye Schul Suffolk	VA	23435	US	#####
Chris Dacu Bell Buckle	TN	37020	US	#####
Stefan Por Suffolk	VA	23434	US	#####
Thomas La Greenback	VA	23356	US	#####
Ryan Buch Suffolk	VA	23434	US	#####
Matt Gerr Virginia be	VA	23454	US	#####
Filomeno S Colorado S	CO	80916	US	#####
Darren Poi Newport N	VA	23601	US	#####
Amber Erb Suffolk	VA	23434	US	#####
Everett Re Suffolk	VA	23434	US	#####
Nina Coble Philadelph	PA	19148	US	#####
Layne Sass Chesapeak	VA	23321	US	#####
John Schm Suffolk	VA	23434	US	#####
Dianne Wi Suffolk	VA	23434	US	#####
Steven Sch Suffolk	VA	23434	US	#####
Justin Zuni Hampton	VA	23666	US	#####
Liz Erpeldii Saint Augu	FL	32086	US	#####
Teresa Bre Mechanics	VA	23111	US	#####
Linda Brov Suffolk	VA	23434	US	#####
Joseph But Richmond	VA	23224	US	#####
george boi belleville	NJ	7109	US	#####
Fred Ashby Suffolk	VA	23434	US	#####
Dean Debi Suffolk	VA	23434	US	#####
Michael Je Lady Lake	FL	32159	US	#####
pamela ha Palo Cedrc	CA	96073	US	#####
June Adco Suffolk	VA	23434	US	#####
James Gra Suffolk	VA	23434	US	#####
Timothy Cl Suffolk	VA	23437	US	#####
Clark Kathl Suffolk	VA	23320	US	#####
William La Suffolk	VA	23434-611	US	#####

Katie O'Ne	Suffolk	VA	23434	US	#####
Max Joyce	Virginia Be	VA	23454	US	#####
Cindy Rob	Suffolk	VA	23434	US	#####
Brandon V	Dayton	OH	23438	US	#####
Katrina Mc	Suffolk	VA	23434	US	#####
Misty Holl	Virginia Be	VA	23462	US	#####
Cynthia W	Suffolk	VA	23438	US	#####
Linda mcci	Suffolk	VA	23437	US	#####
Diana Mix	Richmond	VA	23223	US	#####
Carol Joha	Suffolk	VA	23434	US	#####
Elizabeth N	Suffolk	VA	23437	US	#####
Richard M	Suffolk	VA	23437	US	#####
Eryn Siege	Suffolk	VA	23435	US	#####
Ruth Case	Suffolk	VA	23435	US	#####
Anita Joyc	Suffolk	VA	23435	US	#####
Thomas Le	Suffolk	VA	23435	US	#####
Jeanette B	Suffolk	VA	23433	US	#####
Denise Ste	Richmond	VA	23234	US	#####
Jinny Joyn	Suffolk	VA	23435	US	#####
Chris Dove	Suffolk	VA	23434	US	#####
Denise Mu	Virginia Be	VA	23456	US	#####
Cindy Cler	Suffolk	VA	23435	US	#####
Denise Wit	Suffolk	VA	23434	US	#####
Summer Si	South Jord	UT		US	#####
Penny Lah	Suffolk	VA	23434	US	#####
Jordan Me	Suffolk	VA	23434	US	#####
CURLEYPH	Henrico	VA	23229	US	#####
levonya bc	Suffolk	VA	23437-971	US	#####
Susan Co	Newport N	VA	23605	US	#####
Jacqueline	Suffolk	VA	23434	US	#####
Laura EHRI	Edgewood	MD	21040	US	#####
Lynn Kleisl	Suffolk	VA	23434	US	#####
Jacquelyn	Suffolk	VA	23434	US	#####
Claudia Ho	Smithfield	VA	23430	US	#####
Elizabeth C	Suffolk	VA	23434	US	#####
Nakeeta D	Richmond	VA	23220	US	#####
Wendy Asl	Gloucester	VA	23061	US	#####
Patricia Co	Suffolk	VA	23454	US	#####
Julie bartl	Suffolk	VA	23435	US	#####
Daniele Hc	Suffolk	VA	23434	US	#####
Samantha	Suffolk	VA	23434	US	#####
Adriano M	Suffolk	VA	23434	US	#####
Susan Dra	Suffolk	VA	23434	US	#####
Ouida Dod	Suffolk	VA	23435	US	#####
Shaun Nor	Suffolk	VA	23434	US	#####
Sam Morg	Suffolk	VA	23434	US	#####
Michael R	Norfolk	VA	23504	US	#####

Kelly Chea	Suffolk VA	23434 US	#####
Matthew C	Suffolk VA	23434 US	#####
Jeanne Sp	Suffolk VA	23434 US	#####
Michele M	Suffolk VA	23434 US	#####
Bobby Ma	Suffolk VA	23434 US	#####
Becke We	Suffolk VA	23435 US	#####
Sadie Akin	Suffolk VA	23434 US	#####
kassidy he	Baton Rouge	70808 US	#####
Dee Norto	Charlottesville	22903 US	#####
Alex McDc	Hudson	1749 US	#####
Jade Tuttle	Asbury	8802 US	#####
Eric Hump	Salt Lake City	84088 US	#####
Aida Deek	Whittier	90602 US	#####
Cynthia PII	Chesapeake	23323 US	#####
Brighton S	Butler	7405 US	#####
Adrine Kat	Orlando	32837 US	#####
Indira Hun	Queens NY	11354 US	#####
Marcus Jol	Suffolk VA	23434 US	#####
Cameron I	Suffolk VA	23434 US	#####
Jamie And	Branchville NJ	7826 US	#####
Karina Dev	Newport I VA	23601 US	#####
Parish Parl	Norfolk VA	23513 US	#####
Randi Hun	Suffolk VA	23434 US	#####
Michael Sa	Suffolk VA	23435 US	#####
LeeAnn Da	Naples FL	34116 US	#####
Erin Strickl	Suffolk VA	23434 US	#####
Nancy Bre	Suffolk VA	23434 US	#####
Jessica Dar	Suffolk VA	23434 US	#####
Wanda Mc	Suffolk VA	23434 US	#####
Heather H	Suffolk VA	23435 US	#####
Sean Rutar	Suffolk VA	23434 US	#####
Kellie Paul	Suffolk VA	23434 US	#####
Casia Sieg	Athens GA	30606 US	#####
Ashli Tingl	Castro Valley	94546 US	#####
avery phill	Chicago	60628 US	#####
Holly Tayl	Portsmout VA	23707 US	#####
Ginny Duk	Suffolk VA	23434 US	#####
Luis Quiro	Ottawa OH	45875 US	#####
Thomas Sc	Suffolk VA	23434 US	#####
Pat Robins	Suffolk VA	23434 US	#####
Jacob Rud	Danbury NC	27016 US	#####
Michael Rc	Suffolk VA	23437 US	#####
Edward Al	Oak Hill WV	25901 US	#####
Rachel Fra	Suffolk VA	23434 US	#####
Isaac Rudo	Winston-S NC	27106 US	#####
Kat Robins	Suffolk VA	23437 US	#####
Joshua Alfi	Winston S: NC	27103 US	#####

Holly Rudc	Winston Si	NC	27106	US	#####
Jackie Turr	Suffolk	VA	23434	US	#####
Grace Rud	Newport N	VA	23605	US	#####
Scott Rudc	Danbury	NC	27016	US	#####
Kasey Rud	Danbury	NC	27016	US	#####
Paula Alfin	Suffolk	VA	23437	US	#####
Alfanisa Bc	Suffolk	VA	23434	US	#####
Andrew Cc	Manassas		20110	US	#####
Cory Gulle	Amelia		45102	US	#####
Cassidy Ch	Lexington		40503	US	#####
Marilyn W	Ocean		7712	US	#####
Angelica P	West Colu	SC	29169	US	#####
Victoria Rc	Suffolk	VA	23434	US	#####
Jessa Ingui	Manila			Philippines	#####
Franchesca	Suffolk	VA	23434	US	#####
Vivienne A	Suffolk	VA	23434	US	#####
Martha Sw	Suffolk	VA	23434	US	#####
Robin Whi	Suffolk	VA	23434	US	#####
Kathleen C	Suffolk	VA	23434	US	#####
Linda Byrd	Suffolk	VA	23435	US	#####
Doreen De	Suffolk	VA	23434	US	#####
Carolyn Ev	Suffolk	VA	23434	US	#####
Machelle I	Suffolk		23434	US	#####
Mary Bate	Suffolk	VA	23435	US	#####
James Sno	Suffolk	VA	23434	US	#####
Eddie Atki	suffolk	VA	23434	US	#####
Jennifer Sc	Roanoke	VA	24012	US	#####
Tina Paul	Chesapeak	VA	23321	US	#####
Jayward H	Newport N	VA	23605	US	#####
Colleen Pa	Eugene	OR		US	#####
Susan Co	Suffolk	VA	23434	US	#####
Michael St	Suffolk	VA	23434	US	#####
Lisa Mathi	Suffolk	VA	23435	US	#####
Harvey Te	Orlando	FL	32806	US	#####
Michele A	Boykins	VA	23827	US	#####
Sue Lynch	Suffolk	VA	23434	US	#####
Kelli Cole	Suffolk	VA	23435	US	#####
Royal Rose	Philadelphia		19120	US	#####
Kerstian U	Albemarle		28001	US	#####
Gordon Pc	Kingstree		29556	US	#####
ms t	Red Wing		55066	US	#####
Ron Van	Bronx		10462	US	#####
Kameca Br	Philadelphia		19111	US	#####
sara hustle	Port Angeles		98362	US	#####
Anna Murphy			1915	US	#####
michele ru	Concord		3301	US	#####
Pamela Ne	Indianapol	IN	46227	US	#####

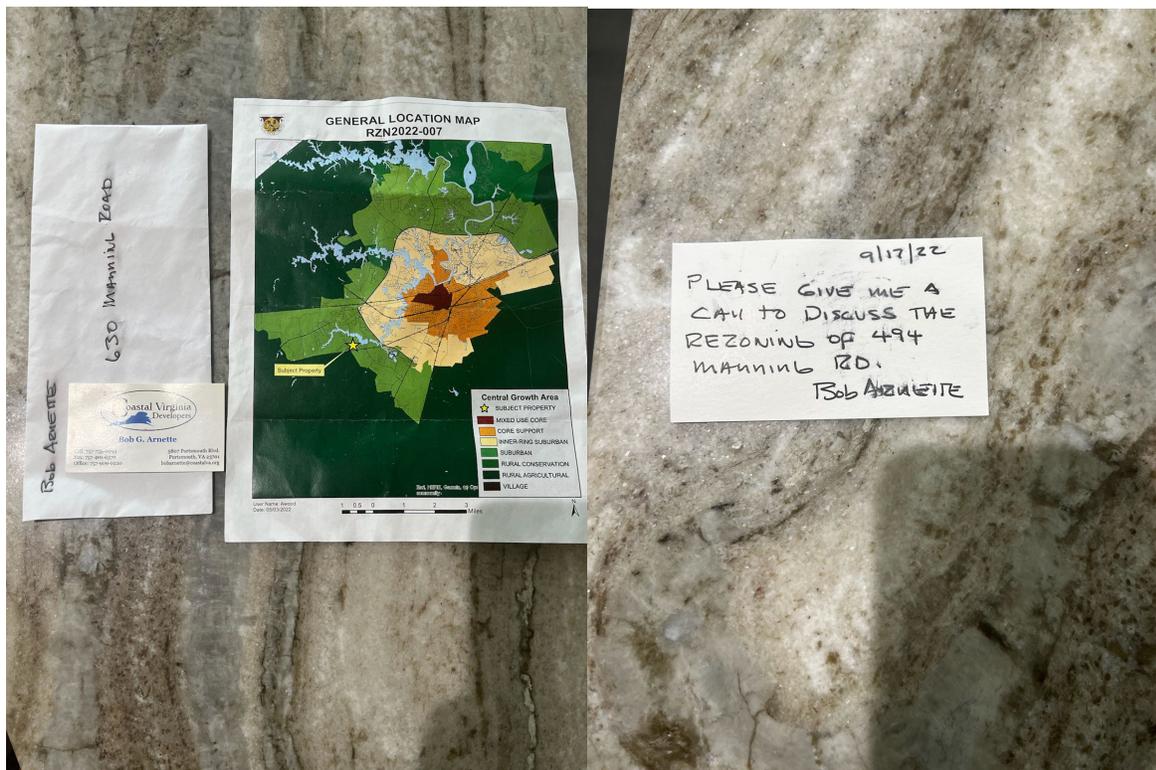
Angie Kriz Milwaukee WI	53215 US	#####
Jessica Alt Cape Girardeau	63701 US	#####
Melissa Pa Dallas	75223 US	#####
Lauren Bra San Francisco	94117 US	#####
Eren Noon Spring	77388 US	#####
Malik, Yer Houston	77082 US	#####
Joana Seq Newark	7105 US	#####
James Bro Fort Laude FL	33313 US	#####
Lanissa Ma Cincinnati	45237 US	#####
Patty Swar Suffolk VA	23434 US	#####
Jennifer H Chesapeake VA	23324 US	#####
Scott Hodg Suffolk VA	23435 US	#####
Kim Burno Suffolk VA	23434 US	#####
Larkin Bra Suffolk VA	23434 US	#####
Reanita Gc Suffolk VA	23434 US	#####
Sandra Coj Suffolk VA	23434 US	#####
Gloria Han Richmond VA	23234 US	#####
Cindy New Suffolk VA	23438 US	#####
Frances Ri Suffolk VA	23434 US	#####
Mary Edm Farmville VA	23901 US	#####
Karen Smit Suffolk VA	23434 US	#####

Schmeckenbechers and the City of Suffolk

John and Angela Schmeckenbecher own the parcel of land adjacent to the Ellis Farm Project. As of Monday, September 19, 2022, they are still waiting on requested information even after completing the FOIA (Freedom of Information Act) Request, as they were told they needed to do.

The Schmeckenbechers border the Ellis Farm Project with approximately 1634 feet of a shared border on their 11.6 acres of land. This rezoning and development would drastically impacts them and the only information that the city has provided is that there was a request for rezoning from agricultural to RLM (Residential Low-Medium Density), that it would allow them to put no more than 300 houses there, and that there will be a meeting September 20 at 2pm at City Hall. Any additional information required an FOIA request for which there has not been time to process.

They never received any notice from the city regarding the rezoning, but the developer, Bob Arnette, with Coastal Virginia, placed an envelope with his business card, and a map from the 2035 Comprehensive Plan, with a note that asks him to contact him. There was no postage on the envelope, and it was illegally placed in their mailbox on September 17, 2022.



Timeline of Communication:

- Sept. 5th at 7pm we noticed a zoning notice sign facing the Springfield neighborhood and took a picture of it for the phone number.
- Sept. 7th at 7:38 AM I emailed the Department of Planning and Community Development advising we noticed the sign and asked for more information about the application specifically the proposed use, site plans or design narratives that show the property line changes that run directly along our 1,634.46' property line.
- Sept. 9th approx. 1:17pm husband, John, called and was told the person handling it was on vacation and was supposed to be back on Monday, Sept. 12th.
- Sept. 12th received an email from Brittany Colyer advising there was a rezoning request for a proposed development and was told that in order to obtain the info I was requesting I would be required to submit a Freedom of Information Act (FOIA) form and email it to the email address on the form.
- Sept. 12th at 9:58 pm I submitted the form to foia@suffolkva.us
- Sept. 12th at 10:02pm I sent an email to Brittany Colyer with the Dept. of Planning & Community Development advising her the form had been sent and asked about the turnaround time for the info.
- Sept. 13th at 8:27 am I received an email from Brittany Colyer and was told timeframe is 1-5 business days and was told to contact the media Office to see if they would expedite the FIOA so we could receive the documents sooner.
- Sept. 13th at 9:06 am I called the Media Department and they said turnaround would depend on how quickly Planning and Community Development approved it, but they would get it right over to them.
- Sept. 13th at 9:13 am I emailed Brittany Colyer notifying her they were sending the FOIA form for approval.
- Sept. 14th at 6:18 am I followed up with an email to Brittany Colyer to see how things were progressing and if she had sent approval to the Media Dept.
- Sept. 15th at 10:19am sent a follow up on the progress on my information request.
- Sept. 15th at 10:22 received an email stating they received the request on Sept. 14th and sent over the documents to their secretary. Was told one Media has all the

documents, someone should be reaching out to me shortly as they will need to provide the documents through a sharefile link due to their size.

- Sept. 17th I received an unposted envelope in my mailbox, from the developer. It contained his business card, a map, and a note to call him to discuss the project.
- I still have not received the requested documents as of today. Nor have we had any letters delivered to our house at 630 Manning Road advising us of the rezoning application or upcoming meetings. Had it not been for our neighbors we would still be in the dark about what's going on next to us.

School	School Board – Capacity*	School Board Projected 2024 Enrollment*	Planning Commission Report Projected Additional Enrollment**	Total Projected Enrollment ***	2019 Utilization vs. Capacity*	Projected Enrollment vs. Capacity with MRD Projections***
Kilby Shores	497	517	53	570	104%	114% (+10%)
Forest Glen	410	447	29	476	109%	116% (+7%)
Lakeland	1,498	986	39	1025	70%	68% (-2)

* Facilities Master Plan | Draft Options, Joint City Council & School, Board Presentation, February 3rd, 2021

**City of Suffolk Planning Commission Report, RZN2022-007, September 20, 2022

According to US News and World Reports, Kilby Shores only 76% tested at or above the expected reading level and has an overall score of 70 of 100. Forest Glen has an overall score of 65 of 100 and only 75% tested at or above expectation.

Traffic:

The Traffic Impact Study (TIS) was conducted on the Manning Bridge Road/Centerpoint/Holland Rd traffic and does not consider the traffic conditions and patterns of Manning Rd. Nor does the Manning Road Property Traffic Memorandum from June 2022 address the conditions on this road. We would like the Planning Commission to take a pause to determine what improvements are concurrently planned for Manning Rd.

Flooding 2 ways in, during severe weather they both become flooded and residents are blocked from entering or exiting the area. The small bridge over the water is not suitable for truck traffic that would be needed to bring supplies for the building of 300 homes.

Speed, the speed limit on this narrow and winding road is 40 MPH, which is only 5 MPH slower than Holland Road when not under construction. The width of the road does not allow for safe passage of two cars traveling in opposite directions and is complicated with garbage cans after collection and no easement on either side. The winding limits vision of stopped cars. Should traffic be traveling north in front of the proposed development and residents traveling south to enter the proposed development need to stop and yield to the northbound traffic, a danger exists with the current speed and inability for southbound traffic to see stopped cars and react in time. During peak times of exit and entry, traffic traveling in and out of the Springfield subdivision would be affected.

The trees lining Manning Rd are affected by water at the roots, loosening the trees and at times causing the trees to fall on Manning Rd. In 2020, we experienced the loss of a Springfield neighbor as he came upon a downed tree during inclement weather and with no street lighting. Loss of even one life is too many and we this development, with Manning Rd in current condition, would increase the risk of additional loss of life.

The residents of the Bethlehem neighborhood, off of Manning Rd near Holland Rd, is a small neighborhood without sidewalks. Drivers use this as a cut-through to Turlington Rd/Holland Rd, and creates dangerous conditions for the families, including children, residing in the small neighborhood. I personally experienced the traffic during rush hour, which has increased with the widening of Holland Rd, while delivering notices of to our neighbors about this hearing. Just last week, a tractor trailer attempted to make a turn from Wilkins Rd, knocking down the stop sign and getting stuck. Manning Rd was impassable while the truck worked its way out of the position. The Planning Commission Staff report projected 172 peak a.m. vehicular trips and 292 peak p.m. vehicular trips from the proposed development. We ask that you pause your decision on this rezoning effort until such time that a traffic study can be conducted on Manning Rd itself. An additional 292 vehicles traveling southbound and attempting to make a left into the proposed development, together with current traffic, creates a danger

and unreasonable traffic for current residents of Springfield and further south on Manning Rd. For these reasons, any of the others that have been discussed by concerned citizens today, indicate a need for a pause, and further analysis, to keep our community safe and enjoyable. We understand that the property will eventually be rezoned for development, we ask that improvements be made to Manning Rd prior to development and that the Commission recommend a reduced number of the maximum homes. A development like Springfield would be more appropriate, but only after ensuring Manning Rd is safe.

Suffolk Planning Commission
City of Suffolk, Virginia

September 19, 2022

Re: Ellis Farm Project - Rezoning

Dear Ms. Coyler,

I represent a group of community members from Manning Road, its surrounding areas, and residents of the City of Suffolk who oppose the rezoning of the Ellis Farm.

We have four individuals prepared to speak on our behalf at the Planning Commission meeting on Tuesday, September 20, 2022. In addition to the speeches they will deliver, we have some documentation that we would like included and made available to the Planning Commission. We have included the information with this email. We would be very appreciative if you could please make sure it is made available.

Thank you for your time and assistance.

Sincerely,
Eryn Siegel
123 Springfield Terrace
erynsiegel@gmail.com
(585) 820-4310

Outline with Sources

Speech from Jacqueline Brooks

1. Traffic Impact Study
 - a. Traffic Impact Study does not include Manning Road
 - b. Traffic Impact Survey erroneously assumed "all site trips will utilize the Holland Road and Manning Bridge Road intersection."
 - c. Traffic on Manning Road will triple.
 - d. Sources:
 - i. Traffic Impact Study Manning Road Subdivision, Suffolk, VA by Charles Smith, P.E., PTOE., EPR, P.C.
 - ii. Memorandum from Charles Smith, P.E., PTOE of EPR, P.C. to Bob Arnette (Dated June 15, 2022) Re: Manning Road Property Traffic Memo
 - iii. Staff Report for Rezoning Ellis Farm
 - iv. [VDOT Virginia Traffic Volume](#)
 - v. Trip Generation, Institute of Transportation Engineers

2. Traffic and Safety on Manning Road
 - a. Accidents
 - b. Design Standards
 - c. Flooding
 - d. Sources:
 - i. [VDOT Virginia Crash Map](#)
 - ii. Suffolk Herald [Article 1](#) and [Article 2](#)
 - iii. [City of Suffolk 2035 Comprehensive Plan](#)
 - iv. [American Association of Highway and Transportation Officials \(AASHTO\)](#)
 - v. VDOT Road Design Manual, p. 20
 - vi. Google Maps
 - vii. Apple Maps

3. Responsible Rezoning
 - a. Develop within Existing Infrastructure
 - b. Expense of Improving Manning Road
 - c. Rural Conservation Areas
 - d. Grossly Irresponsible to Rezone without First Making Improvements to Manning Road
 - e. Sources:
 - i. City of Suffolk 2035 Comprehensive Plan, Chapter 4: Transportation Plan, p. 75

- ii. [Suffolk Unified Development Ordinance, Article 4 - Zoning, Section 31-415 - Chesapeake Bay Preservation Overlay District \(CB\), subsection \(d\)](#)
- iii. Staff Report for Rezoning Ellis Farm
- iv. City of Suffolk 2035 Comprehensive Plan, Chapter 2: Land Use and Growth Management, p. 22
- v. [City of Suffolk 2026 Comprehensive Plan 3-1, Chapter 3: Land Use and Growth Management, p. 3 & 6](#)
- vi. City of Suffolk 2035 Comprehensive Plan, Chapter 2: Land Use and Growth Management, p. 26
- vii. City of Suffolk 2035 Comprehensive Plan, Chapter 5: Municipal Facilities and Services, p. 138
- viii. Petition

Speech from John Schmeckenbecher

1. City Failed to Provide Proper Notice
2. Impact on Quality of Life
3. Request of Ecological Study
4. Sources:
 - a. FOIA Request
 - b. Email chain between Schmeckenbechers and City
 - c. Timeline of Communication

Speech from Don Adams

1. Over-crowded Schools
2. Understaffed Schools
3. Sources:
 - a. Joint City Council & School Board Presentation: Facilities Master Plan/Draft Options
 - b. Suffolk Public Schools Capacity and Projected Enrollment Summary 2024

Speech from Michelle Faulk

1. Manning Road has Needed Improvements Since the Springfield development was built
2. Quality of Life for Residents
3. Safety Issues for Manning Road Drivers
4. Bethlehem Neighborhood

Below is an excerpt from the Suffolk Unified Development Ordinance, Article 4 - Zoning, Section 31-415 - Chesapeake Bay Preservation Overlay District (CB), subsection (d) which shows that the Speight's Run Reservoir is part of the protected wetland areas.

Suffolk, VA

Search or jump to

NOTIFICATIONS SIGN IN HELP Select Language

Suffolk, Virginia - Unified Development Ordinance / ARTICLE 4 - ZONING / SEC. 31-415. - CHESAPEAKE BAY PRESERVATION OVERLAY DISTRICT (CB).

VERSION: JUL 18, 2022 (CURRENT)

- SEC. 31-402. - ESTABLISHMENT OF ZONING DISTRICTS.
- SEC. 31-403. - RELATION OF ZONING DISTRICTS TO COMPREHENSIVE PLAN AND PURPOSE STATEMENTS.
- SEC. 31-404. - ZONING MAP.
- SEC. 31-405. - DISTRICT BOUNDARIES.
- SEC. 31-406. - USE REGULATIONS.
- SEC. 31-407. - DIMENSIONAL AND DENSITY REGULATIONS.
- SEC. 31-408. - SPECIFIC BASE ZONING DISTRICT CRITERIA.
- SEC. 31-409. - INCENTIVE ZONING.
- SEC. 31-410. - PLANNED DEVELOPMENT (PD).
- SEC. 31-411. - USE PATTERNS.
- SEC. 31-412. - SPECIAL CORRIDOR OVERLAY DISTRICT (SCOD).
- SEC. 31-413. - HISTORIC CONSERVATION OVERLAY DISTRICTS (HC).
- SEC. 31-414. - AIRPORT OVERLAY DISTRICT (AD).
- SEC. 31-415. - CHESAPEAKE BAY PRESERVATION OVERLAY DISTRICT (CB).**
- SEC. 31-416. - RESERVED.
- SEC. 31-416.1. - RESERVED.
- SEC. 31-416.2. - FLOODPLAIN OVERLAY DISTRICT (F).
- SEC. 31-417. - AFFORDABLE DWELLING UNIT ORDINANCE.

E. The findings and recommendations of such assessments and any resulting soil and water quality conservation plans will be submitted to the Peanut Soil and Water Conservation District Board, which will be the plan-approving authority.

(10) Silvicultural activities in Chesapeake Bay Preservation Areas are exempt from these regulations provided that silviculture operations adhere to water quality protection procedures prescribed by the Department of Forestry in its "Best Management Practices Handbook for Forestry Operations." The Department of Forestry will oversee and document installation of best management practices and will monitor the in-stream impacts of forestry operations in Chesapeake Bay Preservation Areas.

(d) DEVELOPMENT CRITERIA FOR RESOURCE PROTECTION AREAS.

(1) PRESERVATION AREAS. The Chesapeake Bay Preservation Area shall consist of three areas for purposes of determining applicable development restrictions: (1) a Resource Protection Area and (2) a Resource Management Area. Intensely Developed Areas may be a component of each area. These areas are defined and established as follows:

A. RESOURCE PROTECTION AREA (RPA).

(i) Resource Protection Areas shall consist of lands adjacent to water bodies with perennial flow that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may cause significant degradation to the quality of state waters. In their natural condition, these lands provide for the removal, reduction or assimilation of sediments nutrients and potentially harmful or toxic substances in runoff entering the bay and its tributaries, and minimize the adverse effects of human activities on state waters and aquatic resources.

1. Components:

- (a) Tidal wetlands;
- (b) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow;
- (c) Tidal shores;
- (d) Drinking water reservoirs from the water's edge;
- (e) A vegetated buffer area not less than 100 feet in width located adjacent to and landward of the components listed in Subsections (a) through (d) above, and along both sides of any water body with perennial flow.

(ii) Development criteria include the following:

(a) Land development may be allowed in the Resource Protection Area only if it (i) is water dependent; (ii) constitutes redevelopment; (iii) constitutes development or redevelopment within a designated intensely developed area; (iv) is a new use established pursuant to this Section; (v) is a road or driveway crossing satisfying the conditions set forth in this Section; or (vi) is a flood control or stormwater management facility satisfying the conditions set forth in this Section.

1. A water quality impact assessment in accordance with Appendix B shall be required for any proposed land disturbance.

2. A new or expanded water-dependent facility may be allowed provided that the following criteria are met:

- (a) It does not conflict with the Comprehensive Plan;
- (b) It complies with the performance criteria set forth in this Ordinance;
- (c) Any nonwater-dependent component is located outside of Resource Protection Areas; and
- (d) Access to the water-dependent facility will be provided with the minimum disturbance necessary. Where practicable, a single point of access will be provided.

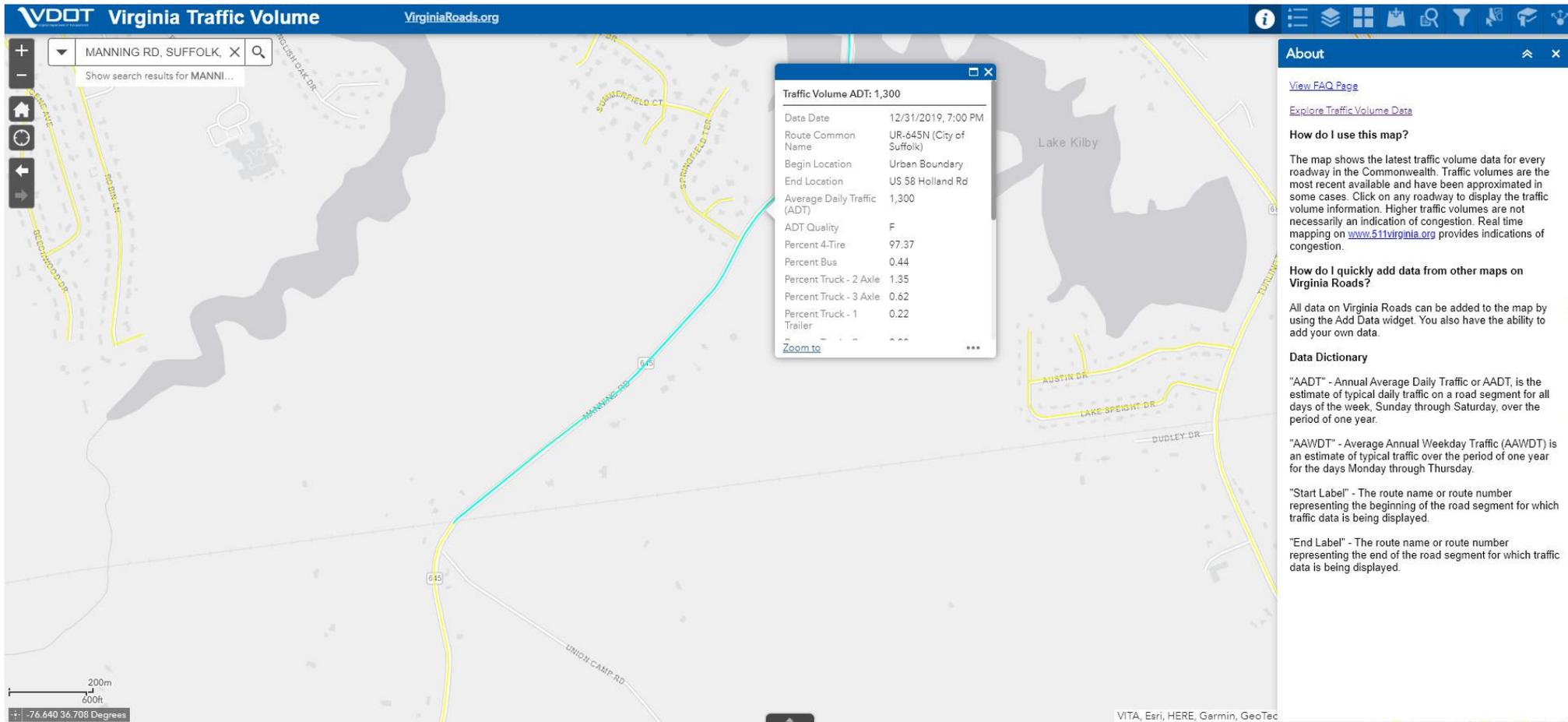
3. Redevelopment outside locally designated Intensely Developed Areas shall be permitted in the Resource Protection Area only if there is no increase in the amount of impervious cover and no further encroachment within the Resource Protection Area, and it shall conform to applicable erosion and sediment control and stormwater management criteria set forth in this Section as well as all applicable stormwater management requirements of other state and federal agencies.

4. Roads and driveways not exempt under this Section and which, therefore, must comply with the provisions of this chapter, may be constructed in or across Resource Protection Areas if each of the following conditions is met:

- (a) No reasonable alternatives exists to aligning the road or driveway in or across the Resource Protection Area;
- (b) The alignment and design of the road are optimized, consistent with other applicable requirements, to minimize (i) encroachment in the Resource Protection Area and (ii) adverse effects on water quality;
- (c) The design and construction of the road or driveway satisfy all applicable criteria of this chapter, including submission of a water quality impact assessment; and
- (d) The road or driveway proposed in or across the Resource Protection Area receives site plan, subdivision or plan or development approvals.

5. Flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed may be allowed in Resource Protection Areas, provided that (i) the City has conclusively established that location of the facility within the Resource Protection Area is the optimum location; (ii) the size of the facility is the minimum necessary to provide necessary flood control, stormwater treatment, or both; (iii) the facility must be consistent with a stormwater management program that has been approved by the Chesapeake Bay Local Assistance Board; (iv) all applicable permits for construction in state or federal waters must be obtained from the appropriate state and federal agencies, such as the U.S. Army Corps of Engineers, the Virginia Department of Environmental Quality and the Virginia Marine Resources Commission; (v) approval must be received from the City prior to construction; and (vi) routine maintenance is allowed to be performed on such facilities to assure that they continue to function as designed. It is not the intent of this subdivision to allow a best management practice that collects and treats runoff from only an individual lot or some portion of the lot to be treated as a Resource Protection Area.

Traffic Volume from VDOT Virginia Traffic Volume



APPENDIX A1 GEOMETRIC DESIGN STANDARDS

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SECTION 1 - GEOMETRIC DESIGN STANDARDS

INTRODUCTION

VDOT has formally adopted the 2018 AASHTO *A Policy on Geometric Design of Highways and Streets*, commonly referred to as the AASHTO “Green Book”, as our minimum design standards. Therefore, **all** design criteria must meet AASHTO minimum standards.

Highway improvement plans are based on established AASHTO geometric design standards for various elements of the roadway under design. The tables on the following pages provide the **minimum** geometric standards, which are to be used for development of VDOT projects except those projects which can be developed using the Guidelines for RRR Projects located in [Appendix A4](#) of this manual. Note that there are no specific RRR standards for Interstate projects. If the designer has determined that Guidelines for RRR Projects do not apply to the project in question, the Geometric Design Standard tables on pages 12 to 22 should be used for project development. See [Appendix B\(1\)](#) for the development of new residential and mixed-use streets functional classified as “local” streets and Appendix B(2) for multimodal design standards for mixed-use urban centers.*

The Geometric Standard Tables were developed using *A Policy on Geometric Design of Highways and Streets* published by the American Association of State Highway and Transportation Officials (AASHTO). These tables present basic practical guidelines compatible with traffic, topography and safety; however, due to the restrictive format, all variables could not be included. The designer is urged to refer to the above named publication and other related chapters in the *Road Design Manual* for further discussion of design considerations before selecting the proper design speed criteria for a given project.

THE APPLICATION OF THE CRITERIA PROVIDED IN THE GEOMETRIC DESIGN STANDARD TABLES MUST BE MADE IN RELATION TO THEIR EFFECT ON THE ROADWAY SYSTEM AND IN CONJUNCTION WITH SOUND ENGINEERING JUDGMENT TO ENSURE AN APPROPRIATE DESIGN. The economic, environmental and social factors involved in highway design shall also be considered. The designer should always attempt to provide for the highest degree of safety and best level of service that is economically feasible. The "minimum" design criteria shown in the tables should only be used when overriding economic or environmental considerations so dictate.

FLEXIBILITY AND PERFORMANCE BASED APPROACH

The 2018 edition of the Green Book introduces the consideration of five specific context classifications (rural, rural town, suburban, urban and urban core) as elements of the geometric design process and emphasizes the consideration of multimodal needs in design. Together, context classification and functional classification constitute a new framework of geometric design. The policy also encourages flexible design, which emphasizes the role of the planner and designer in determining the appropriate design dimensions based on project-specific conditions and existing and future roadway performance more than on meeting

* Rev. 1/19

specific nominal design criteria. Chapters 2 through 10 explains how the flexible, performance-based approach should be applied and can be used in implementing the functional and context classifications together in the design of new construction projects, reconstruction projects and projects on existing roads for all transportation modes. The context are defined based on development density (existence of structures and structure types), land use (primarily residential, commercial, industrial and/or agricultural), and building setbacks (distance of structures to adjacent roadway), which are easy to identify by observing the landscape adjacent to an existing or planned facility. For definitions of each of the 5 context zones, see Chapter 1, Sections 1.5 through 1.9.

Roads in rural areas should be designed for either the rural or rural town context. Each of these contexts is discussed below.

RURAL CONTEXT*

The rural context applies to roads in rural areas that are not within a developed community. These include areas with the lowest development density; few houses or structures; widely dispersed or no residential, commercial, and industrial land uses; and usually large building setbacks. The rural context may include undeveloped land, farms, outdoor recreation areas, or low densities of other types of development. Most roads in rural areas fit the rural context and should be designed in a manner similar to past design criteria for rural facilities.

RURAL TOWN CONTEXT*

The rural town context applies to roads in rural areas located within developed communities. Rural towns generally have low development densities with diverse land uses, on-street parking, and sidewalks in some locations, and small building setbacks. Rural towns may include residential neighborhoods, schools, industrial facilities, and commercial main street business districts, each of which present differing design challenges and differing levels of pedestrian and bicycle activity. The rural town context recognizes that rural highways change character where they enter a small town, or other rural community, and that design should meet the needs of not only through travelers, but also the residents of the community. Speed expectations of through travelers change when they enter a rural town. Guidance on the selection of design speeds and other design elements for the rural town context is presented in Chapters 5, 6, and 7 for local roads and streets, collectors, and arterials, respectively. Additional information on design for the rural town environment can be found in *When Main Street is a State Highway (17)* developed by the Maryland Department of Transportation and *Main Street... When a Highway Runs Through It (19)*, developed by the Oregon Department of Transportation. Guidance on design and speed management for transition zones where a rural highway enters a rural town may be found in and NCHRP Report 737, *Design Guidance for High-Speed to Low-Speed Transition Zones for Rural Highways (23)*.

Roads and streets in urban areas may be designed for the suburban, urban, and urban core contexts. These contexts differ in development density, land use, and building setbacks. Speed expectations of drivers vary markedly as drivers move between (and even within)

* Added 10/20

these contexts, as does the typical level of pedestrian, bicycle, and transit activity. Each of these contexts is discussed below.

SUBURBAN CONTEXT*

The suburban context applies to roads and streets, typically within the outlying portions of urban areas, with low to medium development density, mixed land uses (with single-family residences, some multi-family residential structures, and nonresidential development including mixed town centers, commercial corridors, big box commercial stores, light industrial development). Building setbacks are varied with mostly off-street parking. The suburban context generally has lower development densities and drivers have higher speed expectations than the urban and urban core contexts. Pedestrians and bicyclist flows are higher than in the rural context, but may not be as high as found in urban and urban core areas.

URBAN CONTEXT*

The urban context has high-density development, mixed land uses, and prominent destinations. On-street parking and sidewalks are generally more common than in the suburban context, and building setbacks are mixed. Urban locations often include multi-story and low- to medium-rise structures for residential, commercial, and educational uses. Many structures accommodate mixed uses: commercial, residential, and parking. The urban context includes light industrial, and sometimes heavy industrial, land use. The urban context also includes prominent destinations with specialized structures for entertainment, including athletic and social events, as well as conference centers. In small- and medium-sized communities, the central business district may be more an urban context than an urban core context. Driver speed expectations are generally lower and pedestrian and bicyclist flows higher than in suburban areas. The density of transit routes is generally greater in the urban context than the suburban context, including in-street rail transit in larger communities and transit terminals in small- and medium-sized communities.

URBAN CORE CONTEXT*

The urban core context includes areas of the highest density, with mixed land uses within and among predominantly high-rise structures, and with small building setbacks. The urban core context is found predominantly in the central business districts and adjoining portions of major metropolitan areas. On-street parking is often more limited and time restricted than in the urban context. Substantial parking is in multi-level structures attached to or integrated with other structures. The area is accessible to automobiles, commercial delivery vehicles, and public transit. Sidewalks are present nearly continuously, with pedestrian plazas and multi-level pedestrian bridges connecting commercial and parking structures in some locations. Transit corridors, including bus and rail transit, are typically common and major transit terminals may be present. Some government services are available, while other commercial uses predominate, including financial and legal services. Structures may have multiple uses and setbacks are not as generous as in the surrounding urban area. Residences are often

* Added 10/20

apartments or condominiums. Driver speed expectations are low and pedestrian and bicycle flows are high.

The policies and procedures addressed in [IIM-LD-235](#) (Context Sensitive Solutions) and [IIM-LD-255](#) (Practical Design Flexibility in the Project Development Process) are intended to clarify and emphasize VDOT's commitment to project and program development processes that provide flexibility, innovative design and Context Sensitive Solutions (CSS) to transportation challenges.

These processes have been structured and oriented to include stakeholders and citizens in the design of transportation systems that improve public mobility, while reflecting the community's values, preserving the scenic, aesthetic, historic and environmental resources, and without compromising safety and mobility

This policy emphasizes the importance of recognizing the flexibility within established standards, especially AASHTO's *Policy on Geometric Design of Highways and Streets* (Green Book), AASHTO's *A Guide for Achieving Flexibility in Highway Design* and AASHTO's *Guidelines for Geometric Design of Low-Volume Roads, Second Edition*. While practicable and innovative approaches to using the flexibility inherent in existing standards is encouraged by this policy, individual project development decisions on specific applications of flexibility ultimately rest with the responsible person working with the project manager and the project team. These decisions are made after carefully processing input from all project stakeholders as well as the project team, and evaluating this input with respect to project goals as well as safety and mobility concerns.

For applicable projects, the following note shall be placed on the title sheet under the Functional Classification and Traffic Data Block: NOTE: THESE PLANS WERE DESIGNED IN ACCORDANCE WITH THE AASHTO *GUIDELINES FOR GEOMETRIC DESIGN OF LOW-VOLUME ROADS, SECOND EDITION*.

SECONDARY PROJECT IMPROVEMENTS

The Special Session II of the 2008 General Assembly passed HB 6016, which amended and reenacted [§33.2-326*](#) of the Code of Virginia relating to improvements to the state secondary highway system components. The intent of this Bill is to ensure that the Department provides flexibility in the use of design criteria for improvements to any secondary highway system component(s) by not requiring the Department to comply with all design and engineering standards that would be applicable if the project involved new construction.

The Department currently utilizes the following flexible design Guidelines:

- **RRR Design Guidelines**, which involves the use of minimal improvements to extend the service life and safety for the existing roadway at a fraction of the cost. On Secondary projects that have a 15 year traffic projection of 750 vpd or less, the RRR guidelines are the design concept of choice.

* Rev. 10/20

- **Rural Rustic Road Design Guidelines**, which are used on the secondary highway system that have 1500 vpd or less to pave unpaved secondary roads with no or little geometric improvements.

In addition to the above mentioned practices that follow their own set of guidelines, the Department also encourages roadway designers to identify context sensitive solutions to project issues. It is the responsibility of the roadway design engineer working with the project manager to identify areas where flexibility can be introduced into the design process without compromising safety and mobility.

The Department has a process for documenting design solutions that do not meet current VDOT and AASHTO design geometric standards in the form of design waivers and design exceptions that shall be submitted in accordance with [IIM-LD-227](#). Any design exception not granted may be appealed to the Chief Engineer.

ROADWAY WIDTH

Roadway width as referenced in this section is the portion of the highway, including shoulders (graded and paved), for vehicular use.

DESIGN SPEED (V)

Design speed is defined as a speed determined for design and correlation of the physical features of a highway that influence vehicle operation - the maximum safe speed maintainable over a specified section of highway when conditions permit design features to govern.

Except for local streets where speed controls are frequently included intentionally, every effort should be made to use as high a Design Speed as practical to attain a desired degree of safety, mobility, and efficiency within the constraints of environmental quality, economics, aesthetics, and social or political impacts (See 2018 AASHTO Green Book, Chapter 2).*

The geometric tables indicate a design speed range, or a portion of a range, for each functional classification. The design speed range for each roadway classification is available in the AASHTO Green Book. The selection of the proper design speed to be used on a particular project is of primary importance in project development. The design speed selected should:

- be logical with respect to topography, anticipated operating speed, adjacent land use, and functional classification of the highway.
- be as high as practicable to attain a desired degree of safety, mobility and efficiency while under the constraints of environmental quality, economics, aesthetics and social or political impacts.
- be consistent with the speed a driver is likely to expect. Drivers do not adjust their speeds to the importance of the highway, but to their perception of the physical limitations and traffic.

* Rev. 7/14

Although the design speeds for rural highways are coupled with a terrain classification, terrain is only one of the several factors involved in determining the appropriate design speed of a highway.

Although the selected design speed establishes the maximum degree of curvature and minimum sight distance necessary for safe operation, there should be no restriction on the use of flatter horizontal curves or greater sight distances where such improvements can be provided as a part of performance based practical* design. However, if a succession of flatter

curves or tangent sections would encourage drivers to operate at higher speeds, that section of highway should be designed for a higher speed and all geometric features, particularly that of sight distance on crest vertical curves and intersection sight distance should be related to the higher design speed*.

The minimum Design Speed shall be based on the following criteria:

1) For roadways with a Posted Speed:

- a) For high-speed roadways* (Posted 50 mph and higher) the Design Speed shall be a minimum of 5 mph higher than the Posted Speed.
 - Example - Design Speed 60 mph – Posted Speed 55 mph
- b) For low-speed roadways (Posted 45 mph and less) the Design Speed shall be equal to or higher than the Posted Speed.
 - Example - Design Speed 40 mph – Posted Speed 40 mph

Posted Speed / Design Speed All speeds in miles per hour (mph)		
	Posted	Min. Design
Low-Speed Roadways	20	20
	25	25
	30	30
	35	35
	40	40
	45	45
High-Speed Roadways	50	55
	55	60
	60	65
	65	70
	70	75

Note:

The statutory speed limit (See the [Code of Virginia § 46.2-870 Speed Limits](#)) is **55 mph for cars** and **45 mph for trucks** with the following exceptions:

- 25 mph in residential and business districts
- 35 mph in cities and towns
- 35 mph on Rural Rustic Roadways
- 35 mph on non-surface treated highways

2) For unposted roadways: Design Speed shall be equal to Statutory Speed or 85% percentile speed (based on speed analysis, rounded up to nearest 5 mph increment).

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- 3) Roadways with ADT < 2000, see the VDOT Road Design Manual, Appendix B(1), Tables 1 through 3 and AASHTO's [Guidelines for Geometric Design of Low-Volume Roads, Second Edition](#)*

Whenever VDOT criteria (provided above in cases 1-3) are not met, a design waiver is required to document the design speed.

A Design Exception is required if AASHTO minimum design speeds for individual geometric elements are not met.

Additional information is available in NCHRP Report 504 "Design Speed, Operating Speed and Posted Speed Practices", at:

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_504.pdf.

For the determination of the roadway posted speed limits, the plans are to indicate the Design Speed (V) of each horizontal and vertical (crest and sag) curve along with the horizontal and vertical curve data.

The Design Speeds (V) are to be determined as follows:

- Crest Vertical Curves

- See "Sight Distance on Crest Vertical Curves" (VDOT's [Road & Bridge Standards](#), Section 600) to determine sight distance parameters.
- See 2018 AASHTO Green Book Section 3.4.6.2 "Crest Vertical Curves" to determine the Design Controls.*

- Sag Vertical Curves

- See 2018 AASHTO Green Book, Section 3.4.6.3 "Sag Vertical Curves" to determine the Design Controls.*

Horizontal Curves

- The appropriate Transition Curve Standard (TC-5.01R, TC-5.01U, or TC-5.04ULS, TC-5.11R, TC-5.11U, or TC-5.11ULS) from VDOT'S [Road and Bridge Standards](#), Section 800, provides the Design Speed (V) for horizontal curves (based on the radius of curvature (R) and the superelevation rate (E) provided by GEOPAK.

SHOWING DESIGN SPEED (V) FOR HORIZONTAL CURVES

The Design Speed shown on the plans for each horizontal curve is not necessarily the Minimum Design Speed shown on the Title Sheet.

GEOPAK supplies the superelevation dependent upon the input (urban/rural, radius, etc.) for each curve but does not provide the design velocity.

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Designers shall determine the Design Speed (V) for each curve. This data is to be shown on the plans in the horizontal curve data for each curve.

Example:

Title Sheet:

Urban Principal Arterial (TC-5.11U - 2018 AASHTO Green Book)
45 mph Minimum Design Speed

Horizontal Curve on plans:

Radius = 1533'

Superelevation = 3.3% (provided by GEOPAK)

V = ?

1. To verify the velocity of the horizontal curve compare project radius and superelevation with Design Factors Charts in Section 800 of the Road and Bridge Standards.
2. Start with Page 803.29 TC-5.11U for given Design Speed shown above (45 mph).
 - ⇒ Chart shows that a curve with 3.3% superelevation and radius of 1446' will support a velocity of 45 mph. The radius on the plans is greater than 1446' (1533').
3. Go to Section 803.30 (50 mph Design Speed).
 - ⇒ Chart shows that a curve with 3.3% superelevation and radius of 1857' will support a velocity of 50 mph, but the radius on the plans is less than 1857' (1533').
4. Therefore, the project radius and superelevation will not support a 50 mph design velocity. The more conservative V = 45 mph shall be shown on the plans as the velocity of the curve.

A Design Exception is required whenever the horizontal curve radius and/or superelevation rate does not support the minimum design speed. See [IIM-LD-227](#) for information on Design Exceptions.

ADDITIONAL RESOURCES

Transportation Research Board, *NCHRP Report 504*, Design Speed, Operating Speed, and Posted Speed Practices, available at:

http://trb.org/publications/nchrp/nchrp_rpt_504.pdf

2018 AASHTO Green Book, "Speed", Chapter 2.3.6.

NS 23 CFR 625 available at:

<http://www.fhwa.dot.gov/legsregs/directives/fapq/0625sup.htm>

The Federal Aid Policy Guide (FAPG)

"Compatibility of Design Speed, Operating Speed and Posted Speed" (1995 - By FHWA and TXDOT)

ITE's *"Speed: Understanding Design, Operating and Posted Speed"* (1997 - By Ray Krammes (FHWA) and Kay Fitzpatrick (TTI))

Manual on Uniform Traffic Control Devices (MUTCD, 2009 Edition)

SHOWING DESIGN SPEED ON TITLE SHEET

See the current version of *Instructional and Informational Memorandum IIM-LD-204* for the method of showing design speed data on the plans.

An asterisk is to be shown adjacent to the Design Speed (Example - * 60 MPH) on the title sheet and the following note shown:

* See Plan and Profile Sheets for the horizontal and vertical curve design speeds.

OPERATING SPEED

Operating Speed is the speed at which drivers are observed operating their vehicles during free-flow conditions. The 85th percentile of the distribution of observed speeds is the most frequently used measure of the operating speed associated with a particular location or geometric feature of a highway, or highway segment.

POSTED SPEED

The Posted Speed for existing, new or reconstructed roadways should be determined by factors outlined in the *MUTCD*, Section 2B.13. The MUTCD requires that an engineering study be conducted in accordance with established engineering practice. VDOT has a standard study template for developing speed limit recommendations which incorporates the MUTCD, Section 2B.13 as well as other considerations pertaining to VDOT's decision-making process for speed limit approvals, including enforcement consensus.

After a project is constructed, the responsible District Traffic Engineer will re-establish the speed limit based on established traffic engineering policies. An engineering study will be performed as needed in accordance with documented traffic engineering practices.

It is important to note that the Design Speed shown on the project title sheet may not be the same as the Design Speed of the individual geometric elements. Each curve on the project (horizontal and vertical) should show a distinct and separate Design Speed from that shown on the Title Sheet. In many cases the Design Speed for the project will equal the design speed for the curves.* Although these curves may present isolated instances where the physical roadway dictates the speed of vehicles, they shall not be the sole basis for determining the posted speed limit. It is more appropriate to address these locations by warning signs.

It is only where the physical roadway features dictate the speed of the vehicles on extended sections, for a major portion of the roadway that they should be considered as a limiting factor in setting the speed limit. Such limitations in speed due to physical features will become apparent in the speed analysis conducted as part of the traffic engineering study.

For design criteria and instructions on signing roadways with a design speed < 25 mph, see the VDOT Road Design Manual, Appendix B(1), Tables B(1)-1 through B(1)-3 and AASHTO's *Guidelines for Geometric Design of Low-Volume Roads Second Edition**.

DESIGN VEHICLE

The design vehicle is the type of vehicle that makes frequent turns without encroaching into the adjacent lane when making those turns. The tracking of the design vehicle is an important determinant of corner radii at intersections. When the design vehicle traverses an intersection, the design vehicle shall be able to turn from one street to another without deviating from the near travel lane and impeding other traffic flow. Therefore, the design vehicle determines the elements of design such as turning radius and lane width. The design vehicle is to be determined based on the [LD-104](#) Request for Traffic Data and discussed at the Project Scoping Meeting and recorded on the Scoping Worksheet - Roadway Design.

The WB-67 shall be the design vehicle used for intersections of freeway ramp terminals with other arterial crossroads and for other intersections of state highways and industrialized streets that carry high volumes of traffic, or roadways that provide local access for large trucks.

DESIGN WAIVERS

Design Waivers are required when deviations from VDOT's design criteria occur. When design criteria meet or exceed AASHTO minimal design but fall short of VDOT's minimal design, a Design Waiver shall be required. Design Waivers will be applicable to all projects regardless of functional classification and funding and shall be documented and approved in accordance with the Design Waiver Request Form [LD-448](#). Please refer to [IIM-LD-227](#) for specific guideline on obtaining design waiver. **This Design Waiver Policy is applicable to VDOT owned and maintained roadways only.**

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DESIGN EXCEPTIONS

If there are geometric values that are below AASHTO minimum guidelines, the Project Manager/ Design Engineer shall seek to obtain approval of these design exceptions from the State Location and Design Engineer (all projects) and FHWA (if applicable) no later than Public Hearing Stage. Please refer to [IIM-LD-227](#) for specific guideline on obtaining design exceptions.

FUNCTIONAL CLASSIFICATION

VDOT uses functional classification for the purposes of, funding, design, determining the urban network to identify the thoroughfare system, determining statewide network for the State Highway Needs Assessment Study, and to help establish construction priorities.

According to VDOT's Functional Classification Comprehensive Guide, the highway system in Virginia has been functionally classified as Interstate, Other Freeways and Expressways, Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector and Local. The American Association of State Highway and Transportation Officials (AASHTO) utilizes, as presented in the publication: *A Policy on Geometric Design of Highways and Streets*, referred to as the AASHTO "Green Book", a similar functional classification system. The designations used are: Freeway, Arterial, Collector, and Local Roads and Streets.

These functional classes are defined in AASHTO "Green Book Section 1.4. Relationships between these two classification systems have been generally developed. Please refer to VDOT's Functional Classification website for additional guidance.

Interstates are the highest classification and designed with mobility and long-distance travel in mind. This classification is for highways designated as part of the Eisenhower Interstate System. Roadways classified as interstates are limited access, divided highways with the highest level of mobility. There is also no ambiguity in the functional classification, as only the Secretary of Transportation can designate a roadway as an interstate*.

Other Freeways and Expressways classification is for highways that are generally divided with partial or full control-of-access. They primarily serve through traffic and major circulation movements within or around urban areas. These routes provide connecting links between interstates, principal arterials and minor arterials.*

Other Principal Arterials serve corridor movements of substantial statewide or interstate travel and provides an integrated network without stub connections (dead ends). In urban areas they serve the major activity centers of a metropolitan area and the highest traffic volume corridors, carry a significant amount of intra-area travel, and serve demand between the central business district and outlying residential areas of a metropolitan area. See AASHTO Green Book Chapter 7 for more information on Arterials.*

Minor Arterials link cities and large towns, along with other major traffic generators, and form an integrated network providing interstate and inter-county service. In urban areas, Minor Arterials interconnect with principal arterials, augment the urban principal arterial system, and

* Added 10/20

provide service to trips of moderate length at a lower level of travel mobility than principal arterials.*

Major Collectors provide service to any county seat not on an arterial system, to larger towns not directly served by higher systems. Major Collectors also link these places to nearby larger towns and cities or with arterial routes and serve the most important intra-county travel corridor. In Urban Areas, major collectors provide land access and traffic circulation within residential neighborhoods, commercial, and industrial areas. These collectors distribute trips from the arterials through the aforementioned areas to their ultimate destination, collect traffic from local streets, and channel it to the arterial system. See AASHTO Green Book Chapter 6 for more information on Collectors*.

Minor Collectors collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road. Minor Collector facilities provide service to the remaining smaller communities and link local traffic generators with their rural surrounding areas. In urban areas, Minor Collectors serve both land access and traffic circulation in lower density residential and commercial/industrial areas. Typical operating characteristics include lower speeds and fewer signalized intersections. Minor Collectors penetrate residential neighborhoods, but only for a short distance.*

Local Roads and Streets serve primarily to provide direct access to adjacent land. Local Roads provide service to travel over relatively short distance as compared to collectors or other higher systems. Through traffic movement is deliberately discouraged for Local Roads in urban areas*

- All roadways are classified as to how the facility functions in accordance with Federal guidelines. See link to VDOT's [Functional Classification maps](#).
- The Geometric Design Standards in Appendix A1 of VDOT's [Road Design Manual](#) are divided by Functional Classification (FC).*
- The terms "Urban" and "Rural" used in the FC do not necessarily coincide with the terms as applied to highway systems in Virginia.

Urban - Urbanized areas within set boundaries having a population of 5,000 or more. This may include areas outside of incorporated cities and towns.

Rural - Areas not designated as Urban. Includes incorporated cities and towns with populations less than 5,000.

* Added. 10/20

VIRGINIA HIGHWAY SYSTEMS

- Urban - Roadways within the boundaries of incorporated towns and cities with a population of 3,500 or more plus eight other designated urbanized areas (Bridgewater, Chase City, Elkton, Grottoes, Narrows, Pearisburg, Saltville and Woodstock). The urban program is administered by the Local Assistance Division.
- Primary - Two-to-six-lane roads that connect cities and towns with each other and with interstates.
- Secondary - Normally are local connector or county roads. These generally are numbered 600 and above. Arlington and Henrico counties maintain their own county roads. Projects are administered by the Local Assistance Division. Please see [Code of Virginia § 33.2-324](#) Secondary state highway system; composition for more information*
- A project classified as Urban in FC may be part of the Interstate, Arterial, Primary, or Secondary System and will be administered as such. This applies also to projects classified as Rural.
 - The Functional Classification block on the title sheet is to show the Geometric Design Standard used.

If more than one standard is used in the design, it will be necessary to set up two Functional Classification blocks since in most cases there would be a change in traffic volumes and scope of work.

EXAMPLE OF DETERMINING FUNCTIONAL CLASSIFICATION STANDARDS

When the Functional Classification for a project would normally warrant either Geometric Design Standard GS-1, GS-2, GS-3, or GS-4 and Geometric Design Standard GS-5, GS-6, GS-7 or GS-8, respectively, is used then it will be necessary to show the standard used in the design on the title sheet under the Functional Classification.

- If the normal Geometric standard would be GS-3 and Geometric Standard GS-7 is used, the title sheet is to show:

RURAL COLLECTOR-ROLLING-DIVIDED (Urban St'd. GS-7 was used)

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LANE/SHOULDER/PAVEMENT TRANSITIONS, MERGING TAPERS & SPEED CHANGE LENGTHS

Lane /pavement/shoulder transitions typically occur where new or reconstructed roadways tie-in to existing roadways. This also applies to where roadways tie-in to bridges. **Permanent lane/pavement/shoulder transitions***, merging tapers and speed change lengths shall meet the minimum length provided by the following equations:

For 40 mph or less

$$L = S^2W \div 60$$

For 45 mph or greater

$$L = W \times S$$

L = length of transition

S = Design Speed

W = Width of offset on each side

Source: 2009 MUTCD, Section 6, Table 6C-4

For Temporary Merging, Temporary Shifting and Temporary Shoulder Tapers see 2009 MUTCD, Section 6, Table 6C-3 and 6C-4.

For Passing/ Left Turn lanes on Two-Lane Highway See Appendix F, Figure 3-4.

NOTE:

A pavement transition length of 1/2L (calculate L by using the applicable formula above) is to be used when establishing project termini for the majority of small bridge replacement and/or major bridge rehabilitation projects when "NO" horizontal or vertical geometric changes are required to tie into the existing approach alignment. For additional information see Volume 5, Part 2, of the Structure and Bridge Manual.

Pavement transition is separate from the length of need for guardrail. Length of need and shoulder prep for guardrail shall be in accordance with the VDOT RDM Appendix **J** and the Road & Bridge Standards.

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GEOMETRIC DESIGN STANDARDS FOR INTERSTATE SYSTEM (GS-INT)

	TERRAIN	MINIMUM DESIGN SPEED (MPH)	MINIMUM RADIUS	(7) MINIMUM STOPPING SIGHT DISTANCE	MINIMUM WIDTH OF LANE	(1) MINIMUM WIDTH OF TOTAL SHOULDERS (GRADED + PAVED) (CUT & FILL)		(2,3,4) MINIMUM PAVED SHOULDER WIDTH		(5) MINIMUM WIDTH OF DITCH FRONT SLOPE	(6) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES				
						With GR	Without GR	LT.	RT.							
INTERSTATE	Rural Non-Mountainous (Level or Rolling)	75	2215'	820'	12'	16'	12'	4' ** Min.	10' Min.	12' @ 6:1	CS-4B	See Footnote (8)				
		70	1821'	730'												
	Urban	50	760'	425'									14'	10'	4' ** Min.	8' ** Min.
	Rural Mountainous															

GENERAL NOTES

Interstates - All new and major reconstructed Interstate facilities shall have a design speed 5 mph greater than the posted speed * unless concurrence from the State Location and Design Engineer is obtained.

Standard TC-5.11R superelevation based on 8% maximum is to be used for all Interstates.

Medians in urban or mountainous areas shall be wide enough to accommodate the left total shoulder width plus the space needed for a barrier. See Interstate Guide.

When barriers are provided right of traffic or in the median the total shoulder shall be paved.

Where curbs are provided, they shall not be closer to the traveled way than the outer edge of the paved shoulder, shall have a sloping face and be limited to the height of 4 inches (St'd CG-3). See Interstate Guide.

Maximum Grades

Type of Terrain	Design Speed (mph)						
	50	55	60	65	70	75	80
	*Grades (%)						
Level	4	4	3	3	3	3	3
Rolling	5	5	4	4	4	4	4
Mountainous	6	6	6	5	5	-	-

* Grades 1% Steeper than the value shown may be used in urban areas

FOOTNOTES

(1) Total shoulder widths include the paved portion and are applicable to the left and right shoulder.

Where truck traffic exceeds 250 DDHV, a wider total shoulder should be considered (14' without guardrail; 18' with guardrail).

(2) When the mainline is 6 or more lanes in rural non-mountainous or urban terrain, the left paved shoulder width shall be the same as the right paved shoulder.

** AASHTO Minimum, See Interstate Guide.

(3) When the mainline is 8 or more lanes in rural mountainous terrain, the median paved shoulder width shall be the same as the right paved shoulder.

** AASHTO Minimum, See Interstate Guide.

Where truck traffic exceeds 250 DDHV, additional shoulder width may be beneficial. Refer to AASHTO's Green Book Chapter 8 for more information.

(4) Additional guidance on shoulder widths for tunnels and long bridges [overall length over 200 ft.] is provided in the AASHTO Interstate Guide.

(5) A hydraulic analysis is necessary to determine actual depth requirement.

(6) Additional or modified slope criteria to apply where shown on typical sections.

(7) For additional information on sight distance requirements on grades of 3 percent or greater, see Section 3.2.2, Table 3-2 of the AASHTO Green Book.

(8) See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).

GEOMETRIC DESIGN STANDARDS FOR RURAL PRINCIPAL ARTERIAL SYSTEM (GS-1)

	TERRAIN	DESIGN SPEED (MPH)	MINIMUM RADIUS	(6) MINIMUM STOPPING SIGHT DISTANCE	MINIMUM WIDTH OF LANE	(1) MINIMUM WIDTH OF TOTAL SHOULDERS (GRADED + PAVED) CUT & FILL		(2) MINIMUM PAVED SHOULDER WIDTH		(3) MINIMUM WIDTH OF DITCH FRONT SLOPE	(4) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES See Footnote (5)
						With GR	Without GR	LT.	RT.			
FREEWAYS	LEVEL	75	2215'	820'	12'	16'	12'	4'	10'	12' @ 6:1	CS-4B	
		70	1821'	730'								
	ROLLING	60	1204'	570'							CS-4E	
	MOUNTAINOUS	50	760'	425'								
OTHER PRINCIPAL ARTERIALS	LEVEL	70	1821'	730'	12'	14'	10'	4'	8'	10' @ 6:1	CS-4/	
		60	1204'	570'							CS-4B	
	ROLLING	60	1204'	570'						CS-4/		
		50	760'	425'							CS-4E	
	MOUNTAINOUS	50	760'	425'						6' @ 4:1	CS-3/	
		45	589'	360'								CS-3B
	40	446'	305'									

GENERAL NOTES

Freeways - A design speed of 75 mph should be used for Rural Freeways. Where terrain is mountainous, a design speed of 60 mph or 50 mph which is consistent with driver expectancy, may be used.

Other Principal Arterials - A design speed of 40 to 70 mph should be used depending on terrain, driver expectancy and whether the design is constructed on new location or reconstruction of an existing facility. An important safety consideration in the selection of one of the lower design speeds in each range is to have a properly posted speed limit.

Incorporated towns or other built-up areas, Urban Standard GS-5 may be used for design. "Built-up" is where there is sufficient development along the roadway that justifies a need to channelize traffic into and out of properties utilizing curb and gutter.

Standard TC-5.11R superelevation based on 8% maximum is to be used for all Rural Principal Arterials.

Clear Zone and Recoverable Area information can be found in Appendix A2 of the *Road Design Manual*.

If medians are included, see [Section 2E.3 of Chapter 2E](#) of the *Road Design Manual*.

For additional information on roadway widths and maximum grades relative to terrain and design speed, see AASHTO Green Book, Chapter 7, Section 7.2.2, Table 7-2 and Section 7.2.3, Table 7-3; for Freeways, see Chapter 8, Section 8.2.7, Table 8-1.

FOOTNOTES

- Total shoulder widths include the paved portion and are applicable to the left and right shoulder.
On Freeways, if truck traffic exceeds 250 DDHV, a wider total shoulder should be considered (14' without guardrail and 18' with guardrail).
- When the mainline is 6 or more lanes, the left paved shoulder width shall be the same as the right paved shoulder.
On Freeways, if truck traffic exceeds 250 DDHV, a wider right paved shoulder should be considered (12').*
- A hydraulic analysis is necessary to determine actual depth requirement.
- Additional or modified slope criteria to apply where shown on typical sections.
- See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).
- For additional information on sight distance requirements on grades of 3 percent or greater, see Section 3.2.2, Table 3-2 of the AASHTO Green Book.

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GEOMETRIC DESIGN STANDARDS FOR RURAL MINOR ARTERIAL SYSTEM (GS-2)

TRAFFIC VOLUME	TERRAIN	DESIGN SPEED (MPH)	MINIMUM RADIUS	(7) MINIMUM STOPPING SIGHT DISTANCE	(2) MINIMUM WIDTH OF LANE	MINIMUM WIDTH OF TOTAL SHOULDERS (GRADED + PAVED) CUT & FILL (8)		(3) (9)* MINIMUM PAVED SHOULDER WIDTH		(4) MINIMUM WIDTH OF DITCH FRONT SLOPE	(5) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES
						With GR	Without GR	LT.	RT.			
(1) ADT OVER 2000	LEVEL	70	1821'	730'	12'	12'	8'	4'	6'	10' @ 6:1	CS-4, CS-4A OR CS-4C	See Footnote (6)
		60	1204'	570'								
	ROLLING	60	1204'	570'								
		50	760'	425'								
	MOUNTAINOUS	50	760'	425'								
		45	589'	360'								
(1) ADT 400 TO 2000	LEVEL	70	1821'	730'	12'	10'	6'	4'	4'	6' @ 4:1	CS-4, CS-4A OR CS-4C	
		60	1204'	570'								
	ROLLING	60	1204'	570'								
		50	760'	425'								
	MOUNTAINOUS	50	760'	425'								
		45	589'	360'								
CURRENT ADT UNDER 400	LEVEL	70	1821'	730'	11'	8'	4'	2'	2'	6' @ 4:1	CS-4, CS-4A OR CS-4C	
		60	1204'	570'								
	ROLLING	60	1204'	570'								
		50	760'	425'								
	MOUNTAINOUS	50	760'	425'								
		45	589'	360'								
		40	446'	305'	10'						CS-3/CS-3B	
		40	446'	305'								

GENERAL NOTES

Rural Minor Arterials are designed with design speeds of 50 to 70 MPH, dependent on terrain features and traffic volumes, and occasionally may be as low as 40 MPH in mountainous terrain.

In incorporated towns or other built-up areas, Urban Standard GS-6 may be used for design. "Built-up" is where there is sufficient development along the roadway that justifies a need to channelize traffic into and out of properties utilizing curb and gutter.

Standard TC-5.11R superelevation based on 8% maximum is to be used for Rural Minor Arterials.

If medians are included, see [Section 2E.3 of Chapter 2E](#) of the *Road Design Manual*.

Clear Zone and Recoverable Area information can be found in Appendix A2 of the *Road Design Manual*.

For Passing Sight Distance Criteria, see AASHTO Green Book, Section 3.2.4,

For maximum grades relative to terrain and design speed, see AASHTO Green Book, Chapter 7, Section 7.2.2, Table 7-2.

FOOTNOTES

- (1) Use Design Year ADT for new construction and reconstruction projects (not applicable to R.R.R. projects or roads with ADT < 400) in accordance with [Road Design Manual, Chapter 2A](#), "REQUEST FOR TRAFFIC DATA" and Form [LD-104](#).
- (2) Lane width to be 12' at all interchange locations. For projects not on the National Highway System, width of traveled way may remain at 22' on reconstructed highways where alignment and safety records are satisfactory.
- (3) Where the mainline is 6 or more lanes, both right and median paved shoulders shall be 8' in width. For additional guidance on shoulder widths/reductions, see AASHTO Green Book, Ch. 7, Section 7.2.11, & Section 7.2.3, Table 7-3.
- (4) A hydraulic analysis is necessary to determine actual depth requirement.
- (5) Additional or modified slope criteria to be applied where shown on typical sections.
- (6) See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).
- (7) For additional information on sight distance requirements on grades of 3 percent or greater, see AASHTO Green Book, Chapter 3, Section 3.2.2, Table 3-2.
- (8) Total shoulder widths include the paved portion and are applicable to the left and right shoulder.
- (9) Additional paved width may be required for the installation of rumble strips.

GEOMETRIC DESIGN STANDARDS FOR RURAL COLLECTOR ROAD SYSTEM (GS-3)

TRAFFIC VOLUME	TERRAIN	DESIGN SPEED (MPH)	MINIMUM RADIUS	(8) MINIMUM STOPPING SIGHT DISTANCE	(2) MINIMUM WIDTH OF LANE	(3) (4) MINIMUM WIDTH OF GRADED SHOULDERS CUT & FILL		(5) MINIMUM WIDTH OF DITCH FRONT SLOPE	(6) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES
						With GR	Without GR			
(1) ADT OVER 2000	LEVEL	60	1204'	570'	(9) 11'	10'	6	10' @ 6:1	CS-4, CS-4A OR CS-4C	See Footnote (7)
	ROLLING	50	760'	425'				6' @ 4:1		
	MOUNTAINOUS	45	589'	360'						
		40	446'	305'						
(1) ADT 400 TO 2000	LEVEL	50	760'	425'	11'	8'	4'	6' @ 4:1	CS-4, CS-4A OR CS-4C	
	ROLLING	45	589'	360'						
	MOUNTAINOUS	40	446'	305'						
		35	316'	250'						
		30	215'	200'						
		10'	4' @ 3:1	CS-3/ CS-3B						
CURRENT ADT UNDER 400	LEVEL	45	589'	360'	10'	6'	2'	6' @ 4:1	CS-1	
		40	446'	305'						
	ROLLING	35	316'	250'						
		30	215'	200'						
	MOUNTAINOUS	25	135'	155'						
		20	77'	125'						

GENERAL NOTES

Geometric design features should be consistent with a design speed appropriate for the conditions.

Low design speeds (45 MPH and below) are generally applicable to highways with curvilinear alignment in rolling or mountainous terrain and where environmental conditions dictate.

High speed design (50 MPH and above) are generally applicable to highways in level terrain or where other environmental conditions are favorable.

Intermediate design speeds would be appropriate where terrain and other environmental conditions are a combination of those described for low and high design speed.

The designer should strive for higher values than the minimum where conditions of safety dictate and costs can be supported.

In incorporated towns or other built-up areas, Urban Standard GS-7 may be used. "Built-up" is where there is sufficient development along the roadway that justifies a need to channelize traffic into and out of properties utilizing curb and gutter.

Standard TC-5.11R superelevation based on 8% maximum is to be used for Rural Collectors.

Clear zone and Recoverable Area information can be found in [Appendix A2](#) of the *Road Design Manual*.

For Passing Sight Distance Criteria see AASHTO Green Book, Chapter 3, Section 3.2.4.

For maximum grades relative to terrain and design speed, see AASHTO Green Book, Chapter 6, Section 6.2.1, Table 6-2.

FOOTNOTES

- (1) Use Design Year ADT for new construction and reconstruction projects (not applicable to R.R.R. projects or roads with ADT < 2000) in accordance with [Road Design Manual, Chapter 2A](#), "REQUEST FOR TRAFFIC DATA" and Form [LD-104](#).
- (2) Lane width to be 12' at all interchange locations.
- (3) When the mainline is 2 lanes provide 4' wide paved shoulders (right and left) when design year ADT exceeds 2000 VPD, with 5% or more truck and bus usage. Provide 5' wide right paved shoulder when design year ADT exceeds 2000 VPD, with 5% or more truck and bus usage and the route is an AASHTO approved U.S. Bicycle Route (1, 76 or 176) or designated as a bicycle route on a locally adopted transportation plan. All shoulders not being paved will have the mainline pavement structure extended 1' on the same slope into the shoulder to eliminate raveling at the pavement edge. For additional guidance on shoulder widths, see AASHTO Green Book, Chapter 6, Section 6.2.2.
- (4) When the mainline is 4 lanes with ADT >2000, a minimum paved shoulder width of 6' right of traffic and 3' left of traffic shall be provided.
- (5) A hydraulic analysis is necessary to determine actual depth requirement.
- (6) Additional or modified slope criteria to be applied where shown on typical sections.
- (7) See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).
- (8) For additional information on sight distance requirements on grades of 3 percent or greater, see AASHTO Green Book, Chapter 3, Section 3.2.2, Table 3-2.
- (9) Consider using a lane width of 12 ft. where substantial truck volumes are present or agricultural equipment frequently uses the road. See AASHTO Green Book, Chapter 6, [Section 6.2.2](#), Table 6-5 footnote b.

GEOMETRIC DESIGN STANDARDS FOR RURAL LOCAL ROAD SYSTEM (GS-4)

TRAFFIC VOLUME	TERRAIN	DESIGN SPEED (MPH)	MINIMUM RADIUS	(9) MINIMUM STOPPING SIGHT DISTANCE	(2) MINIMUM WIDTH OF SURFACING OR PAVEMENT	(3) (4) (5) MINIMUM WIDTH OF GRADED SHOULDERS CUT & FILL		(6) MINIMUM WIDTH OF DITCH FRONT SLOPE	(7) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES
						With GR	Without GR			
(1) ADT OVER 2000	LEVEL	50	760'	425'	(10) 22'	10'	6'	6' @ 4:1	CS-4, 4A / 4C	See Footnote (8)
	ROLLING	45	589'	360'					CS-3, 3A / 3B	
		40	446'	305'						
	MOUNTAINOUS	35	316'	250'					4' @ 3:1	
30		215'	200'							
(1) ADT 400 TO 2000	LEVEL	50	760'	425'	22'	7'	3'	6' @ 4:1	CS-1	
	ROLLING	45	589'	360'	20'					
		40	446'	305'						
	MOUNTAINOUS	35	316'	250'	4' @ 3:1					
30		215'	200'							
CURRENT ADT UNDER 400	LEVEL	45	589'	360'	18'	6'	2'	4' @ 3:1	CS-1	
		40	446'	305'						
	ROLLING	35	316'	250'						
		30	215'	200'						
	MOUNTAINOUS	25	135'	155'						
		20	77'	125'						

GENERAL NOTES

Low design speeds are generally applicable to roads with winding alignment in rolling or mountainous terrain where environmental conditions dictate.

High design speeds are generally applicable to roads in level terrain or where other environmental conditions are favorable.

Intermediate design speeds would be appropriate where terrain and other environmental conditions are a combination of those described for low and high speed.

For minimum design speeds for 250 ADT and under, see AASHTO Green Book, Chapter 5, Section 5.2.1, Table 5-1.

Standard TC-5.11R superelevation based on 8% maximum is to be used.

In incorporated towns or other built-up areas, Urban Standard GS-8 may be used. "Built-up" is where there is sufficient development along the roadway that justifies a need to channelize traffic into and out of properties utilizing curb and gutter.

For Passing Sight Distance Criteria See AASHTO Green Book, Chapter 3, Section 3.2.4.

For maximum grades relative to terrain and design speed, see AASHTO Green Book, Chapter 5, Section 5.2.1, Table 5-2.

For Recreational Access Road design standards, see AASHTO Green Book, Chapter 5, Section 5.4.2.

FOOTNOTES

- (1) Use Design Year ADT for new construction and reconstruction projects in accordance with *Road Design Manual*, Chapter 2A, "REQUEST FOR TRAFFIC DATA" and Form *LD-104*. For RRR projects or roads with ADT < 2000, See Road Design Manual, Appendix A4*, "GUIDELINES FOR RRR PROJECTS."
- (2) Lane width to be 12' at all interchange locations.
- (3) In mountainous terrain or sections with heavy earthwork, the graded width of shoulder in cuts may be decreased by 2', but in no case shall the cut shoulder width be less than 2'.
- (4) Minimum shoulder slope shall be 8% on low side and same slope as pavement on high side (See St'd. GS-12).
- (5) When the mainline is 2 lanes provide 4' wide paved shoulders (right and left) when design year ADT exceeds 2000 VPD, with 5% or more truck and bus usage. Provide 5' wide paved shoulder when design year ADT exceeds 2000 VPD, with 5% or more truck and bus usage and the route is an AASHTO approved U.S. Bicycle Route (1, 76 or 176) or designated as a bicycle route on a locally adopted transportation plan All shoulders not being paved will have the mainline pavement structure extended 1' on the same slope into the shoulder to eliminate raveling at the pavement edge. For additional guidance on shoulder widths, see AASHTO Green Book, Chapter 5, Section 5.2.2.
- (6) A hydraulic analysis is necessary to determine actual depth requirement.
- (7) Additional or modified slope criteria to be applied where shown on typical sections.
- (8) See *Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics*.
- (9) For additional information on sight distance requirements on grades of 3 percent or greater, see AASHTO Green Book, Chapter 3, Section 3.2.2, Table 3-2.
- (10) Consider using a lane width of 12 ft. where substantial truck volumes are present or agricultural equipment frequently uses the road. See AASHTO Green Book, Chapter 5, Section 5.2.2, Table 5-5 footnote b.

GEOMETRIC DESIGN STANDARDS FOR URBAN PRINCIPAL ARTERIAL SYSTEM (GS-5)

	DESIGN SPEED (MPH)	MINIMUM RADIUS		(13) MINIMUM STOPPING SIGHT DISTANCE	MINIMUM WIDTH OF LANE	(1) MIN. WIDTH OF TOTAL SHOULDERS (GRADED + PAVED) CUT & FILL		(2) MINIMUM PAVED SHOULDER WIDTH		(3) MINIMUM WIDTH OF DITCH FRONT SLOPE	(4) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES
		U	ULS			With GR	Without GR	LT.	RT.			
FREEWAYS	70		-	730'	12'	16'	12'	4'	10'	12' @ 6:1	CS-4 OR 4B	
	60	See GS-1*	-	570'								
	50		-	425'								
OTHER PRINCIPAL ARTERIAL WITH SHOULDER DESIGN	60		-	570'	(12)	14'	10'	4'	8'	10' @ 6:1	CS-4 OR 4E	See Footnote (7)
	50	929'	-	425'								
	45	713'	795'	360'	(5) (6) (12) 11'					6' @ 4:1	CS-3 OR 3B	
	40	536'	593'	305'								
	35	373'	408'	250'								
	30	251'	273'	200'								
	DESIGN SPEED (MPH)	MINIMUM RADIUS		(13) MINIMUM STOPPING SIGHT DISTANCE	MINIMUM WIDTH OF LANE	(8) STANDARD CURB & CURB & GUTTER	BUFFER STRIP WIDTH	(9) MINIMUM SIDEWALK WIDTH	(10) SLOPE			
OTHER PRINCIPAL ARTERIAL WITH CURB & GUTTER	60	GS-1	-	570'	(12) 12'	CG-3 / CG-7	(11)	5'	2:1			
	50	929'	-	425'								
	45	713'	795'	360'	(5) (6) (12) 11'	(14) CG-2 / CG-6						
	40	536'	593'	305'								
	35	373'	408'	250'								
	30	251'	273'	200'								
	25	155'	167'	155'								

GENERAL NOTES

Freeways - Urban Freeways should accommodate desired safe operating speeds during non-peak hours, but should not be so high as to exceed the limits of prudent construction, right of way and socioeconomic costs due to the large proportion of vehicles which are accommodated during periods of peak flow when lower speeds are necessary. The design speeds for Freeways shall not be less than 50 mph.

On many Urban Freeways, particularly in suburban areas, a design speed of 60 mph or higher can be provided with little additional cost above that required for 50 mph design speed. The corridor of the mainline may be relatively straight and the character and location of interchanges may permit a higher design speed. Under these conditions, a design speed of 70 mph should be considered.

Other Principal Arterials - Design speeds for Urban Arterials generally range from 40 to 60 mph, and occasionally may be as low as 25 mph. The lower (40 mph and below) speeds apply in the central business district and intermediate areas. The higher speeds are more applicable to the outlying business and developing areas.

Standard TC-5.11R (Rural) superelevation based on 8% maximum is to be used for **ALL** Freeways (50 – 70 mph) and for Other Principal Arterials with a design speed of 60 mph. For minimum radius, see GS-1.

Standard TC-5.11U (Urban) superelevation based on 4% maximum is to be used on Other Principal Arterials with a design speed of 50 mph and less.

Standard TC-5.11ULS (Urban Low Speed) superelevation based on +2% maximum may be used for design speeds less than or equal to 45 mph.

For Standard TC-5.11 ULS superelevation based on -2%, please refer to Road and Bridge Standards 803.23.

Clear Zone and Recoverable Area information can be found in Appendix A2 of the *Road Design Manual*.

If medians are included, see [Section 2E.3 of Chapter 2E](#) of the *Road Design Manual*. For minimum widths for roadway & right of way used within incorporated cities or towns to qualify for maintenance funds see [Code of Va. Section 33.2-319](#).

For maximum grades relative to terrain and design speed, see AASHTO Green Book, Chapter 7, Section 7.3.2, Table 7-4a, for Freeways, see Chapter 8, Section 8.2.7, Table 8-1.

FOOTNOTES

- (1) Total shoulder widths include the paved portion and are applicable to the left and right shoulder. On Freeways, if truck traffic exceeds 250 DDHV, a wider total shoulder should be considered (14' without guardrail and 18' with guardrail).
- (2) When the mainline is 6 or more lanes, the left paved shoulder width shall be the same as the right paved shoulder. On Freeways, if truck traffic exceeds 250 DDHV, a wider right paved shoulder should be considered (12').
- (3) A hydraulic analysis is necessary to determine actual depth requirement.
- (4) Additional or modified slope criteria apply where shown on typical sections.
- (5) Minimum lane widths to be 12' at all interchange locations.
- (6) Where heavy truck volume (equal to or greater than 10%) or bus traffic is anticipated, an additional 1 foot width should be considered.
- (7) See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).
- (8) Or equivalent City or Town design.
- (9) Width of 8' or more may be needed in commercial areas.
- (10) 3:1 and flatter slopes shall be used when the right of way is behind the sidewalk (or sidewalk space) in residential or other areas where slopes will be maintained by the property owner.
- (11) For buffer strip widths see [Appendix A\(1\). Section A\(1\)-1 Bicycle & Pedestrian Facility Guidelines](#).
- (12) Situations having restrictions on trucks may allow the use of lanes 1 foot less in width.
- (13) For additional information on sight distance requirements on grades of 3 percent or greater, see AASHTO Green Book, Section 3.2.2, Table 3-2. For Intersection sight distance requirements see Appendix F, Table 2-5.
- (14) Where bicycle accommodation is next to curb or curb and gutter, mountable curb (CG-3) or mountable curb and gutter (CG-7) shall be used for design speeds of 45 mph and below.

GEOMETRIC DESIGN STANDARDS FOR URBAN MINOR ARTERIAL STREET SYSTEM (GS-6)

	DESIGN SPEED (MPH)	MINIMUM RADIUS		(11) MINIMUM STOPPING SIGHT DISTANCE	(10) MINIMUM WIDTH OF LANE	(3) STANDARD CURB / CURB & GUTTER	BUFFER STRIP WIDTH		(4) MINIMUM SIDEWALK WIDTH	(5) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES	
		U	ULS									
STREETS WITH CURB & GUTTER	60	1204'	-	570'	12'	CG-3 / CG-7	(9)		5'	2:1	See Footnote (6)	
	50	929'	-	425'								
	45	713'	795'	360'	(1) (2) 11'	(13) (14) CG-2 / CG-6						
	40	536'	593'	305'								
	35	373'	408'	250'								
	30	251'	273'	200'								
	25	155'	167'	155'								
	DESIGN SPEED (MPH)	MINIMUM RADIUS		(11) MINIMUM STOPPING SIGHT DISTANCE	(10) MINIMUM WIDTH OF LANE	(15) MINIMUM WIDTH OF TOTAL SHOULDERS (GRADED + PAVED) CUT & FILL		(12) (7) MINIMUM PAVED SHOULDER WIDTH	(8) MINIMUM WIDTH OF DITCH FRONT SLOPE	(5) SLOPE		
		U	ULS			With GR	Without GR					LT.
(12) STREETS WITH SHOULDER DESIGN	60	1204'	-	570'	12'	REFER TO MINIMUM WIDTH OF GRADED SHOULDERS CUT AND FILL FOR GS-2		See GS-2*	See GS-2	10' @ 6:1		2:1
	50	929'	-	425'								
	45	713'	795'	360'	(1) (2) 11'							
	40	536'	593'	305'								
	35	373'	408'	250'								
	30	251'	273'	200'								

GENERAL NOTES

Design Speeds for Urban Arterials generally range from 40 to 60 mph and occasionally may be as low as 25 mph. The lower (40 mph and below) speeds apply in the central business district and intermediate areas. The higher speeds are more applicable to the outlying business and developing areas.

Standard TC-5.11R (Rural) superelevation based on 8% maximum is to be used for 60 mph design speed.

Standard TC-5.11U (Urban) superelevation based on 4% maximum is to be used for design speeds less than 60 mph.

Standard TC-5.11ULS (Urban Low Speed) superelevation based on +2% maximum may be used for design speeds less than or equal to 45 mph.

For Standard TC-5.11 ULS superelevation based on -2%, please refer to Road and Bridge Standards 803.23.

Clear Zone and Recoverable Area information can be found in Appendix A2 of the *Road Design Manual*.

If medians are included, see [Section 2E.3 of Chapter 2E](#) of the *Road Design Manual*.

For minimum widths for roadway and right of way used within incorporated cities or towns to qualify for maintenance funds see [Code of Virginia Section 33.2-319](#).

For maximum grades relative to terrain and design speed, see AASHTO Green Book, Chapter 7, Section 7.3.2, Table 7-4a.

FOOTNOTES

(1) Lane width to be 12' at all interchanges.

- (2) Where heavy truck volume (equal to or greater than 10%) or bus traffic is anticipated, an additional 1 foot width should be considered.
- (3) Or equivalent City or Town design.
- (4) A width of 8' or more may be needed in commercial areas.
- (5) Slopes 3:1 and flatter shall be used when the right of way is behind the sidewalk (or sidewalk space) in residential or other areas where slopes will be maintained by the property owner.
- (6) See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).
- (7) Where the mainline is 6 or more lanes, both right and median paved shoulders shall be 8' in width. For additional guidance on shoulder widths/reductions, see AASHTO Green Book, Chapter 7, Section 7.2.11.
- (8) A hydraulic analysis is necessary to determine actual depth requirement.
- (9) For buffer strip widths see [Appendix A\(1\), Section A\(1\)-1 Bicycle & Pedestrian Facility Guidelines](#).
- (10) Situations having restrictions on trucks may allow the use of lanes 1 foot less in width.
- (11) For additional information on sight distance requirements on grades of 3 percent or greater, see AASHTO Green Book, Chapter 3, Section 3.2.2, Table 3-2.
- (12) For information on reduced shoulder widths, see AASHTO Green Book, Chapter 7, Section 7.2.3, Table 7-3.
- (13) Where bicycle accommodation is next to curb or curb and gutter, mountable curb (CG-3) or mountable curb and gutter (CG-7) shall be used for design speeds of 45 mph and below.
- (14) See Appendix J for guardrail installation adjacent to curb or curb and gutter.
- (15) Total shoulder widths include the paved portion and are applicable to the left and right shoulder.

GEOMETRIC DESIGN STANDARDS FOR URBAN COLLECTOR STREET SYSTEM (GS-7)

	DESIGN SPEED (MPH)	MINIMUM RADIUS		(10) MINIMUM STOPPING SIGHT DISTANCE	(13) MINIMUM WIDTH OF LANE	(3) STANDARD CURB & GUTTER	BUFFER STRIP WIDTH	(4) MINIMUM SIDEWALK WIDTH	(5) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES
		U	ULS							
STREET WITH CURB & GUTTER	50	929'	-	425'	12'	CG-3 / CG-7	(9)	5'	2:1	
	45	713'	795'	360'	(1) (2) (12) 11'	(14) CG-2 / CG-6				
	40	536'	593'	305'						
	35	373'	408'	250'						
	30	251'	273'	200'						
	25	115'	167'	155'						
	DESIGN SPEED (MPH)	MINIMUM RADIUS		(10) MINIMUM STOPPING SIGHT DISTANCE	(13) MINIMUM WIDTH OF LANE	(7) (11) MINIMUM WIDTH OF GRADED SHOULDERS CUT & FILL		(6) MINIMUM WIDTH OF DITCH FRONT SLOPE	(5) SLOPE	See Footnote (8)
	U	ULS*	With GR			Without GR				
(11) STREET WITH SHOULDER DESIGN	50	929'	-	425'	12'	REFER TO MINIMUM WIDTH OF GRADED SHOULDERS CUT AND FILL FOR GS-3 ¹		6' @ 4:1	2:1	
	45	713'	795'	360'	(1) (2) (12) 11'					
	40	536'	593'	305'						
	35	373'	408'	250'						
	30	251'	273'	200'						
								4' @ 3:1		

GENERAL NOTES

A minimum design speed of 25 mph or higher should be used for collector streets, depending on available right of way, terrain, adjacent development and other area controls.

In the typical street grid, the closely spaced intersections usually limit vehicular speeds and thus make the effect of design speed of less significance. Nevertheless, the longer sight distances and curve radii commensurate with design speeds higher than the value indicated result in safer highways and should be used to the extent practicable.

Standard TC-5.11U (Urban) superelevation based on 4% maximum.

*Standard TC-5.11ULS (Urban-Low Speed) superelevation based on +2% maximum may be used with a design speed of 45 mph or less.

*For Standard TC-5.11 ULS superelevation based on -2%, please refer to Road and Bridge Standards 803.23.

For minimum widths for roadway and right of way used within incorporated cities or towns to qualify for maintenance funds see [Code of Virginia Section 33.2-319](#).

Clear zone and Recoverable Area information can be found in [Appendix A2*](#) of the [Road Design Manual](#).

For maximum grades relative to terrain and design speed, see AASHTO Green Book, Chapter 6, Section 6.3.1, Table 6-7.

FOOTNOTES

- (1) Lane width should be 12' in industrial areas. Where Right of Way is restricted 11' lanes may be used in industrial areas. (See AASHTO Green Book Chapter 6, Section 6.2.2 and 6.3.2, Table 6-5).
- (2) Lane width to be 12' at all interchange locations.
- (3) Or equivalent City or Town Design.
- (4) 8' or more may be needed in commercial areas.

- (5) 3:1 and flatter slopes shall be used when right of way is behind the sidewalk (or sidewalk space) in residential or other areas where the slopes will be maintained by the property owner.
- (6) A hydraulic analysis is necessary to determine actual depth requirement.
- (7) When Design year ADT exceeds 2000 VPD, with greater than 10% total truck and bus usage: Provide 4' wide paved shoulders (right and left) when the graded shoulder is 5' wide or greater. Provide 5' wide paved shoulder when design year ADT exceeds 2000 VPD, with 5% or more truck and bus usage and the route is an AASHTO approved U.S. Bicycle Route (1, 76 or 176) or designated as a bicycle route on a locally adopted transportation plan. All shoulders not being paved will have the mainline pavement structure extended 1', on the same slope, into the shoulder to eliminate raveling at the pavement edge. (See Standard GS-11 for shoulder design).
- (8) See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).
- (9) For buffer strip widths see [Appendix A\(1\), Section A\(1\)-1 Bicycle & Pedestrian Facility Guidelines](#).
- (10) For additional information on sight distance requirements on grades of 3 percent or greater, see AASHTO, Green Book, Chapter 3, Section 3.2.2, Table 3-2.
- (11) Where shoulders are provided, roadway widths in accordance with Table 6-5 should be considered. (See AASHTO Green Book, Chapter 6, Section 6.2.2)
- (12) Where heavy truck volume (equal to or greater than 10%) or bus traffic is anticipated, an additional 1 foot width should be considered.
- (13) Situations having restrictions on trucks may allow the use of lanes 1 foot less in width.
- (14) Where bicycle accommodation is next to curb or curb and gutter, mountable curb (CG-3) or mountable curb and gutter (CG-7) shall be used for design speeds of 45 mph and below.

GEOMETRIC DESIGN STANDARDS FOR URBAN LOCAL STREET SYSTEM (GS-8)

	DESIGN SPEED (MPH)	MINIMUM RADIUS		(1) MAXIMUM PERCENT OF GRADE	(10) MINIMUM STOPPING SIGHT DISTANCE	(2) MINIMUM WIDTH OF LANE	(3) STANDARD CURB / CURB & GUTTER	BUFFER STRIP WIDTH	(5) MINIMUM SIDEWALK WIDTH	(6) SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES
		U	ULS								
STREET WITH CURB & GUTTER	30	251'	273'	15	200'	10'	(12) CG-2 / CG-6	(4)	5'	2:1	
	25	155'	167'		155'						
	20	87'	92'		125'						
	DESIGN SPEED (MPH)	MINIMUM RADIUS		(1) MAXIMUM PERCENT OF GRADE	(10) MINIMUM STOPPING SIGHT DISTANCE	(2) MINIMUM WIDTH OF LANE	(7) (11) MINIMUM WIDTH OF GRADED SHOULDERS CUT & FILL		(8) MINIMUM WIDTH OF DITCH FRONT SLOPE	SLOPE	See Footnote (9)
		U	ULS				With GR	Without GR			
(11) STREET WITH SHOULDER DESIGN	30	251'	273'	15	200'	10'	REFER TO MINIMUM WIDTH OF GRADED SHOULDERS CUT AND FILL FOR GS-4		4' @ 3:1	3:1	
	25	155'	167'		155'						
	20	87'	92'		125'						

GENERAL NOTES

Design Speed is not a major factor for local streets. For consistency in design elements, design speeds ranging from 20 to 30 mph may be used, depending on available right of way, terrain, adjacent development and other area controls.

In the typical street grid, the closely spaced intersections usually limit vehicular speeds, making the effect of a design speed of less significance.

Design speeds exceeding 30 mph in residential areas may require longer sight distances and increased curve radii, which would be contrary to the basic function of a local street.

Standard TC-5.11U (Urban) superelevation based on 4% maximum.

Standard TC-5.11ULS (Urban Low Speed) superelevation based on +2% maximum may be used with a design speed of 45 mph or less.

*For Standard TC-5.11 ULS superelevation based on -2%, please refer to Road and Bridge Standards 803.23.

For minimum widths for roadway and right of way used within incorporated cities or towns to qualify for maintenance funds see [Code of Virginia Section 33.2-319](#).

FOOTNOTES

- (1) Grades in commercial and industrial areas should be less than 8 percent; desirably, less than 5 percent. For maximum grades relative to terrain and design speed, see AASHTO Green Book, Chapter 5, Section 5.2.1, Table 5-2.
- (2) Where feasible, lanes should be 11' wide and in industrial areas should be 12' wide; however, where available or attainable right of way imposes severe limitations, 9' lanes can be used in residential areas and 11' lanes can be used in industrial areas.

- (3) Or equivalent City or Town design.
- (4) For buffer strip widths see [Appendix A\(1\), Section A\(1\)-1 Bicycle & Pedestrian Facility Guidelines](#).
- (5) A width of 8' or more may be needed in commercial areas.
- (6) 3:1 and flatter slopes shall be used when the right of way is behind the sidewalk (or sidewalk space) in residential or other areas where slopes will be maintained by the property owner.
- (7) When Design year ADT exceeds 2000 VPD, with greater than 5% total truck and bus usage: Provide 4' wide paved shoulders when the graded shoulder is 5' wide or greater. Provide 5' wide paved shoulder when design year ADT exceeds 2000 VPD, with 5% or more truck and bus usage and the route is an AASHTO approved U.S. Bicycle Route (1, 76 or 176) or designated as a bicycle route on a locally adopted transportation plan. All shoulders not being paved will have the mainline pavement structure extended 1', on the same slope, into the shoulder to eliminate raveling at the pavement edge (See Standard GS-12 for shoulder design).
- (8) A hydraulic analysis is necessary to determine actual depth requirement.
- (9) See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).
- (10) For additional information on sight distance requirements on grades of 3 percent or greater, see AASHTO Green Book, Chapter 3, Section 3.2.2, Table 3-2.
- (11) For information on reduced shoulder widths, see AASHTO Green Book, Chapter 5, Section 5.2.2, Table 5-5.
- (12) Where bicycle accommodation is next to curb or curb and gutter, mountable curb (CG-3) or mountable curb and gutter (CG-7) shall be used for design speeds of 45 mph and below.

GEOMETRIC DESIGN STANDARDS FOR SERVICE ROADS (GS-9)

(1) DEAD END SERVICE ROADS UNDER 25 VPD								
PROPERTIES SERVED	DESIGN SPEED (MPH)	MINIMUM RADIUS	STOPPING SIGHT DISTANCE	(2) MINIMUM TRAVEL WAY WIDTH	MINIMUM WIDTH OF SHOULDER CUT & FILL		(3) MINIMUM WIDTH OF DITCH FRONT SLOPE	SLOPE
					With GR	Without GR		
1	10	30'	50'	12'	6'	2'	3' @ 3:1	(4)
	15	38'	80'					
OVER 1	20	77'	125'	16'				
	25	135'	155'					
	30	215'	200'	18'				
	35	316'	250'					
40	446'	305'						

GENERAL NOTES

The minimum design speed for service roads should be 20 mph except for one lane service roads serving one property which may have a minimum design speed of 10 mph.

Standard TC-5.11R superelevation is based on 8% maximum.

Standard TC-5.11U (Urban) superelevation based on 4% maximum.*

Standard TC-5.11ULS (Urban Low Speed) superelevation based on +2% maximum may be used with a design speed of 45 mph or less.*

For Standard TC-5.11 ULS superelevation based on -2%, please refer to Road and Bridge Standards 803.23.*

For Passing Sight Distance Criteria See AASHTO Green Book, Chapter 3, Section 3.2.4.

FOOTNOTES

- (1) For through service roads and dead end service roads with over 25 VPD, use Standards shown for Local Roads and Streets (Also See Standard GS-12).
- (2) Under adverse conditions, intermittent shoulder sections or turnouts for passing may be required (see AASHTO Green Book, Chapter 5, Section 5.4*).
- (3) A hydraulic analysis is necessary to determine actual depth requirement.
- (4) Slopes to be same as mainline when service road is parallel to or otherwise visible from the mainline. For other cases, slopes should be in accordance with standards for Local Roads and Streets.

RELATIONSHIP OF MAXIMUM GRADES TO DESIGN SPEED				
TYPE OF TERRAIN	DESIGN SPEED (MPH)			
	10	20	30	40
	GRADES (PERCENT)			
LEVEL	8	8	7	7
ROLLING	12	11	10	9
MOUNTAINOUS	18	16	14	12

* Added 1/21

GEOMETRIC DESIGN STANDARDS FOR INTERCHANGE RAMPS (GS-R)

	RAMP DESIGN SPEED (MPH)	MINIMUM RADIUS	(6) MINIMUM STOPPING SIGHT DISTANCE	(1) MINIMUM RAMP PAVEMENT WIDTHS	MINIMUM WIDTH OF SHOULDER				(5) MINIMUM WIDTH OF DITCH OF DITCH FRONT SLOPE	NEW AND RECONSTRUCTED MINIMUM BRIDGE WIDTHS AND VERTICAL CLEARANCES	
					LEFT OF TRAFFIC		RIGHT OF TRAFFIC				
					GRADED WIDTH CUT & FILL		(2) (3) PAVED WIDTH	(7) GRADED WIDTH			(2) (3) PAVED WIDTH
					With GR	Without GR					
INTERCHANGE RAMPS	60	1204'	570'	16'	10'	6'	4'	10'	8'	10' @ 6:1	See Footnote (4)
	50	760'	425'								
	45	589'	360'								
	40	446'	305'								
	35	316'	250'								
	30	215'	200'								
	25	135'	155'								
20	77'	125'	18'								
AUXILIARY LANES (ACCEL/ DECEL)	(8) GEOMETRIC DESIGN ELEMENTS ARE TO BE THE SAME AS MAINLINE THROUGH LANES. SEE APPLICABLE FUNCTIONAL CLASSIFICATION GS STANDARDS.									AUXILIARY LANE SHOULDER WIDTHS ARE TO BE THE SAME AS MAINLINE THROUGH LANES	

GENERAL NOTES

The determination of the proper design speed for any particular ramp should be made using guidelines shown in the AASHTO Green Book, Chapter 10, Section 10.9.6, Table 10-1.

Standard TC-5.11R is to be used. Maximum ramp superelevation is to be 8%.

Clear Zone and Recoverable Area information can be found in [Appendix A2](#) of the *Road Design Manual*.

RELATIONSHIP OF MAXIMUM GRADES TO DESIGN SPEED			
DESIGN SPEED (MPH)			
15 - 20	25 - 30	35 - 40	45 - 60
GRADES (PERCENT)			
6 - 8	5 - 7	4 - 6	3 - 5

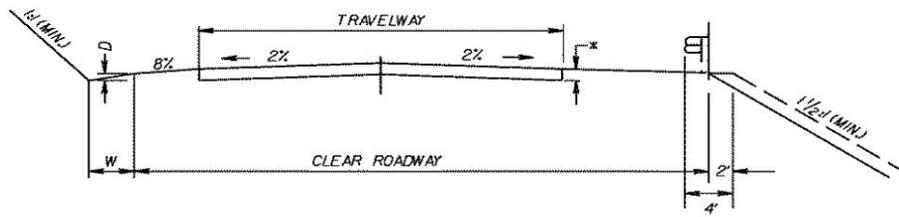
Where topographic conditions dictate, grades steeper than those above may be used. One-way descending gradients on ramps should be held to the same general maximums, but in special cases they may be 2 percent greater. However, downgrades with sharp horizontal curvature and significant heavy truck or bus traffic should be limited to 4 percent. See Section 10.9.6.2.12 of the AASHTO Green Book.

See the [IIM-LD- 227](#) and AASHTO Green Book Chapter 10, Section 10.9.6, for further guidance on ramp design.

FOOTNOTES

- (1) Interchange ramp widths shown are for one lane traffic. For two lane or other conditions see Table 3-27 in the AASHTO Green Book.
- (2) Paved shoulder widths on ramps with a design speed of 40 mph or less may be reduced to 6' right, or 2' left, when justifiable. However, the sum of the right and left shoulder shall not be less than 10'. See AASHTO Green Book, Chapter 10, Section 10.9.6.
- (3) On ramps with a radius of less than 500', consider (depending on degree of curvature, percent of trucks) the extension of the full pavement structure (on the same slope as the pavement) through the inside paved shoulder area to eliminate raveling of the pavement edge.
- (4) See [Manual of the Structure and Bridge Division – Volume V – Part 2 Design Aids – Chapter 6 Geometrics](#).
- (5) A hydraulic analysis is necessary to determine actual depth requirement.
- (6) For additional information on sight distance requirements on grades of 3 percent or greater, see the AASHTO Green Book, Chapter 3, Section 3.2.2, Table 3-2.
- (7) Graded shoulder width to be increased additional 4' when guardrail is required.
- (8) See [AASHTO Green Book*](#), Chapter 10, Section 10.9.5, for further guidance on Auxiliary Lanes.

FIGURE A1-1 GEOMETRIC DESIGN STANDARDS FOR TEMPORARY DIVERSION (GS-10)



TYPICAL SECTION

BRIDGE WIDTH = APPROACH ROADWAY WIDTH (CLEAR ROADWAY).

* SEE PLANS FOR BASE DEPTH AND TYPE AND PAVED SURFACE TREATMENT WHERE REQUIRED.

NOTE: WHEN GUARDRAIL IS REQUIRED IT SHALL BE INSTALLED IN ACCORDANCE WITH THE ROAD & BRIDGE STANDARDS

WIDTHS FOR TWO-WAY TRAFFIC (LESSER WIDTH MAY BE USED FOR ONE WAY TRAFFIC)								
Type	Current ADT	(1) Travelway width (ft.)	Surface		Minimum Roadway shoulder to shoulder (ft.)	Ditch Width (ft.)	Ditch Depth (in.)	Pay Item
			Unpaved	Paved				
A	0-250	18	✓		22	4	16	L.F.
B	251-750	20	✓		24-30	4	16	L.F.
C	751-2000	22		✓	30-34	4	16	(2)
D	2001-5500	24		✓	40	4	16	(2)
E	5501-15000	24		✓	40	4	16	(2)
F	15001-above	24		✓	40	6	18	(2)

Note: Width for two way traffic shall not be less than the proposed typical section

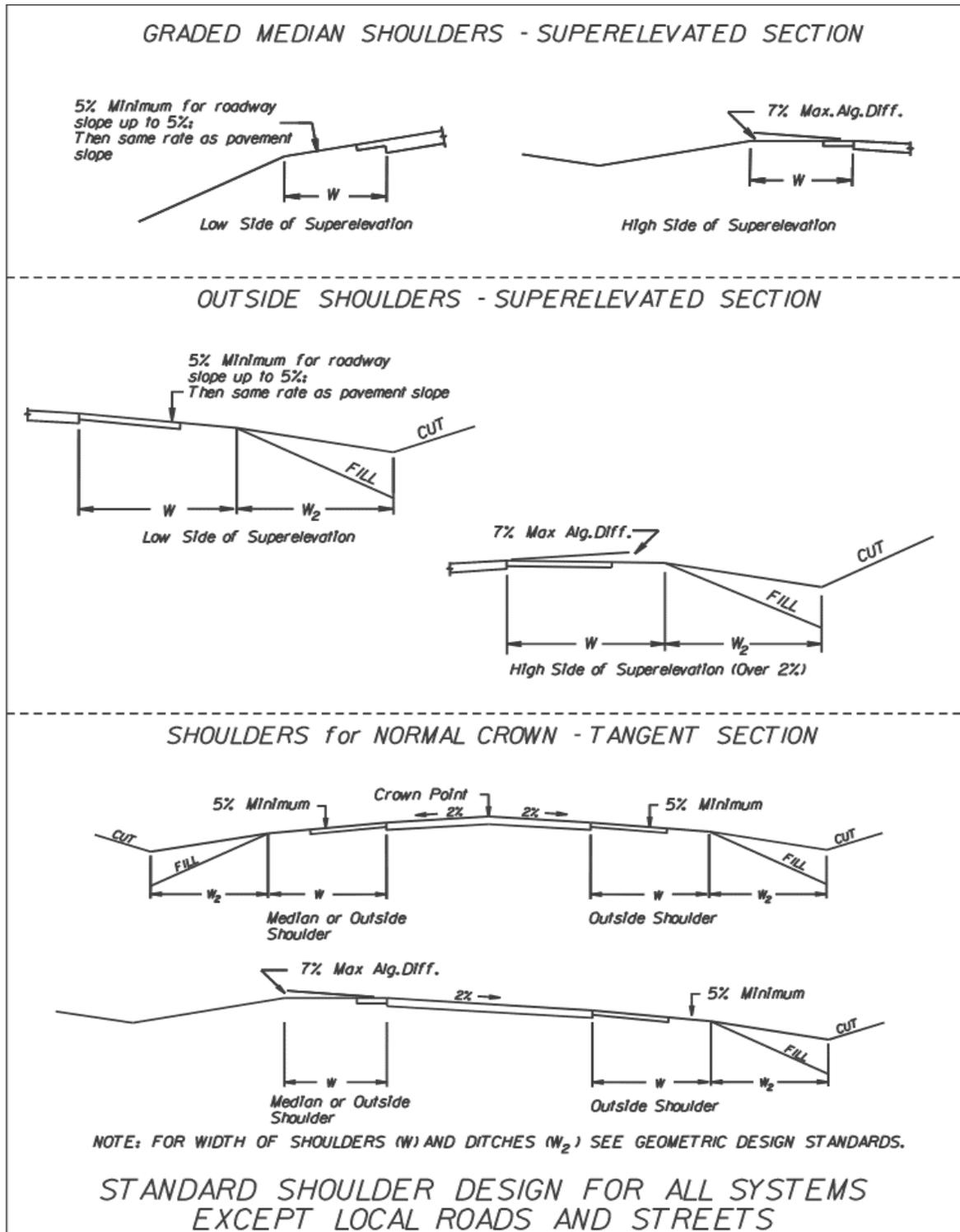
(1) Curves to be widened in accordance with TC-5.11R; does not include shoulder width

(2) Paid for by Individual Quantities

GEOMETRICS*							
Design Speed (mph)		20	25	30	35	40	45
Min Radius		76	134	214	314	444	587
Max % Grade		For maximum allowable grades, please see appropriate GS Standard*					
Stopping Sight Distance	Minimum	115	155	200	250	305	360
Maximum Superelevation		8%	8%	8%	8%	8%	8%

* All detours for roadways with design speeds over 45 shall be designed using the same minimum geometrics as the roadway under design.

FIGURE A1-2 GEOMETRIC DESIGN STANDARDS FOR SHOULDER DESIGN (GS-11)*



* Rev 1/21

FIGURE A1-3 GEOMETRIC DESIGN STANDARDS FOR SHOULDER DESIGN LOCAL ROAD & STREETS (GS-12)

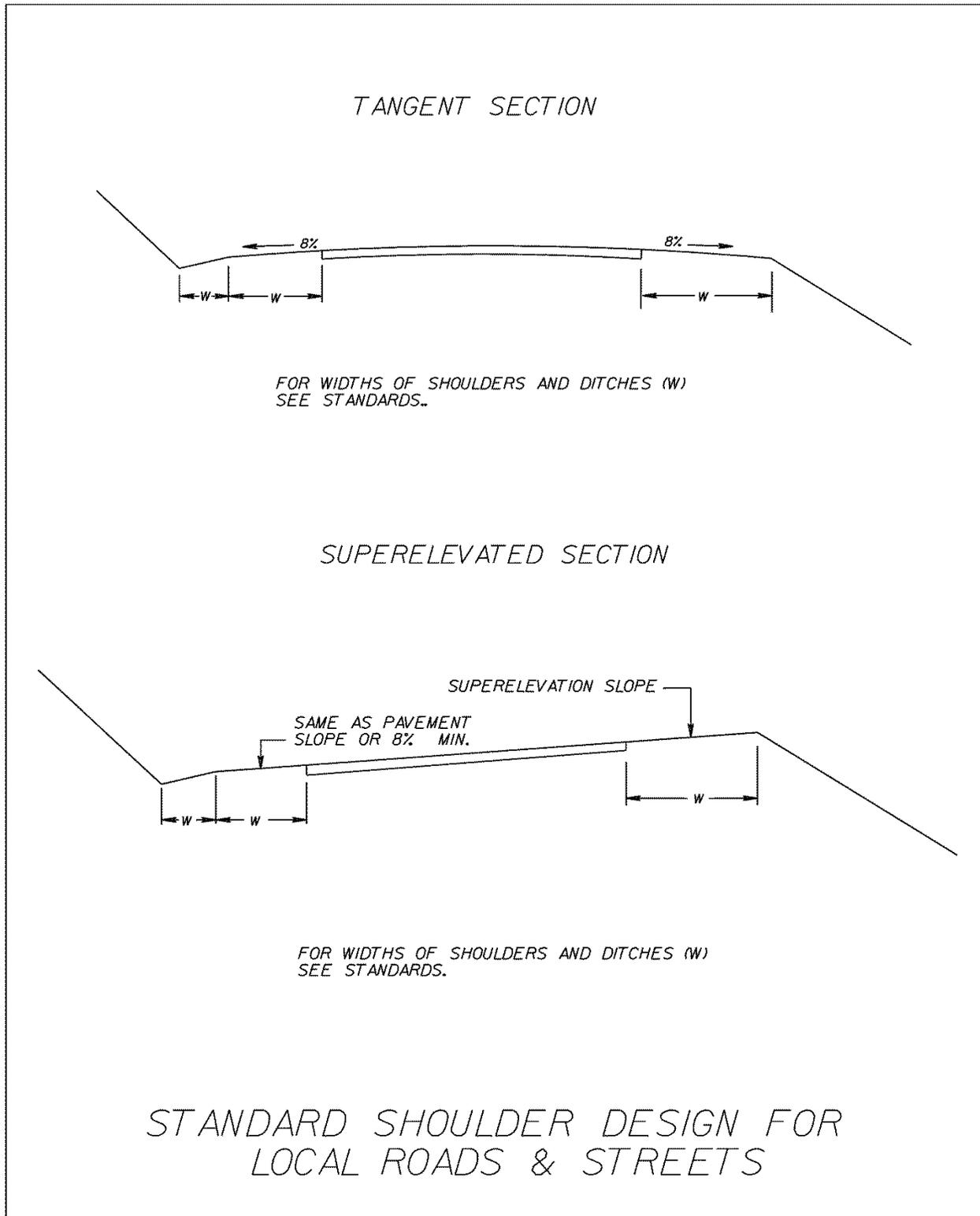
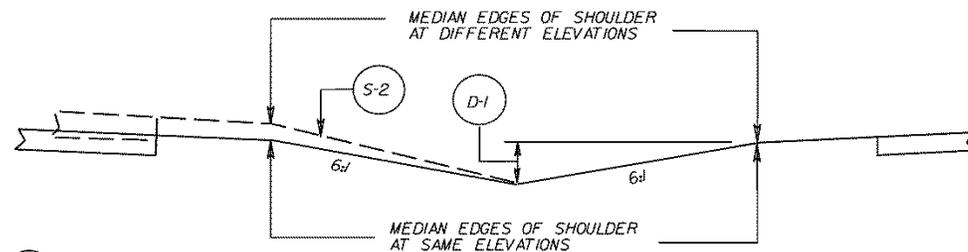


FIGURE A1-4 GEOMETRIC DESIGN STANDARDS FOR GRADED MEDIAN DESIGN (GS-13)

MEDIAN EDGES OF SHOULDER AT SAME OR APPROXIMATELY SAME ELEVATION

(GRADING TO CENTER OF MEDIAN)



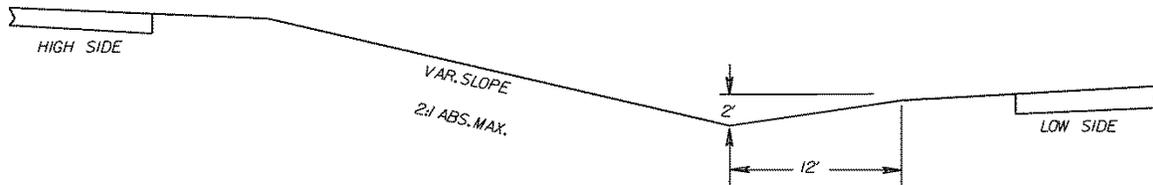
(D-1) VARIABLE DEPTH (2' MIN.)

(S-2) VARIABLE SLOPE

HOLD A 6:1 SLOPE FROM THE EDGES OF MEDIAN SHOULDERS (FROM THE LOWER MEDIAN SHOULDER IF AT DIFFERENT ELEVATIONS) TO THE CENTER OF MEDIAN..

MEDIAN EDGES OF SHOULDER AT DIFFERENT ELEVATIONS

(GRADING FROM HIGH SHOULDER TO DITCH ADJACENT TO LOWER ROADWAY)



HOLD A 2' DITCH DEPTH, 12' WIDE, ADJACENT TO LOWER SHOULDER.

STANDARD GRADED MEDIAN DESIGNS

SECTION 2 - SIGHT DISTANCE

STOPPING SIGHT DISTANCE

Stopping sight distances exceeding those shown in the table below should be used as basis for design wherever practical. *

In computing and measuring stopping sight distances, the height of the driver's eye is estimated to be 3.5 feet and the height of the object to be seen by the driver is 2 feet, equivalent to the taillight height of a passenger car. The "K Values" shown are a coefficient by which the algebraic difference in grade may be multiplied to determine the length in feet of the vertical curve that will provide minimum sight distance. Crest vertical curves shall meet or exceed AASHTO design criteria for Stopping Sight Distance, not the "k" Values. The "K" values for sag vertical curves take into account the headlight sight distance.

Height of Eye 3.5'	Height of Object 2'										
Design Speed (mph) **	25	30	35	40	45	50	55	60	65	70	75
Min. Sight Distance (ft.)	155	200	250	305	360	425	495	570	645	730	820

Source: 2018 AASHTO Green Book, Chapter 3, Section 3.2.2

Minimum K Value For:											
Crest Vertical Curves	12	19	29	44	61	84	114	151	193	247	312
Sag Vertical Curves	26	37	49	64	79	96	115	136	157	181	206

Source: 2018 AASHTO Green Book, Chapter 3, Section 3.4.6

TABLE A1-1 STOPPING SIGHT DISTANCE

**For all tables, use design speed if available, if not use legal speed.

When a highway is on a grade, the sight distances in the table below shall be used. *

Design Speed (mph) **	Stopping Sight Distance on Grades					
	Downgrades			Upgrades		
	3%	6%	9%	3%	6%	9%
15	80	82	85	75	74	73
20	116	120	126	109	107	104
25	158	165	173	147	143	140
30	205	215	227	200	184	179
35	257	271	287	237	229	222
40	315	333	354	289	278	269
45	378	400	427	344	331	320
50	446	474	507	405	388	375
55	520	553	593	469	450	433
60	598	638	686	538	515	495
65	682	728	785	612	584	561
70	771	825	891	690	658	631
75	866	927	1003	772	736	704

TABLE A1-2 STOPPING SIGHT DISTANCE ON GRADES

(See 2018 AASHTO Green Book, Chapter 3, Section 3.2.2

**For all tables, use design speed if available, if not use legal speed.

Connection grades are to provide for a smooth tie-in with the mainline edge of pavement in accordance with [Appendix F, Section 2-INTERSECTING CROSS ROAD GRADES](#) and are to provide for adequate sight distance.

Current practice is to eliminate scuppers on most bridge designs. For this reason a minimum gradient of 0.5 percent is desirable to facilitate surface run-off. There will be instances where flatter gradients are required, through vertical curves, long water crossings, etc.; therefore, the water should be removed by means of inlets in lieu of open scuppers. Gradients are to be computed to as few decimal places as possible and should be in numbers evenly divisible by four, where feasible.

All grades are to be checked, as accurately as possible at this stage. See [GS standards](#) or proper minimum vertical clearances at underpasses and overpasses.

Minimum vertical clearances for structures or limits of work at grade crossing of railroads are to be obtained from the Department of Rail and Public Transportation.

Drainage of the existing terrain and adequate cover for drainage structures are also important factors to be considered in designing grades.

Proposed grades for roadside ditches and/or special design ditches are to be shown on corresponding profile sheet. See Chapter 7 of VDOT [Drainage Manual](#).

Conflicts with utilities are to be avoided wherever practicable. See VDOT [Survey Manual](#), Chapter 8 for additional analysis information.

The Department's permit policy allows vehicles with excess heights to operate on our highways under an over-height permit. In view of this, 14'-0" has been accepted as the maximum allowable height to be provided for during construction, reconstruction, or maintenance operations. Every effort must be made to insure that a minimum vertical clearance of 14'-2" is provided on existing grade separation structures during construction, reconstruction, or maintenance. If temporary reduction in the vertical clearance below 14'-2" is unavoidable and is apparent in the design stage, the Permit Office is to be advised when the project is turned in to the Construction Division.

The following information is to be furnished so that permit holders can be notified:

- Route, County, and Mile Post
- Name of railroad or Route overpass
- Minimum overhead clearance prior to change
- Minimum overhead clearance after change

Date of change

Temporary or permanent

INTERSECTION SIGHT DISTANCE

The following table shows intersection sight distance requirements for various speeds along major roads: *

Height of Eye 3.5'		Height of Object 3.5'										
Design Speed (mph)**		20	25	30	35	40	45	50	55	60	65	70
SDL=SDR: 2 Lane Major Road	ft	225	280	335	390	445	500	555	610	665	720	775
SDR: 4 Lane Major Road (Undivided) or 3 Lane		250	315	375	440	500	565	625	690	750	815	875
SDL: 4 Lane Major Road (Undivided) or 3 Lane		240	295	355	415	475	530	590	650	710	765	825
SDR: 4 Lane Major Road (Divided – 18' Median)		275	340	410	480	545	615	680	750	820	885	955
SDL: 4 Lane Major Road (Divided – 18' Median)		240	295	355	415	475	530	590	650	710	765	825
SDR: 5 Lane Major Road (continuous two-way turn-lane)		265	335	400	465	530	600	665	730	800	860	930
SDL: 5 Lane Major Road (continuous two-way turn-lane)		250	315	375	440	500	565	625	690	750	815	875
SDR: 6 Lane Major Road (Divided – 18' Median)		290	360	430	505	575	645	720	790	860	935	1005
SDL: 6 Lane Major Road (Divided – 18' Median)		250	315	375	440	500	565	625	690	750	815	875
SDL: (Where left turns are physically restricted)		210	260	310	365	415	465	515	566	620	670	725

TABLE A1-3 INTERSECTION SIGHT DISTANCE

Source: 2018 AASHTO Green Book, Chapter 9, Section 9.5.3, page 9-37 thru 9-52, Table 9-6 thru 9-17

**For all tables, use design speed if available, if not use legal speed.

* Added 7/17

SDR = Sight Distance Right (For a vehicle making a left turn)
 SDL = Sight Distance Left (For a vehicle making a right or left turn)

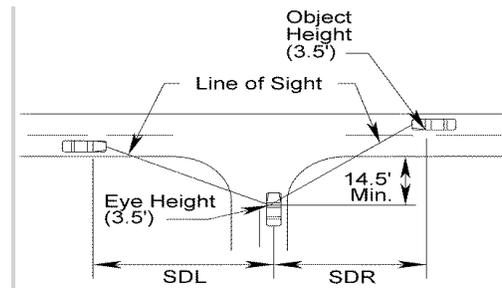


FIGURE A1-5 LINE OF SIGHT

Note: Both SDR and SDL must be met at the entrance or intersection, unless left turns are physically restricted by a median or channelization island; then only SDL is needed. Intersection sight distance determinations apply both horizontally and vertically, measured in each direction, and are to be based on a height of driver's eye of 3.5' and a height of object 3.5'.*

The term "Major Road" refers to the road with the higher functional classification, or if both have the same classification, the road with the higher volume.

Intersection sight distance does not control the access spacing for entrances and intersections shown in [Appendix F, Table 2-2](#).

For major roadways of more than four lanes, large truck volumes on a minor road or median crossover, or median widths over 60', see AASHTO's *A Policy on Geometric Design of Highways and Streets*.

The Engineer must check each entrance and intersection to insure that adequate sight distance is provided. On a typical two-lane road horizontal curve there are numerous objects that restrict sight distance such as cut slopes, buildings, vegetation, vehicles, etc.

These obstructions should be considered when reviewing commercial entrances. A divided highway can have similar problems. It is very important to obtain adequate intersection sight distance for all "New" and "Reconstructed" commercial entrances from the entrance as well as the left turn position into the entrance. If the minimum intersection sight distance values in the table mentioned above cannot be met, including applying the adjustment factors for sight distances based on approach grades, a Design Waiver shall be requested in accordance with [IIM-LD-227](#), see 2018 AASHTO Green Book, Chapter 9, Section 9.5.3, for further guidance. Design Waiver and Design Exception requirements are based on the following;

- 1) Design Waiver – Meets Stopping Sight Distance but not Intersection Stopping Sight Distance.
- 2) Design Exception – Does not meet the minimum Stopping Sight Distance.

* Added 7/17

The Intersection Sight Distance values in Table A1-3 permit a vehicle stopped on a minor road or median crossover to cross the major road safely or merge safely in the case of turns. The Intersection Sight Distance table above is based on the following criteria:

The AASHTO Green Book shows that it requires 7.5 seconds for a passenger car to turn left onto a two-lane road. For a passenger vehicle to turn right into the first lane, the Green Book shows that only 6.5 seconds is required because drivers making right turns generally accept gaps that slightly shorter than those accepted in making left turns.

The reference to 18' median in Table A1-3 applies to medians up to 18' in width (18' or less). For medians up to this width there is not sufficient room to stop so more sight distance is needed. For wider medians, there would be room to stop in the middle of the highway so sight distance can be less.*

* Added 7/17

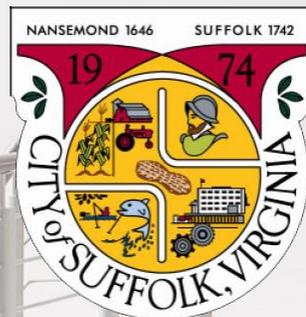


COOPERATIVE
STRATEGIES

COMPLETE FINANCIAL & DEMOGRAPHIC PLANNING FOR EDUCATION



RRMM
ARCHITECTS



SUFFOLK
PUBLIC SCHOOLS

JOINT CITY COUNCIL & SCHOOL BOARD PRESENTATION

FACILITIES MASTER PLAN |
DRAFT OPTIONS

FEBRUARY 3RD, 2021

AGENDA



- **Visioning Meeting Outcomes**
- **Facility Condition**
- **Demographic Overview**
- **Facility Options**



VISIONING

VISIONING MEETING OUTCOMES

- **Classroom design/renovation**

- All-in-One Classrooms: Each classroom needs to be highly reconfigurable to accommodate different methods of teaching, learning, and collaborating.
- Furnishings need to allow for simple and rapid modification of the classroom: sectionalized, large group, and active/ collaborative learning.

- **Division priorities**

- Specialty Center focused on the production side of the Visual and Performing Arts.
- Branding: The central themes of the Division's brand should be designed into the facility, not added in afterwards.
- JFK MS, Kilby Shores ES, Elephants Fork ES, Nansemond Parkway ES should be top schools looked at for major renovation or replacement
- Look at the near-term community needs when determining facility actions: location, population demands.



FACILITY CONDITION

KEY TERMS & DEFINITIONS



Bullet points below define terms on the following pages used to develop and prioritize facility assessments and options

- **Deferred Maintenance** – unperformed maintenance, repairs and/or replacement of equipment or systems due to a lack of resources or a perceived low priority and deferral of the activity resulting in a progressive deterioration of the school condition or performance.
- **Replacement Value** – The cost to construct the square footage of the existing building in today’s dollars. This is not the cost to design and create a new campus with modern standards, and does not account for changes in square footage or site.
- **FCI (Facility Condition Index, based on Category 1 only)** – The ratio of total Category 1 deferred maintenance costs divided into the Replacement Value of the school
- **Category 1 Deferred Maintenance Repairs** – High priority (0-3 years) deferred maintenance costs
- **Category 2 Projected Deferred Maintenance Repairs** – Medium priority (4-6 years) deferred maintenance costs
- **Category 3 Projected Deferred Maintenance Repairs** – Low priority (7-10 years) deferred maintenance costs

FACILITY CONDITION ASSESSMENTS

- **Building System/Component Ratings**

Each building system/component provided rating (i.e. poor, fair, good, excellent) based on a number of factors.

- **Deferred Maintenance Schedules**

Factors above (i.e. condition, age, estimated remaining useful life, maintenance, etc.) determined priority for recommended replacement date and cost of systems/components in the development of the Deferred Maintenance schedules for each school.



- **Building FCI Rating Calculation**

The building FCI formula is summarized as the ratio of the Total Deferred Maintenance Costs (High Priority Only) divided into the Current Replacement Cost for the school.

$$\text{Facility Condition Index (FCI) Value} = \frac{\text{Total Deferred Maintenance Costs}}{\text{Total Current School Replacement Cost}}$$

FACILITY CONDITION ASSESSMENTS



EXECUTIVE SUMMARY SPREADSHEET

SUFFOLK PUBLIC SCHOOLS

- Schools with most needs (all "Poor" and over 25% FCI's)
 - Forest Glen MS (38.35%)
 - John Yeates MS (38.02%)
 - John F Kennedy MS (34.09%)
 - Elephants Fork ES (31.71%)
 - Kilby Shores ES (26.53%)

SCHOOL NAME	OVERALL BUILDING CONDITION				FCI RATING (%)
	POOR	FAIR	GOOD	EXCEL	
<i>Elementary Schools</i>					
Booker T. Washington		✘	✘		15.23%
Creekside			✘		11.32%
Elephant's Fork	✘				31.71%
Hillpoint			✘		2.22%
Kilby Shores	✘				26.53%
Mack Benn Jr.		✘			20.36%
Nansemond Parkway		✘			25.88%
Northern Shores			✘		8.11%
Oakland		✘			16.35%
<i>Middle Schools</i>					
Forest Glen	✘				38.35%
John F Kennedy	✘				34.09%
John Yeates	✘				38.02%
Kings Fork			✘		4.05%
<i>High Schools</i>					
Kings Fork			✘		5.49%
Lakeland			✘		8.22%
Nansemond River		✘			10.71%
<i>Specialty Schools</i>					
Turlington Woods School		✘			20.39%
College & Career Academy @ Pruden		✘			20.15%
TOTALS / AVERAGES	5	7	6	0	14.72%

FACILITY CONDITION ASSESSMENTS



- Schools with most needs (all "Poor" and over 25% FCI's)
 - Forest Glen MS (38.35%)
 - John Yeates MS (38.02%)
 - John F Kennedy MS (34.09%)
 - Elephants Fork ES (31.71%)
 - Kilby Shores ES (26.53%)
 - Nansemond Parkway ES

Highlighted schools represent schools the division prioritized for replacement prior to assessments.

EXECUTIVE SUMMARY SPREADSHEET

SUFFOLK PUBLIC SCHOOLS

SCHOOL NAME	OVERALL BUILDING CONDITION				FCI RATING (%)
	POOR	FAIR	GOOD	EXCEL	
<i>Elementary Schools</i>					
Booker T. Washington		✘	✘		15.23%
Creekside			✘		11.32%
Elephant's Fork	✘				31.71%
Hillpoint			✘		2.22%
Kilby Shores	✘				26.53%
Mack Benn Jr.		✘			20.36%
Nansemond Parkway		✘			25.88%
Northern Shores			✘		8.11%
Oakland		✘			16.35%
<i>Middle Schools</i>					
Forest Glen	✘				38.35%
John F Kennedy	✘				34.09%
John Yeates	✘				38.02%
Kings Fork			✘		4.05%
<i>High Schools</i>					
Kings Fork			✘		5.49%
Lakeland			✘		8.22%
Nansemond River		✘			10.71%
<i>Specialty Schools</i>					
Turlington Woods School		✘			20.39%
College & Career Academy @ Pruden		✘			20.15%
TOTALS / AVERAGES	5	7	6	0	14.72%

DEFERRED MAINTENANCE COSTS



SCHOOL NAME	DEFERRED MAINTENANCE COSTS				
	HIGH PRIORITY (0 - 3 YEARS)	FCI RATING (%)	MEDIUM PRIORITY (4 - 6 YEARS)	LOW PRIORITY (7 - 10 YEARS)	TOTALS
<i>Elementary Schools</i>					
Booker T. Washington	\$3,767,801	15.23%	\$2,873,098	\$2,464,346	\$9,105,245
Creekside	\$2,918,906	11.32%	\$1,858,347	\$3,326,926	\$8,104,179
Elephant's Fork	\$4,957,676	31.71%	\$2,329,513	\$1,009,336	\$8,296,525
Hillpoint	\$573,021	2.22%	\$3,792,732	\$2,328,655	\$6,694,408
Kilby Shores	\$4,147,687	26.53%	\$2,174,934	\$1,135,508	\$7,458,129
Mack Benn Jr.	\$4,661,709	20.36%	\$2,986,637	\$2,004,219	\$9,652,565
Nansemond Parkway	\$4,046,526	25.88%	\$1,978,274	\$2,730,826	\$8,755,626
Northern Shores	\$1,570,797	8.11%	\$5,903,258	\$1,743,698	\$9,217,753
Oakland	\$2,695,650	16.35%	\$4,659,737	\$2,199,245	\$9,554,632
<i>Middle Schools</i>					
Forest Glen	\$7,764,331	38.35%	\$2,647,027	\$1,693,455	\$12,104,813
John F Kennedy	\$12,763,098	34.09%	\$3,889,128	\$2,496,497	\$19,148,723
John Yeates	\$10,506,110	38.02%	\$5,319,383	\$2,226,935	\$18,052,428
Kings Fork	\$1,993,137	4.05%	\$4,931,656	\$10,130,076	\$17,054,869
<i>High Schools</i>					
Kings Fork	\$5,507,783	5.49%	\$6,461,373	\$10,597,967	\$22,567,123
Lakeland	\$6,664,222	8.22%	\$9,494,077	\$6,208,127	\$22,366,426
Nansemond River	\$8,677,131	10.71%	\$7,284,136	\$5,198,527	\$21,159,794
<i>Specialty Schools</i>					
Turlington Woods School	\$1,859,590	20.39%	\$1,352,809	\$833,911	\$4,046,310
College & Career Academy @ Pruden	\$5,460,836	20.15%	\$3,557,846	\$2,629,622	\$11,648,304
TOTAL DEFERRED MAINTENANCE COSTS (BY CATEGORY)	\$90,536,011	14.72%	\$73,493,965	\$60,957,876	\$224,987,852

Red text indicates schools that are proposed to be rebuilt in Facility Options. Replacement school may save on Deferred Maintenance Costs, depending on timeline for new construction.



DEMOGRAPHICS

HISTORICAL & PROJECTED ENROLLMENT

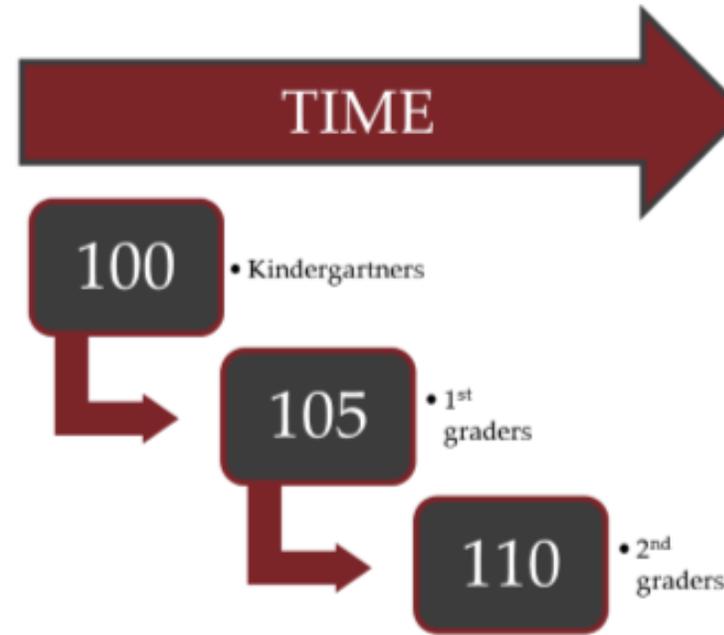


- 10-year enrollment projections
 - By school, by grade
- Developed using the cohort survival method
 - 10 years of historical enrollment by grade, by year
 - Historical resident live birth counts
- Housing
 - Building permits
- Census data

METHODOLOGY

COHORT SURVIVAL METHOD

- Uses **historical** live birth data and **historical** student enrollment to “age” (or progress) a known population (cohort) throughout the school grades
- Survival ratios analyzed
- Projection ratios developed



BIRTHS

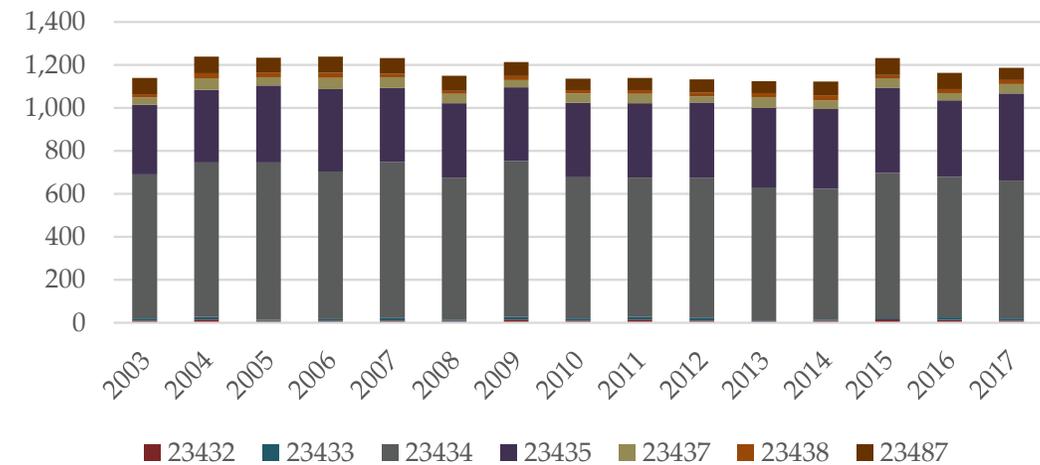


- Birth data is used to project kindergarten enrollment 5 years later

**SUFFOLK PUBLIC SCHOOLS ZIP CODES
RESIDENT LIVE BIRTH COUNTS**

Year	23432	23433	23434	23435	23436	23437	23438	23487
2003	11	9	670	325	6	34	15	75
2004	15	13	719	336	3	54	24	77
2005	8	6	732	358	9	39	21	70
2006	9	9	687	382	12	52	24	76
2007	10	13	725	344	12	50	18	71
2008	9	7	659	346	7	44	13	72
2009	15	13	725	343	15	33	19	65
2010	10	10	658	346	8	43	15	54
2011	15	13	647	347	14	44	16	57
2012	11	11	654	349	8	28	18	62
2013	9	4	618	371	7	48	19	55
2014	10	5	608	371	13	41	23	64
2015	18	7	673	396	9	44	15	79
2016	14	12	653	356	14	34	19	75
2017	11	9	642	405	8	44	19	56

**SUFFOLK PUBLIC SCHOOLS ZIP CODES
RESIDENT LIVE BIRTH COUNTS**



Source: Virginia Department of Health

POPULATION ESTIMATES



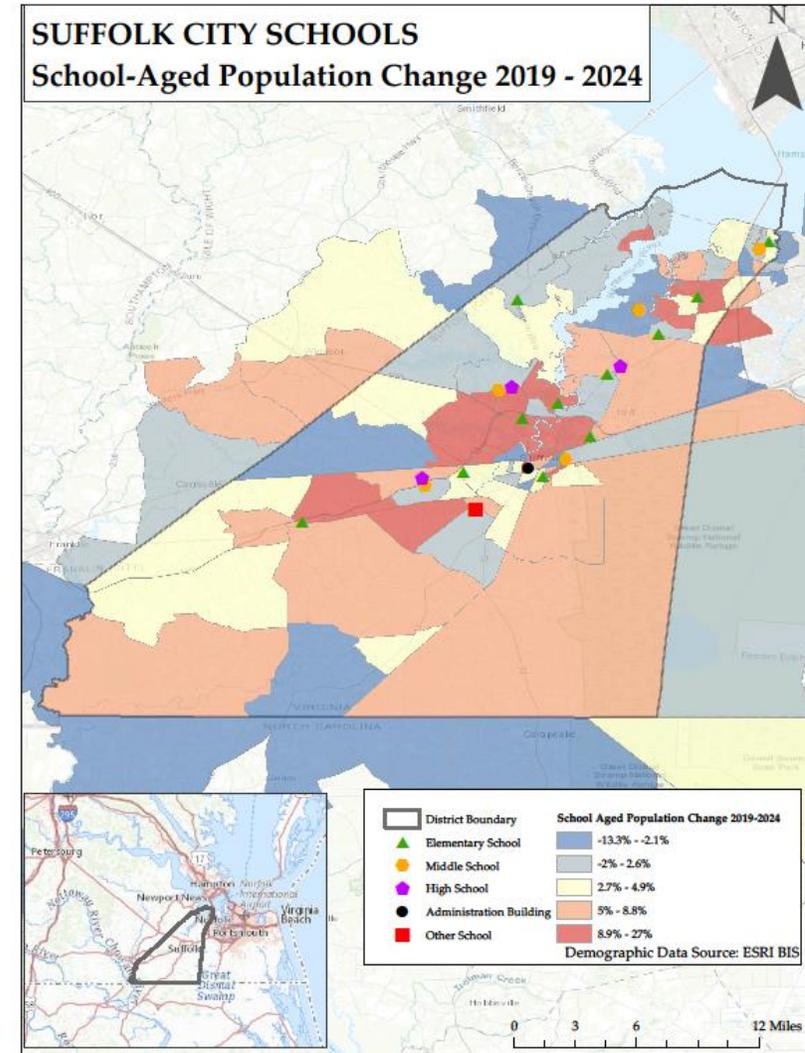
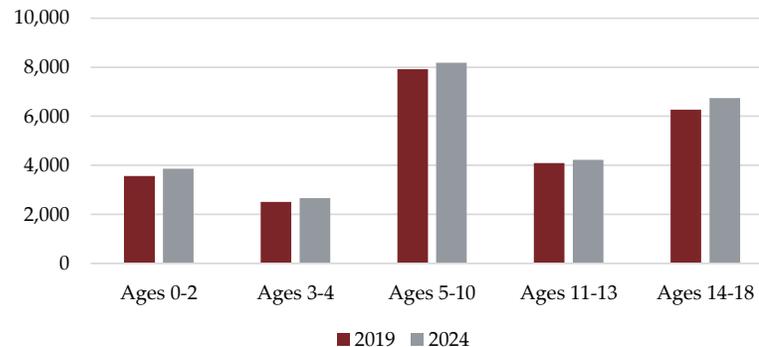
- Total population in Suffolk City is estimated to increase by approximately 7% from 2019 to 2024.
- School-aged population (ages 5-18) is estimated to increase by 873 children, or 4.8% from 2019 to 2024.

SUFFOLK CITY, VA
POPULATION ESTIMATES

Age	2019	2024
Ages 0-2	3,567	3,861
Ages 3-4	2,509	2,668
Ages 5-10	7,915	8,182
Ages 11-13	4,093	4,226
Ages 14-18	6,273	6,746
Ages 5-18	18,281	19,154
Total Population	95,864	102,505

Source: ESRI BIS

SUFFOLK CITY, VA
POPULATION ESTIMATES

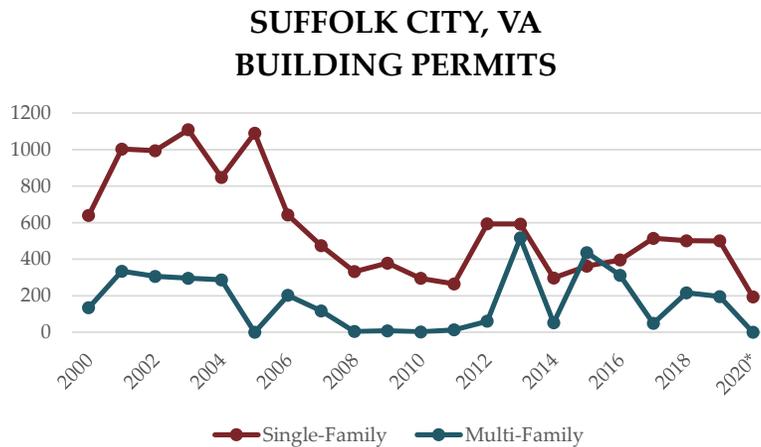


HOUSING DATA



SUFFOLK CITY, VA BUILDING PERMITS

Year	Single-Family	Multi-Family
2000	639	134
2001	1,003	334
2002	994	306
2003	1,108	296
2004	848	287
2005	1,090	0
2006	642	202
2007	474	117
2008	332	4
2009	378	8
2010	295	2
2011	265	13
2012	593	60
2013	592	516
2014	297	51
2015	362	436
2016	395	312
2017	514	48
2018	501	216
2019	500	195
2020*	193	0



From 2010 to 2019

- Total of 4,314 single-family permits or 431 per year
- Total of 1,849 multi-family permits or 185 per year

Source: SOCDS Building Permits Database

*preliminary through May 2020

HISTORICAL ENROLLMENT

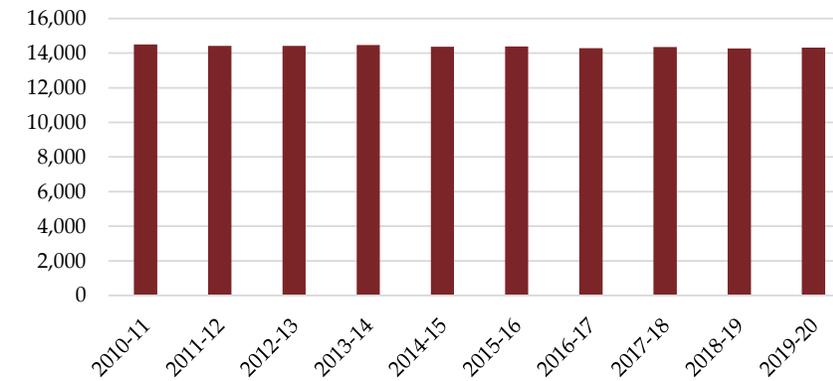


Historical Enrollment - District-wide

Grade	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PK	513	506	499	501	475	445	493	503	501	513
K	1,148	1,063	1,087	1,064	1,040	1,050	1,050	1,044	933	1,007
1	1,120	1,143	1,097	1,113	1,076	1,083	1,061	1,096	1,061	989
2	1,122	1,117	1,127	1,148	1,117	1,068	1,102	1,061	1,091	1,049
3	1,059	1,124	1,117	1,127	1,151	1,194	1,108	1,107	1,112	1,092
4	1,057	1,067	1,138	1,133	1,131	1,127	1,155	1,127	1,073	1,071
5	1,052	1,048	1,045	1,109	1,090	1,088	1,111	1,127	1,086	1,078
6	1,075	1,061	1,060	1,036	1,154	1,082	1,054	1,123	1,124	1,111
7	1,094	1,082	1,066	1,043	1,006	1,129	1,058	1,019	1,127	1,122
8	1,043	1,066	1,034	1,082	1,018	987	1,095	1,079	1,038	1,121
9	1,291	1,242	1,208	1,228	1,283	1,253	1,182	1,304	1,287	1,208
10	1,158	1,089	1,177	1,139	1,170	1,240	1,123	1,035	1,110	1,148
11	911	967	868	848	835	840	906	919	876	1,006
12	864	845	898	905	819	797	786	815	846	807
K - 12 Total	13,994	13,914	13,922	13,975	13,890	13,938	13,791	13,856	13,764	13,809
Grand Total	14,507	14,420	14,421	14,476	14,365	14,383	14,284	14,359	14,265	14,322

Source: Virginia Department of Education

HISTORICAL ENROLLMENT - DISTRICT-WIDE



Total enrollment has declined by 185 students from 2010-11 to 2019-20

Historical Enrollment - District-wide

Grade	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PK	513	506	499	501	475	445	493	503	501	513
K - 5	6,558	6,562	6,611	6,694	6,605	6,610	6,587	6,562	6,356	6,286
6 - 8	3,212	3,209	3,160	3,161	3,178	3,198	3,207	3,221	3,289	3,354
9 - 12	4,224	4,143	4,151	4,120	4,107	4,130	3,997	4,073	4,119	4,169
K - 12 Total	13,994	13,914	13,922	13,975	13,890	13,938	13,791	13,856	13,764	13,809
Grand Total	14,507	14,420	14,421	14,476	14,365	14,383	14,284	14,359	14,265	14,322

Source: Virginia Department of Education

PROJECTED ENROLLMENT

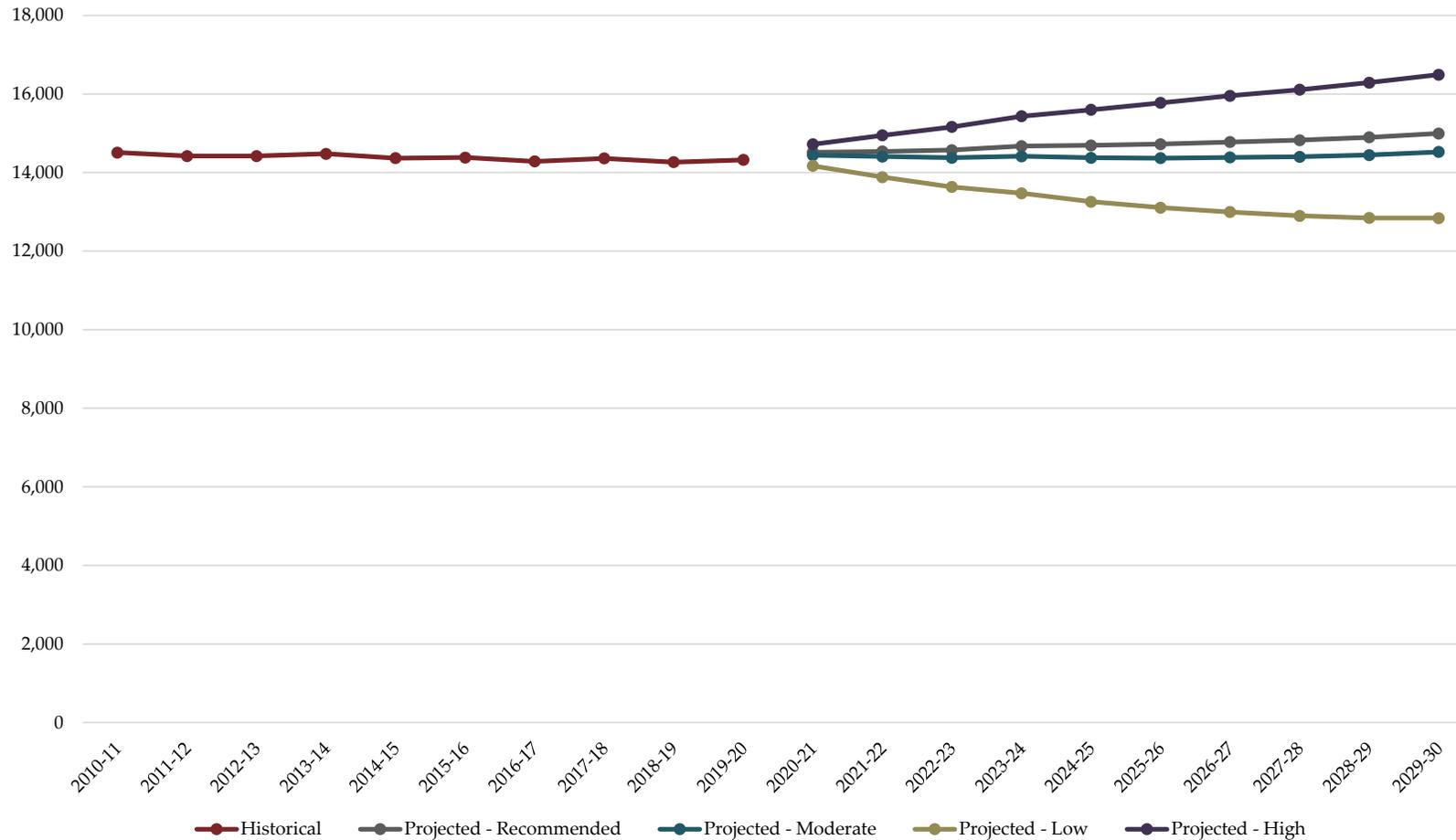


- Recommended, Low, Moderate, and High enrollment projections were developed
- Recommended = based on more recent trends in the District
- Low = conservative approach
- Moderate projection = in this case reflects a 3–year weighted average of survival ratios
- High projection = liberal approach

HISTORICAL & PROJECTED ENROLLMENT



HISTORICAL & PROJECTED ENROLLMENT - SUFFOLK PUBLIC SCHOOLS



PROJECTED ENROLLMENT



Projected Enrollment - Recommended - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K	1,096	1,041	1,068	1,070	1,070	1,070	1,070	1,070	1,070	1,070
1	1,048	1,142	1,084	1,115	1,115	1,115	1,115	1,115	1,115	1,115
2	984	1,044	1,137	1,080	1,111	1,108	1,108	1,108	1,108	1,108
3	1,085	1,024	1,086	1,183	1,123	1,151	1,151	1,151	1,151	1,151
4	1,060	1,047	992	1,053	1,146	1,086	1,119	1,118	1,118	1,118
5	1,068	1,058	1,049	995	1,062	1,156	1,095	1,126	1,128	1,128
6	1,102	1,094	1,081	1,073	1,018	1,090	1,186	1,123	1,156	1,155
7	1,110	1,101	1,095	1,080	1,072	1,019	1,093	1,188	1,126	1,158
8	1,120	1,106	1,098	1,092	1,076	1,071	1,018	1,090	1,186	1,123
9	1,304	1,301	1,285	1,278	1,269	1,249	1,246	1,183	1,263	1,373
10	1,078	1,170	1,161	1,152	1,143	1,137	1,117	1,114	1,058	1,133
11	1,015	953	1,035	1,027	1,020	1,012	1,007	990	984	935
12	936	943	886	962	954	947	939	935	920	915
K - 12 Total	14,006	14,024	14,057	14,160	14,179	14,211	14,264	14,311	14,383	14,482
Grand Total	14,519	14,537	14,570	14,673	14,692	14,724	14,777	14,824	14,896	14,995

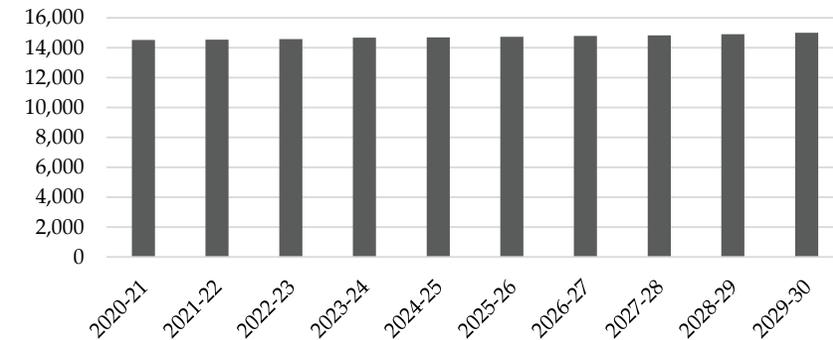
Source: Cooperative Strategies

Projected Enrollment - Recommended - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K - 5	6,341	6,356	6,416	6,496	6,627	6,686	6,658	6,688	6,690	6,690
6 - 8	3,332	3,301	3,274	3,245	3,166	3,180	3,297	3,401	3,468	3,436
9 - 12	4,333	4,367	4,367	4,419	4,386	4,345	4,309	4,222	4,225	4,356
K - 12 Total	14,006	14,024	14,057	14,160	14,179	14,211	14,264	14,311	14,383	14,482
Grand Total	14,519	14,537	14,570	14,673	14,692	14,724	14,777	14,824	14,896	14,995

Source: Cooperative Strategies

PROJECTED ENROLLMENT - RECOMMENDED - DISTRICT-WIDE



- PK-12 enrollment is projected to grow 370 students by the 2024-25 school year
- PK-12 enrollment is projected to grow 673 students by the 2029-30 school year

PROJECTED ENROLLMENT



Icon	Value
	Projected enrollment between 1 classroom growth or decline, or +/- 25 students
	Projected enrollment decline greater than 1 classroom or 25 students
	Projected enrollment growth greater than 1 classroom or 25 students

School	2019-20 Enrollment	Projected 5 Year Enrollment Growth	Projected 10 Year Enrollment Growth
Booker T. Washington Elem.	343	13	16
Creekside Elem.	748	-28	-25
Elephant's Fork Elem.	599	-23	-13
Florence Bowser Elem.	821	284	298
Hillpoint Elementary	786	32	28
Kilby Shores Elementary	511	6	11
Mack Benn, Jr. Elem.	606	-33	-23
Nansemond Parkway Elem.	482	20	23
Northern Shores Elem.	819	-6	2
Oakland Elem.	454	15	19
Pioneer Elem.	630	61	68
ES Total	6,799	341	404
Col. Fred Cherry Middle	794	-74	-12
Forest Glen Middle	454	-7	23
John F. Kennedy Middle	551	-54	-53
John Yeates Middle	552	-18	117
King's Fork Middle	1,003	-35	7
MS Total	3,354	-188	82
King's Fork High	1,518	79	36
Lakeland High	1,049	-63	-82
Nansemond River High	1,602	201	233
HS Total	4,169	217	187

PROJECTED ENROLLMENT



Icon	Value
	Projected enrollment between 1 classroom growth or decline, or +/- 25 students
	Projected enrollment decline greater than 1 classroom or 25 students
	Projected enrollment growth greater than 1 classroom or 25 students

North Suffolk Schools	2019-20 Enrollment	Projected 5 Year Enrollment Growth	Projected 10 Year Enrollment Growth
Creekside Elem.	748	-28	-25
Florence Bowser Elem.	821	284	298
Nansemond Parkway Elem.	482	20	23
Northern Shores Elem.	819	-6	2
Col. Fred Cherry Middle	794	-74	-12
John Yeates Middle	552	-18	117
Nansemond River High	1,602	201	233
Total	5,818	379	636

Central Suffolk Schools	2019-20 Enrollment	Projected 5 Year Enrollment Growth	Projected 10 Year Enrollment Growth
Hillpoint Elementary	786	32	28
Elephant's Fork Elem.	599	-23	-13
Mack Benn, Jr. Elem.	606	-33	-23
Oakland Elem.	454	15	19
King's Fork Middle	1,003	-35	7
King's Fork High	1,518	79	36
Total	4,966	35	54

South Suffolk Schools	2019-20 Enrollment	Projected 5 Year Enrollment Growth	Projected 10 Year Enrollment Growth
Booker T. Washington Elem.	343	13	16
Kilby Shores Elementary	511	6	11
Pioneer Elem.	630	61	68
Forest Glen Middle	454	-7	23
John F. Kennedy Middle	551	-54	-53
Lakeland High	1,049	-63	-82
Total	3,538	-44	-17



FACILITY OPTIONS

KEY TERMS & DEFINITIONS



Bullet points below define terms on the following pages used to develop and prioritize facility options

- **Program Capacity** – Number of students a school can reasonably accommodate based on its current program, as defined by Suffolk Public Schools
- **2019 Actual Enrollment** – Actual enrollment for each school in the 2019-20 school year
- **2019 Utilization** – 2019-20 enrollment divided by capacity, or what % of a school facility is full. The target range for utilization is 80%-100%, with schools below 80% considered under-utilized and schools above 100% considered over-utilized
- **2024 Projected Enrollment** – The number of students projected to attend each school in the 2024-25 school year
- **2024 Projected Utilization** – 2024-25 projected enrollment divided by capacity
- **2029 Projected Enrollment** – The number of students projected to attend each school in the 2029-30 school year
- **2029 Projected Utilization** – 2029-30 projected enrollment divided by capacity
- **Deferred Maintenance** – unperformed maintenance, repairs and/or replacement of equipment or systems due to a lack of resources or a perceived low priority and deferral of the activity resulting in a progressive deterioration of the school condition or performance.
- **Replacement Value** – The cost to construct the square footage of the existing building in today's dollars. This is not the cost to design and create a new campus with modern standards, and does not account for changes in square footage or site
- **Category 1 Deferred Maintenance Repairs** – High priority (0-3 years) deferred maintenance costs
- **Category 2 Projected Deferred Maintenance Repairs** – Medium priority (4-6 years) deferred maintenance costs
- **Category 3 Projected Deferred Maintenance Repairs** – Low priority (7-10 years) deferred maintenance costs
- **FCI (Facility Condition Index, based on Category 1 only)** – The ratio of total Category 1 deferred maintenance costs divided into the Replacement Value of the school
- **Cumulative Projected Index (based on Category 1-3 Total)** – The ratio of total Category 1-3 deferred maintenance costs divided into the Replacement Value of the school

KEY CONSTRUCTION COSTS FACTORS



Two Key Factors Driving School Construction Costs

- **\$ Per Square Foot**
 - Historical Data from Actual Schools Constructed in Virginia
 - Weighting Factor Used for Local and Regional School Costs

- **Square Foot Per Student**
 - Determines School Size
 - Desire to Unify UDO and CIP Guidelines
 - Scale Below to Address Variations in School Size

Square Foot Per Student by School Type and Size/Capacity					
School Type	Range of School Sizes/Numbers of Students				
	Up to 750	750 to 1050	1,050 to 1,350	1,350 to 1,650	1,650 and abv.
Elementary School	145	125	Note 1	Note 1	Note 1
Middle School	175	160	145	Note 1	Note 1
High School	Note 1	Note 1	Note 1	175	150
Note 1: This school size not recommended by Suffolk Public Schools. Note 2: Variations in school type such as K-8 schools or alternative schools will be case by case based on grade levels included.					

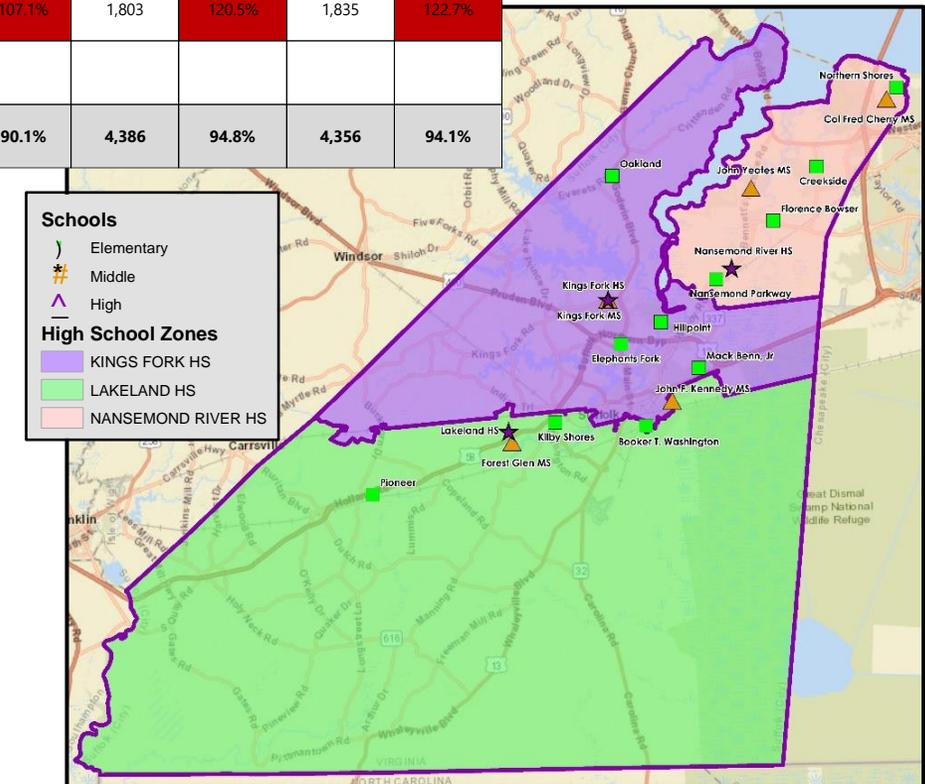
HIGH SCHOOLS

Enrollment & Facility Data Summary

Building Information						Building Condition						Building Enrollment & Utilization					
Facility	Construction Year/Age	Square Footage	Acreage	Program Capacity	Mobile Units/Capacity	Category 1 Deferred Maintenance Repairs	Category 2 Projected Deferred Maintenance Repairs	Category 3 Projected Deferred Maintenance Repairs	Replacement Value	FCI (based on Category 1 only)	Cumulative Projected Index (based on Category 1-3 Total)	2019 Actual Enrollment	2019 Utilization	2024 Projected Enrollment	2024 Projected Utilization	2029 Projected Enrollment	2029 Projected Utilization
King's Fork High	2004/16 yrs.	275,300	80	1634	0	\$ 5,507,783	\$ 6,461,373	\$ 10,597,967	\$ 100,327,579	5.5%	22.5%	1,518	92.9%	1,597	97.7%	1,554	95.1%
Lakeland High	1991/29 yrs.	222,400	69.5	1,498	0	\$ 6,664,222	\$ 9,494,077	\$ 6,208,127	\$ 81,049,232	8.2%	27.6%	1,049	70.0%	986	65.8%	967	64.6%
Nansemond River High	1991/29 yrs.	222,400	50	1496	0	\$ 8,677,131	\$ 7,284,136	\$ 5,198,527	\$ 81,049,232	10.7%	26.1%	1,602	107.1%	1,803	120.5%	1,835	122.7%
College Career Academy	1973/47 yrs.	74,354	19.4			\$ 5,460,836	\$ 3,557,846	\$ 2,629,622	\$ 27,096,828	20.2%	43.0%						
High School Totals		794,454	219	4,628		\$ 26,309,972	\$ 26,797,432	\$ 24,634,243	\$ 289,522,871			4,169	90.1%	4,386	94.8%	4,356	94.1%

Key factors | utilization imbalance and moderate projected growth

All three comprehensive high schools have been built within the last 30 years and are in good condition. Overall high schools are utilized within the target range of 80% - 100%. Nansemond River HS was 107% utilized in 2019-20 and is projected to reach 121% in the 2024-25 school year. Lakeland HS was 70% utilized in 2019-20 and is projected to decline to 66% in the 2024-25 school year.



HIGH SCHOOLS – DRAFT OPTIONS

Option #	Options	Cost	Description	Benefits	Challenges
A	Rezone between high schools to balance utilization.	-	High schools currently utilized at 90%, but Nansemond River HS is 107% and Lakeland is 70%. Rezoning would bring all high schools closer to the division average.	<ul style="list-style-type: none"> No capital improvement for new construction 	<ul style="list-style-type: none"> Rezoning
B	400 seat addition (incl. new Auxiliary Gym and Cafeteria Expansion) to Nansemond River HS to reduce over-utilization.	\$14,970,000	Utilization at Nansemond River HS is projected to reach 120% based on 2024-25 projected enrollment. Building a 400-seat addition will reduce facility utilization to 95%.	<ul style="list-style-type: none"> No rezoning 	<ul style="list-style-type: none"> Cost Lakeland HS remains under-utilized without rezoning
C	New 1,500 seat high school on new site	\$118,885,625	Building a new HS and rezoning all existing high school boundaries would better balance all high schools across the division		<ul style="list-style-type: none"> Cost Extensive rezoning

- Option B - 400 seat addition reduces 2024 projected utilization from 120% to 95% at Nansemond River HS, and total 2024 projected high school utilization from 95% to 87%
- Option C – New 1,500 seat high school reduces 2024 projected high school utilization from 95% to 72%

Cost with rezoning only: **\$0**

Cost with no rezoning: **\$14,970,000**

Cost with new HS and rezoning: **\$118,885,625**

Cost estimates are Total Project Costs, including Soft Costs. These estimates are shown in 2020 dollars and are not escalated.

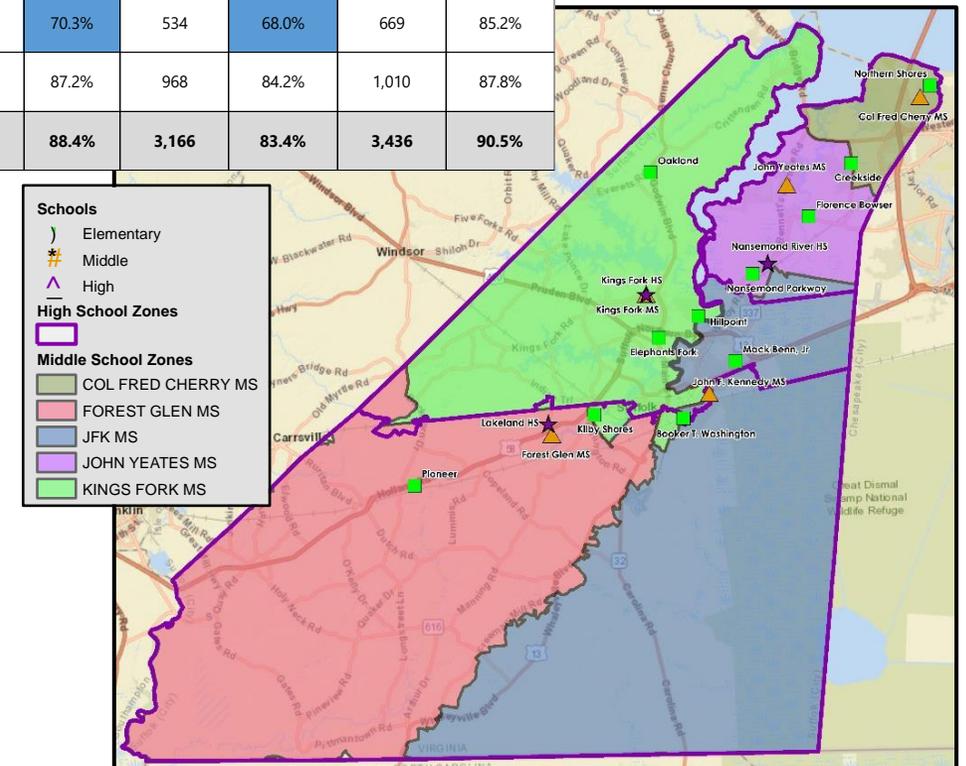
MIDDLE SCHOOLS

Enrollment & Facility Data Summary

Building Information						Building Condition						Building Enrollment & Utilization					
Facility	Construction Year/Age	Square Footage	Acreage	Program Capacity	Mobile Units/Capacity	Category 1 Deferred Maintenance Repairs	Category 2 Projected Deferred Maintenance Repairs	Category 3 Projected Deferred Maintenance Repairs	Replacement Value	FCI (based on Category 1 only)	Cumulative Projected Index (based on Category 1-3 Total)	2019 Actual Enrollment	2019 Utilization	2024 Projected Enrollment	2024 Projected Utilization	2029 Projected Enrollment	2029 Projected Utilization
Col. Fred Cherry Middle	2018 / 2 yrs.	125,000	26	800	0							794	99.3%	720	90.0%	782	97.8%
Forest Glen Middle	1965/55 yrs.	77,000	61.7	410	5/110	\$ 7,764,331	\$ 2,647,027	\$ 1,693,455	\$ 20,244,070	38.4%	59.8%	454	110.7%	447	109.0%	477	116.3%
John F. Kennedy Middle	1965/55 yrs.	142,400	39.2	650	0	\$ 12,763,098	\$ 3,889,128	\$ 2,496,497	\$ 37,438,384	34.1%	51.1%	551	84.8%	497	76.5%	498	76.6%
John Yeates Middle	1965/55 yrs.	105,100	28.5	785	18/396	\$ 10,506,110	\$ 5,319,383	\$ 2,226,935	\$ 27,631,841	38.0%	65.3%	552	70.3%	534	68.0%	669	85.2%
King's Fork Middle	2001/19 yrs.	187,000	35.4	1150	0	\$ 1,993,137	\$ 4,931,656	\$ 10,130,076	\$ 49,164,170	4.1%	34.7%	1,003	87.2%	968	84.2%	1,010	87.8%
Middle School Totals		636,500	190.8	3,795		\$ 34,424,393	\$ 16,787,194	\$ 16,546,963	\$ 134,478,465			3,354	88.4%	3,166	83.4%	3,436	90.5%

Key factors | utilization imbalance and poor condition schools

Forest Glen, John F. Kennedy, and John Yeates middle schools are all 55 years old with poor FCI scores. Overall middle schools are utilized within the target range of 80% - 100%, but Forest Glen is at 110% utilization and John Yeates is 70% utilized. Enrollment is projected to decline moderately by 2024-25, before slightly surpassing current levels by 2029-30.



MIDDLE SCHOOLS – DRAFT OPTIONS



Option #	Options	Cost	Description	Benefits	Challenges
A.1	Rebuild Forest Glen MS on current site at 600 capacity	\$34,135,500 incl. demo of FGMS	Current facilities are 55 years old and have poor FCI's. New facilities will address condition needs and provide for modernized learning opportunities.	<ul style="list-style-type: none"> New facilities 	<ul style="list-style-type: none"> Cost No reduction in operating costs
A.2	Rebuild John F. Kennedy MS on current site at 600 capacity	\$35,214,600 incl. demo of JFKMS			
A.3	Rebuild John Yeates MS on current site at 800 capacity	\$41,798,150 incl. demo of JYMS			
B.1	Consolidate Forest Glen MS and John F. Kennedy MS into a new 1,200 seat MS (on Forest Glen site or a new site)	\$55,732,500 incl. demo of FGMS	Both schools are 55 years old with poor FCI's. Forest Glen is significantly undersized with a 410 capacity. Students from both schools could be served in a new 1,200 seat middle school.	<ul style="list-style-type: none"> New facilities Reduced operating costs 	<ul style="list-style-type: none"> Cost Transportation Potential land acquisition
B.2	Rebuild John Yeates MS on current site at 800 capacity	\$41,798,150 incl. demo of JYMS	Current facility is 55 years old and has a poor FCI. New facility will address condition needs and provide for modernized learning opportunities.		

- Option A.1, A.2, A.3 adds a combined 155 middle school seats and reduces 2024 projected middle school utilization from 83% to 80%
- Option B.1, B.2 adds a combined 155 middle school seats and reduces 2024 projected middle school utilization from 83% to 80%

Total cost with no rezoning (A.1, A.2, A.3): **\$111,148,250**

Total cost with rezoning (B.1, B.2): **\$97,530,650**

Cost estimates are Total Project Costs, including Soft Costs. These estimates are shown in 2020 dollars and are not escalated.

ELEMENTARY SCHOOLS

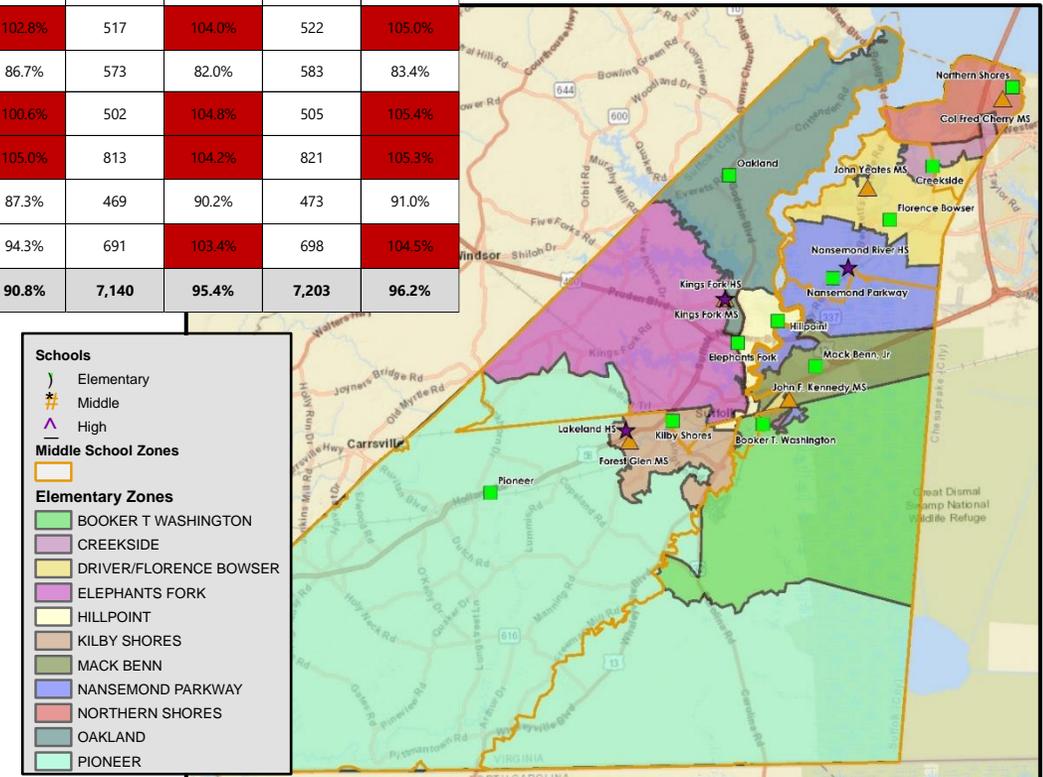


Enrollment & Facility Data Summary

Building Information						Building Condition						Building Enrollment & Utilization					
Facility	Construction Year/Age	Square Footage	Acreage	Program Capacity	Mobile Units/Capacity	Category 1 Deferred Maintenance Repairs	Category 2 Projected Deferred Maintenance Repairs	Category 3 Projected Deferred Maintenance Repairs	Replacement Value	FCI (based on Category 1 only)	Cumulative Projected Index (based on Category 1-3 Total)	2019 Actual Enrollment	2019 Utilization	2024 Projected Enrollment	2024 Projected Utilization	2029 Projected Enrollment	2029 Projected Utilization
Booker T. Washington Elem.	1999/21 yrs.	93,000	15.8	588	0	\$ 3,767,801	\$ 2,873,098	\$ 2,464,346	\$ 24,731,490	15.2%	36.8%	343	58.3%	356	60.5%	359	61.1%
Creekside Elem.	2006/14 yrs.	97,000	18.5	865	7/154	\$ 2,918,906	\$ 1,858,347	\$ 3,326,926	\$ 25,795,210	11.3%	31.4%	748	86.5%	720	83.2%	723	83.6%
Elephant's Fork Elem.	1979/41 yrs.	58,800	14.3	520	13/286	\$ 4,957,676	\$ 2,329,513	\$ 1,009,336	\$ 15,636,684	31.7%	53.1%	599	115.2%	576	110.8%	586	112.7%
Florence Bowser Elem.	2018 / 2 yrs.	116,000	21	1000	0							821	82.1%	1,105	110.5%	1,119	111.9%
Hillpoint Elem.	2008/12 yrs.	97,000	15.9	869	0	\$ 573,021	\$ 3,792,732	\$ 2,328,655	\$ 25,795,210	2.2%	26.0%	786	90.4%	818	94.1%	814	93.7%
Kilby Shores Elem.	1979/41 yrs.	58,800	15.3	497	8/176	\$ 4,147,687	\$ 2,933,731	\$ 1,135,508	\$ 15,636,684	26.5%	52.5%	511	102.8%	517	104.0%	522	105.0%
Mack Benn, Jr. Elem.	1998/22 yrs.	86,100	26.6	699	3/66	\$ 4,661,709	\$ 2,986,637	\$ 2,004,219	\$ 22,896,573	20.4%	42.2%	606	86.7%	573	82.0%	583	83.4%
Nansemond Parkway Elem.	1979/41 yrs.	58,800	14.6	479	4/88	\$ 4,046,526	\$ 1,978,274	\$ 2,730,826	\$ 15,636,684	25.9%	56.0%	482	100.6%	502	104.8%	505	105.4%
Northern Shores Elem.	1996/24yrs.	72,800	15.1	780	13/286	\$ 1,570,797	\$ 5,903,258	\$ 1,743,698	\$ 19,359,704	8.1%	47.6%	819	105.0%	813	104.2%	821	105.3%
Oakland Elem.	1997/23yrs.	62,000	8.5	520	1/22	\$ 2,695,650	\$ 4,659,737	\$ 2,199,245	\$ 16,487,660	16.3%	58.0%	454	87.3%	469	90.2%	473	91.0%
Pioneer Elem.	2014/6 yrs.	85,000	47	668	0							630	94.3%	691	103.4%	698	104.5%
Elementary School Totals		885,300	212.6	7,485		\$ 29,339,773	\$ 29,315,327	\$ 18,942,759	\$ 181,975,899			6,799	90.8%	7,140	95.4%	7,203	96.2%

Key factors | utilization imbalance and poor condition schools

Overall elementary schools are currently utilized within the target range of 80% - 100% and projected to remain within this range over the next 10 years. There are currently 4 schools above 100% utilization, and 6 schools projected to be above 100% by 2024-25. Elephant's Fork, Kilby Shores, and Nansemond Parkway are all 41 years old, with poor FCI's.



ELEMENTARY SCHOOLS – DRAFT OPTIONS (W/ REZONING)



Option #	Options	Cost	Description	Benefits	Challenges
A.1	Rebuild Kilby Shores at 1,000 capacity. Rezone portions of Pioneer and majority of Elephant’s Fork to new Kilby Shores. Repurpose Elephant’s Fork	\$38,010,825 incl. demo of KSES	Elephant’s Fork and Kilby Shores are both 41 years old with poor FCI’s. A rebuilt Kilby Shores at 1,000 capacity could accommodate the majority of Elephant’s Fork students and some projected growth at Pioneer ES. Some EFES students would be rezoned to Hillpoint and Oakland.	<ul style="list-style-type: none"> • New facility • Reduced operating costs 	<ul style="list-style-type: none"> • Cost • Transportation
A.2	Rebuild Nansemond Parkway at 800 capacity. Rezone portion of Florence Bowser ES to new Nansemond Parkway ES to account for future growth	\$30,602,700 incl. demo of NPES	Current facility is 41 years old and has a poor FCI. A new facility will address condition needs and provide for modernized learning opportunities. Will alleviate projected over-utilization at Florence Bowser.	<ul style="list-style-type: none"> • New facility 	<ul style="list-style-type: none"> • Cost
A.3	200 seat addition to Northern Shores ES (incl. Cafeteria Expansion)	\$4,871,875		<ul style="list-style-type: none"> • Reduces facility over-utilization 	
A.4	400 seat addition to Northern Shores ES (incl. Cafeteria Expansion)	\$9,371,875		<ul style="list-style-type: none"> • Reduces facility over-utilization 	

- Option A.1, A.2, A.3 adds a combined 504 elementary school seats and reduces 2024 projected elementary school utilization from 95% to 89%
- Option A.1, A.2, A.4 adds a combined 704 elementary school seats and reduces 2024 projected elementary school utilization from 95% to 87%

Total cost with rezoning (A.1, A.2, A.3): **\$73,485,400**

Total cost with rezoning (A.1, A.2, A.4): **\$77,985,400**

Cost estimates are Total Project Costs, including Soft Costs. These estimates are shown in 2020 dollars and are not escalated.

ELEMENTARY SCHOOLS – DRAFT OPTIONS (NO REZONING)



Option #	Options	Cost	Description	Benefits	Challenges
B.1	Rebuild Elephant’s Fork at 750 capacity. Rebuild Kilby Shores and Nansemond Pkwy at 600 capacity each	\$86,696,494 incl. demo of EFES, KSES and NPES	All three schools are 41 years old with poor FCI’s. New facilities would address condition needs and provide for modernized learning opportunities.	<ul style="list-style-type: none"> • New facilities • No rezoning 	<ul style="list-style-type: none"> • Cost • No operational cost savings
B.2	200 seat addition to Florence Bowser and Northern Shores (incl. cafeteria expansion), 100 seat addition to Pioneer	\$10,793,750	Additions to elementary schools will address projected over-utilization	<ul style="list-style-type: none"> • Addresses projected over-utilization 	<ul style="list-style-type: none"> • Cost
B.3	200 seat addition to Florence Bowser, 400 seat addition to Northern Shores (incl. cafeteria expansion), 100 seat addition to Pioneer	\$15,293,750	Additions to elementary schools will address projected over-utilization	<ul style="list-style-type: none"> • Addresses projected over-utilization 	<ul style="list-style-type: none"> • Cost

- Option B.1, B.2 adds a combined 804 elementary school seats and reduces 2024 projected elementary school utilization from 95% to 86%
- Option B.1, B.3 adds a combined 1,004 elementary school seats and reduces 2024 projected elementary school utilization from 95% to 84%

Total cost with no rezoning (B.1, B.2): **\$97,490,244**

Total cost with no rezoning (B.1, B.3): **\$101,990,244**

Cost estimates are Total Project Costs, including Soft Costs. These estimates are shown in 2020 dollars and are not escalated.



CONCLUSIONS, NEXT STEPS & CLOSING COMMENTS

Brittany A. Colyer

From: Brittany A. Colyer
Sent: Friday, October 14, 2022 10:12 AM
To: Kevin M Wyne
Subject: RZN2022-00007 - Ellis Farm Rezoning
Attachments: Dupont Email.pdf; Schmeckenbacher Email 10-5-22.pdf; Schmeckenbacher Letter 10-9-22.pdf

Good Afternoon,

Subsequent to the staff report for RZN2022-00007, Ellis Farm Rezoning, that was delivered on October 13, 2022, there are three additional Public Comments that were received that we would like to provide to each of you in advance of the upcoming October 18, 2022, Planning Commission meeting.

Thank you,

Brittany Colyer

Senior Planner

City of Suffolk

Department of Planning and Community Development

City of Suffolk, Virginia

442 W. Washington Street

Suffolk, VA 23434

(757) 514-4060 (main)

(757) 514-4077 (direct)

(757) 434-2506 (cell)



Applicants are encouraged to continue to submit application materials electronically using the City's sharefile link here: <https://cityofsuffolk.sharefile.com/share/upload/r73c19f0337bc4f1cb6c76fd69a0434d8>.

We kindly ask that prior to uploading materials, please name your files using the following format:

- **For first submittals:** "Project Name or Address - Type of Document (site plan, title report, design narrative, etc.)- 1st Submittal". The original signed hard copy of the application form must still be submitted either via mail or in person.
- **For resubmittals:** "- Application Number (such as SPL2021-00001) - Type of Document-2nd/3rd/4th Submittal."

Brittany A. Colyer

From: Amy L. Bocchicchio
Sent: Wednesday, September 21, 2022 1:57 PM
To: Brittany A. Colyer
Subject: FW: [EXTERNAL] Manning Road Rezoning Project

Follow Up Flag: Follow up
Flag Status: Flagged

Hey, as you have seen from most of the emails but not the one below in particular, please make sure that new public comment attachment is included come time for the October PC meeting for Ellis Farm. Thanks! I recommend making a folder for "October PC Items" and saving it there so you know to include it when you make the report if that helps.

Amy Bocchicchio
Current Planning Manager

City of Suffolk
Dept. of Planning & Community Development
442 West Washington Street, Suffolk, VA 23434
Main: (757) 514 - 4060
Direct: (757) 514 - 4066

Applicants are encouraged to continue to submit application materials electronically using the City's sharefile link
here: <https://cityofsuffolk.sharefile.com/r-r73c19f0337bc4f1cb6c76fd69a0434d8>

We kindly ask that prior to uploading materials, please name your files using the following format:

- **For first submittals:** "Project Name or Address - Type of Document (site plan, title report, design narrative, etc.)- 1st Submittal". The *original signed hard copy* of the application form must still be submitted either via mail or in person.
- **For resubmittals:** "- Application Number (such as SPL2021-00001) - Type of Document-2nd/3rd/4th Submittal."

From: Springfield HOA [mailto:springfieldhoaboard@gmail.com]
Sent: Wednesday, September 21, 2022 11:47 AM
To: Amy L. Bocchicchio <abocchicchio@suffolkva.us>
Subject: Re: [EXTERNAL] Manning Road Rezoning Project

Amy,

Thank you for your quick response.

Please accept this reply as confirmation that we would like this email included in the Staff Report when the application is presented to the Planning Commission at their next meeting on Tuesday, October 18th.

We understand that it will be incorporated in the report as part of the community's comments.

On Wed, Sep 21, 2022 at 11:33 AM Amy L. Bocchicchio <abocchicchio@suffolkva.us> wrote:

Mr. and Mrs. DeLugo,

We would be happy to include your email in the Staff Report when the application is presented to Planning Commission at their next meeting, which will take place on Tuesday, October 18th. Please confirm that you would like your email included and we will incorporate it as part of the community's comments.

Thank you,

Amy Bocchicchio

Current Planning Manager

City of Suffolk

Dept. of Planning & Community Development

[442 West Washington Street, Suffolk, VA 23434](#)

Main: (757) 514 - 4060

Direct: (757) 514 - 4066

From: Debbie DeLugo [mailto:dgdelugo@gmail.com]

Sent: Wednesday, September 21, 2022 10:28 AM

To: Catina M. Myrick <cmyrick@suffolkva.us>; Brittany A. Colyer <bcolyer@suffolkva.us>; Amy L. Bocchicchio <abocchicchio@suffolkva.us>; Kevin M Wyne <kwyne@suffolkva.us>; Debbie DeLugo <dgdelugo@gmail.com>; Springfield HOA <springfieldhoaboard@gmail.com>; sherrijohnston21@gmail.com

Subject: [EXTERNAL] Manning Road Rezoning Project

Caution: This email originated from a source outside of the **City of Suffolk**. Do not click on links or open attachments unless you recognize the sender and you know the content is safe.

On Tuesday, September 20, 2022, my husband and I attended the Planning Commission Meeting. We were there in opposition to the rezoning of Ellis Farm on Manning Road. Mr. Arnette, the developer, through his lawyer, managed to convince the planning commission to table the discussion for 30 days because he needed "additional time to work together with the Springfield HOA Board on this project."

Mr. Arnette can meet all he wants to. Our HOA Board representatives have already met with him. The only way we might change our minds is if Manning Road is widened and improved from 58 to Manning Bridge Road to handle the anticipated construction and passenger traffic BEFORE Mr. Arnette starts his project.

Manning Road is one step up from a dirt road. It is narrow, there are no shoulders, and there are ditches on either side. It was not designed for heavy traffic and certainly not for dump trucks and other large vehicles. Passing oncoming vehicles is often scary, especially if the vehicle is large or has wide side mirrors. The speed limit is 40 mph, but vehicles often go faster than that and they cross the centerline, especially on curves. There are numerous curves on Manning Road, one that is particularly hazardous right by the lake and the area of the rezoning. If construction vehicles are added to the mix, there is going to be a huge potential for accidents. We encourage you to drive Manning Road to see for yourself.

Mr. Arnette had a traffic study done of Manning Bridge Road. That road is also narrow and dangerous; however, it has nothing to do with the rezoning area. No person is going to voluntarily drive Manning Road to Manning Bridge Road out to 58, then come back on 58, coming past Manning Road to go towards town. That's an additional 6 miles. Why do that when the person could drive Manning Road straight to 58 in just 1 mile?

Please take these concerns into consideration. Thank you for your time.

Sincerely,

Deborah and Richard DeLugo

[122 Springfield Terrace](#)

[Suffolk, Va 23434](#)

757-619-4414

--

Springfield HOA Board of Directors

Chris Smith, President (757) 581-2324

Will Greatheart, Vice President (757) 969-3042

Eryn Siegel, Secretary (585) 820-4310

Rick DeLugo, Treasurer (757) 620-8448

Brittany A. Colyer

From: Kevin M Wyne
Sent: Wednesday, October 05, 2022 2:56 PM
To: Brittany A. Colyer
Subject: FW: Re: 630 Manning Rd

See below for inclusion in your report.

Kevin

Kevin M. Wyne, AICP
Interim Director of Planning and Community Development City of Suffolk
442 W. Washington Street
Suffolk, VA 23434
p: 757-514-4065
f: 757-514-4199

www.suffolk2045.org.

Helpful Links:
Unified Development Ordinance
City of Suffolk's Planning Department Website Applications

-----Original Message-----

From: Azeez Felder
Sent: Wednesday, October 5, 2022 2:53 PM
To: Kevin M Wyne <kwyne@suffolkva.us>
Subject: FW: Re: 630 Manning Rd

Good Afternoon,

Please see the citizen's comment below regarding the 2035 Comp. Plan. Thank you.

Azeez

-----Original Message-----

From: Erika S. Dawley
Sent: Wednesday, October 5, 2022 2:21 PM
To: Timothy J. Johnson <tjohnson@suffolkva.us>
Cc: Azeez Felder <afelder@suffolkva.us>; Randah Gaitan <rgaitan@suffolkva.us>; Tracey Sanford <tsanford@suffolkva.us>
Subject: FW: Re: 630 Manning Rd

Good afternoon Council Member Johnson:

Please see the emails below from the Holy Neck Borough email box. As Ms. Schmeckenbecher's second email does contain some concerns of an administrative matter, this correspondence has been forwarded to Deputy City Manager Azeez Felder for review and response.

Erika S. Dawley, MMC
City Clerk

-----Original Message-----

From: Angela R. Schmeckenbecher <arschmeck@icloud.com>
Sent: Wednesday, October 5, 2022 2:12 PM
To: City Council E-Mail <COUNCIL@suffolkva.us>
Subject: [EXTERNAL] Re: 630 Manning Rd

In the 2035 comprehensive plan under water challenges it states... The current zoning adjacent to the water supply reservoirs is primarily Rural Estate and will continue under the Focused Growth Approach. This zoning allows for minimal development while protecting the water quality of the reservoir supply systems.

The Ellis Farm was previously considered rural conservation and zoned A and should remain as such under the Focused Growth Approach per this statement in the comprehensive plan.

I argue our reservoir should have the same protective zoning for this property due to it being adjacent to the reservoir.
Angela

Sent from my iPhone

> On Oct 5, 2022, at 12:20 PM, City Council E-Mail <COUNCIL@suffolkva.us> wrote:

>

> Good afternoon Ms. Schmeckenbecher:

>

> Thank you for your email. It will be forwarded to Council Member Johnson. Again, thank you for contacting the City of Suffolk.

>

> Erika S. Dawley, MMC

> City Clerk

>

October 9, 2022

Re: Response to Rezoning Request, RZN2022-007, (conditional), Ellis Farm

Dear Planning Commissioners,

I would like to thank you all in advance for taking the time to read this. My name is Angela Schmeckenbecher. My husband John and I live at 630 Manning Road. We have a 1,634' adjoining property line located at the Western border of Ellis Farm. We are writing to express our strongest opposition to RZN2022-007 as we own the longest adjoining property line besides the City of Portsmouth that owns the area bordering the reservoir and feel this development will unfairly negatively impact us the most.

Before I get into how this affects us personally, I wanted to bring to the planning commissions some concerns I had on the applicant's submission. I don't believe the Commission staff has received all the information or facts that are needed to make a proper assessment.

After reviewing the applicant's original submission information, I noticed a few things that concerned me.

1. Site photos provided in the Environmental Site Assessment show the property lines of Ellis Farm at almost every angle except from the corners of our 1,634 adjoining property line. I would think this would be needed so you get an accurate and complete depiction of the rural character and properties surrounding Ellis Farm. It also failed to provide a photo of the private driveway that runs the length of this property line that is used for a personal residence and access to the adjoining croplands. The farmers need a minimum of 24' clearance to accommodate the equipment they currently have. There are also no photos of the drainage pipe that goes under this road that helps the fields drain during heavy downpours. Building houses across this area will cause issues with drainage. This drainage needs to remain unobstructed.

I have attached photos from various angles from our Western adjoining property line, photos from the western corner next to Manning Rd looking north where Springfield Terrace is located, and photos of the drainpipe mentioned. The surrounding houses that were not presented in the applicant's submission are larger more upscale houses on larger lots. The proposed cluster development does not fit with the Suburban Neighborhood Place Types of the surrounding neighborhoods with development characteristics that include larger lots with lower percentage of lot coverage, generous yards and setbacks on all sides allowing for more space between houses and better disbursement of noise. Nor does it next to large acreage properties with custom built homes.

Most of the adjoining property lines abutting Ellis Farm are A zoned properties. These calculations were obtained from survey the applicant provided. 3,511.75 feet of shared property line is abutting A zoned property whereas only 1,454.39 feet abuts RLM zoned properties.

Adjoining Properties							
	Feet	Zone	Characteristics		Feet	Zone	Characteristics
North	4,314.65	Conservation District	Speights Run Reserior	South West	110.68	A	trees have been clear cut
North -separated by Manning Rd.	371.8	RLM	Brick ranch homes on exlarge lots, (Springfield Terrace) Large upscale brick homes, large lots	South	981.84	A	Custum Built home on large acreage lot with active farmland
West	1,634.46	A	Large Custom Built Brick/Stone home on large acreage lot with active cropland	East	1,082.59	RLM	Lake Speights Colony - Older brick ranches with large size lots
				East	784.8	A	Large Home with acreage

2. The physical setting source map -6877955.2s and well search information provided in the applicant’s Environmental Site Assessment makes no mention of our well or the southern adjoining property owner’s two wells. Our well is near the property line they want to build 24+ houses on. We have serious concerns about how so much excavation along our adjoining line will impact the supply and water quality of our well. We spent a lot of money getting this well put in so we would have the best water quality and pressure possible. **Our concerns have not been addressed and feel further study is necessary.** I have attached photos showing the location of our well to the adjacent Ellis Farm property.
3. The applicant is not providing adequate buffers, screening or berms to protect the rural character, quality of life and property values of our A zoned property. The higher density and intensity of homes distributed along the adjacent property line that abuts our much lower density and lower intensity property should include buffering that should substantially mitigate any negative impacts we will have. 24+ homes along our adjoining property line we feel is an overcrowding of the land, will be unattractive to the features of our property and surrounding properties and should be prohibited. The site plan provides a 100 ft buffer adjacent to Manning Road. I would assume this is to prevent the lining of houses on rural roads to maintain the rural character of the area and stems from the UBC mention of Policy 13, Action 13B. To preserve the rural character of my property, I would expect nothing less.
4. The applicant is applying for a zone change to RLM which is not an appropriate zoning as it is not a zone that provides a buffer between A and more intensive residential zoning district classifications. The property is currently zoned A, adjacent to the reservoir and should remain as such as the 2035 Comprehensive Plan, Policy 7-2, Action 7-2 states, *“Continue to limit development within drinking water watersheds to low intensity and low density uses.”* The plan also states on page 138, *“Protection of the City’s water supply and that of surrounding communities is of vital importance to the region. The current zoning adjacent to the water supply reservoirs is primarily Rural Estate and will continue under the Focused Growth Approach. This zoning allows for minimal development while protecting the water quality of the reservoir supply systems.”* Primarily Rural Estate but not all Rural Estate. A zone is a less intensive use than RE, current zoning of A along these same water supply reservoirs should remain as well.

We purchased the land our house sits on 7 years ago and chose it because of the quiet rural setting and abundance of local wildlife. We then had a custom home built 5 years ago and built it taking the size and design of surrounding homes into consideration, particularly Springfield Terrace where homes average 3,053 sq ft; largest one at 5,150 sq ft. Our home is brick, stone and Hardy Board and is 3,462 sq ft. We build a large two-tier deck on the back ourselves which took all summer, but well worth it as we get to enjoy watching the local wildlife and having a place to relax after a long day's work in the city. We had a large metal barn built the next year and an inground pool put in the following year. We have our entire life savings invested in our property.

We've reviewed the original package the applicant submitted and found it appalling. While I commend wanting to provide open space to preserve wetlands, the effect of doing so pushes an unimaginable amount of crowding of houses along our property line. A line of 24+ houses built closely together stretching from one end of our property to the other is just not right. A massive wall of houses will replace the peaceful wooded scenery we enjoy. We purchased and built here for the quiet rural character and left the back field as active farmland to preserve that rural character. We understood that eventually someone would build next to us, but we expected it would only be a few houses due to the property being zoned A and next to the reservoir. At the very most, we thought maybe 14 rural estates in keeping with the properties to the south, west and northeast of us. As a former real estate agent with Long & Foster, I do understand how the visual and noise impact of so many houses can have on the marketability and value of a rural property such as ours and it terrifies both of us. Despite that, we thought this would be our forever home and fear the noise, loss of privacy and loss of rural feel will ruin the quality of life we currently enjoy and if we were forced to move, we would never recoup the cost of what we have invested. Having rural property lined with so many homes, making so much noise will, with no doubt in my mind, reduce our property values substantially.

My husband did 30 years in the USCG, we moved all over the East Coast, living in every type of housing you can imagine, from apartments, condos, townhouses, duplexes and Government Housing. When it came close to his retirement, out of all the places we lived, we decided to plant permanent roots in Suffolk. We chose Suffolk because it was a rural community with a lot of rural character. My husband works at Navy Region Mid-Atlantic in Norfolk, and I work in Dominion Tower in Norfolk and the only reason we commute 45-1hr or more sometimes is so we can live in the country and not in a noisy neighborhood.

I would hope that the Director of Planning and Community Development would find that having such a mass of houses crowding an adjacent agricultural zone property with active agricultural use to be objectionable and would provide us with substantial protection against noise, privacy, loss in property values and degradation of our quality of life that this proposed development will cause. We would like to request that at least a 100 ft buffer be used including a berm and adequate screening to prevent the sight and sound of this neighborhood from destroying our current rural character and peaceful enjoyment of our property. We would like to personally welcome anyone on the planning committee to visit our property firsthand before making a decision, stand in our back yard and just imagine what so many houses would look like and the noise they will generate. The large parcel to the south of ours was recently clearcut, that coupled with our open fields, makes sound travel and at times noise echoes like a large empty room. Noise from so many houses will make it unbearable to live here anymore. We love Suffolk, our children have started their own lives here in Suffolk and we would like the opportunity to stay and live out the rest of our lives right here in Suffolk.

We pray you find it in your hearts to do the right thing and thank you again for taking the time to read this.

John and Angela Schmeckenbecher
630 Manning Road.



Photo 1: Property adjacent to the western border taken from northwest corner of Ellis Farm and Manning Road.



Photo 2: View of property adjacent to the western border taken from southwest corner near railroad tracks.



Photo 3: Adjacent houses across Manning Road from the Northwest edge of the property. (Springfield Terrace)



Photo 4: Photo of the drainpipe located halfway down western edge of the property adjacent to Ellis Farm



Photo 5: Property on the western boundary of Ellis Farm taken from property line.



Photo 6: Well cap located below in relation to Ellis Farm boundary at the top



Example of one property located in Springfield Terrace. Large brick home with generous yard.

ORDINANCE NO.

AN ORDINANCE TO REZONE AND AMEND THE OFFICIAL ZONING MAP OF THE CITY OF SUFFOLK TO CHANGE THE ZONING FROM A, AGRICULTURAL ZONING DISTRICT, TO RLM, RESIDENTIAL LOW-MEDIUM DENSITY ZONING DISTRICT (CONDITIONAL), FOR PROPERTY LOCATED AT 494 MANNING ROAD; ZONING MAP 33, PARCELS 75 AND 75A; ACCOUNT NUMBERS 151078000 AND 151069000; RZN2022-007 (CONDITIONAL)

WHEREAS, Bob Arnette, Manning Road Development Group, LLC, applicant, on behalf of Coastal Virginia Partners, LLC, contract purchaser, on behalf of Ellis Freehold LLC, property owner, has requested to rezone and amend the official zoning map of the City of Suffolk from A, Agricultural zoning district, to the RLM, Residential Low-Medium Density zoning district (Conditional), for property located at 494 Manning Road, Zoning Map 33, Parcels 75 and 75A, which land is depicted on Exhibit "C"; and,

WHEREAS, the proposed rezoning and amendment to the official zoning map have been advertised and reviewed by the Planning Commission in compliance with the requirements of state law; and,

WHEREAS, the Planning Commission has made a recommendation as stated in Exhibit "A"; and,

WHEREAS, a public hearing before City Council was duly advertised as required by law and held on November 16, 2022, at which public hearing the public was presented with the opportunity to comment on the proposed rezoning.

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Suffolk, Virginia, that:

Section 1. Exhibit "A", "Planning Commission Recommendation", Exhibit "B", "Voluntary Proffer Statement", and Exhibit "C", "Property Map," and Exhibit "D," "Rezoning Exhibit", which are attached hereto, are hereby incorporated as part of this ordinance.

Section 2. Findings.

A. Council finds that the proposed rezoning is reasonable and warranted due to a change in circumstances affecting the property, and has considered the following factors and finds that the proposed rezoning does not conflict with:

1. the existing use and character of property within the City;
2. the Comprehensive Plan;
3. the suitability of the property for various uses;
4. the trends of growth or change;

5. the current or future requirements of the community as to land for various purposes as determined by the population and economic studies and other studies;
6. the transportation requirements of the community;
7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;
8. the conservation of natural resources;
9. the preservation of flood plains;
10. the preservation of agricultural and forestal land;
11. the conservation of properties and their values;
12. the encouragement of the most appropriate use of land throughout the City; and
13. the expressed purpose of the City's Unified Development Ordinance as set out in Section 31-102 of the Code of the City of Suffolk (1998), as amended, and Section 15.2-2283 of the Code of Virginia (1950), as amended ("Va. Code").

B. The Suffolk City Council makes the following specific findings to the conditions of the rezoning:

1. the proposed rezoning itself gives rise to the need for the proffered conditions;
2. the proffered conditions have a reasonable relationship to the rezoning; and
3. the proffered conditions are in conformity with the 2035 Comprehensive Plan as adopted by City Council on April 1, 2015.

Section 3. Rezoning.

1. The conditions proffered in the attached Exhibit "B" be, and they are hereby, accepted.
2. The property as shown on the attached Exhibit "C" is hereby, conditionally rezoned and the official zoning map be, and it is hereby, amended from A, Agricultural zoning district, to the RLM, Residential Low-Medium Density zoning district (Conditional).
3. The foregoing rezoning and amendment to the official zoning map are

expressly made subject to the performance of the conditions hereby proffered and accepted and these conditions shall remain in effect until a subsequent amendment changes the zoning of the property; however, such conditions shall continue if the subsequent amendment is part of a comprehensive implementation of a new or substantially revised zoning ordinance.

Section 4. Recordation.

A certified copy of this ordinance shall be recorded, by the applicant, in the name of the property owner as grantor in the office of the Clerk of the Circuit Court of the City of Suffolk, Virginia.

This ordinance shall be effective upon passage and shall not be published or codified.

READ AND PASSED: _____

TESTE: _____
Erika S. Dawley, City Clerk

Approved as to Form:

William E. Hutchings, Jr., City Attorney

EXHIBIT "A"

RESOLUTION NO. 22-10-03

CITY OF SUFFOLK PLANNING COMMISSION

**A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION
TO CITY COUNCIL RELATING TO REZONING REQUEST
RZN2022-007 (CONDITIONAL)
TO CHANGE THE ZONING FROM A, AGRICULTURAL ZONING
DISTRICT, TO RLM, RESIDENTIAL LOW-MEDIUM DENSITY ZONING
DISTRICT (CONDITIONAL), FOR PROPERTY LOCATED AT ZONING
MAP 33, PARCELS 75 AND 75A; ACCOUNT NUMBERS 151078000 AND
151069000; RZN2022-007 (CONDITIONAL)**

WHEREAS, Bob Arnette, Manning Road Development Group, LLC, applicant, on behalf of Coastal Virginia Partners, LLC, contract purchaser, on behalf of Ellis Freehold LLC, property owner, has requested to change the zoning from A, Agricultural zoning district, to RLM, Residential Low-Medium Density zoning district (Conditional); and

WHEREAS, the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Suffolk, Virginia, that:

Section 1. Findings.

- A. The Suffolk Planning Commission finds that the proposed rezoning is reasonable, and warranted due to change in circumstances affecting the property, and has considered the following factors and finds that the proposed rezoning does not conflict with:
1. the existing use and character of property within the City;
 2. the Comprehensive Plan;
 3. the suitability of the property for various uses;
 4. the trends of growth or change;
 5. the current or future requirements of the community as to land for various purposes as determined by the population and economic studies and other studies;
 6. the transportation requirements of the community;
 7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;

8. the conservation of natural resources;
9. the preservation of flood plains;
10. the preservation of agricultural and forestal land;
11. the conservation of properties and their values;
12. the encouragement of the most appropriate use of land throughout the City; and
13. the expressed purpose of the City's Unified Development Ordinance as set out in Section 31-102 of the Code of the City of Suffolk (1998), as amended, and Section 15.2-2283 of the Code of Virginia (1950), as amended ("Va. Code").

B. The Suffolk Planning Commission makes the following specific findings to the conditions of the rezoning:

1. the proposed rezoning itself gives rise to the need for the proffered conditions;
2. the proffered conditions have a reasonable relationship to the rezoning; and
3. the proffered conditions are in conformity with the 2035 Comprehensive Plan as adopted by City Council on April 1, 2015.

Section 2. Recommendation to Council.

The Planning Commission recommends to City Council that the request, RZN2022-007 (Conditional), be:

- _____ a) Granted as submitted, and that the City Council adopt the proposed Ordinance without modification.
- _____ b) Denied, and that Council not adopt the proposed Ordinance.
- _____ c) Granted with the modifications set forth on the attached listing of specific recommendations and that Council adopt the proposed Ordinance with such modifications.

READ AND PASSED: _____

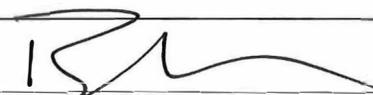
TESTE: _____

VOLUNTARY PROFFER STATEMENT

I hereby voluntarily proffer that the development of the property owned by me proposed for reclassification under this application shall be in strict accordance with the conditions set forth below.

The following conditions (add additional sheets if necessary) are voluntarily proffered for the reclassification of property identified as Tax Map Number(s): 33*75, 33*75A

- 1) The students generated by this development will be assigned to Kilby Shores Elementary school, Forest Glen Middle School and Lakeland High School. The calculated impact of students generated and value of cash proffer contribution shall be based upon the current enrollment and committed development as of the last day of the month of the date of this application is deemed complete and acceptable by the City of Suffolk. The proposed rezoning estimate net impact of 53 elementary school students, 29 additional middle school students, and 39 additional high school students. The Capital Improvements Program (FY 2022-2031) projects will allow cash proffers to be paid to advance of capacity at the elementary and middle school levels. The property owner shall make a cash contribution to the City of Suffolk to advance capacity at the elementary and middle school levels only. Based upon the estimated cost, to advance capacity at the elementary school level is \$35,900.55 per student and middle school level (\$42,065.60, a cash contribution of \$6,342.43 per housing unit (elementary school) and \$4,066.34 per housing unit (middle school) shall be paid prior to issuance of a Certificate of Occupancy. The estimated total proffer is \$1,902,729.25 (elementary school) and \$1,219,902.40 (middle school).

Applicant Signature: 

Date: 8/29/22

Printed Name: Bob Amette

Tax Map Number: 33*75, 33*75A

Property Owner Signature: _____

Date: _____

Printed Name: _____

Tax Map Number: _____

Property Owner Signature: _____

Date: _____

Printed Name: _____

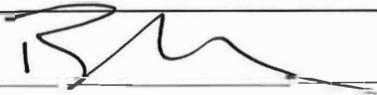
Tax Map Number: _____

VOLUNTARY PROFFER STATEMENT

I hereby voluntarily proffer that the development of the property owned by me proposed for reclassification under this application shall be in strict accordance with the conditions set forth below.

The following conditions (add additional sheets if necessary) are voluntarily proffered for the reclassification of property identified as Tax Map Number(s): 33*75, 33*75A

- 2) No more than 300 single family detached units shall be constructed with this project
- 3) All units shall have a crawl space or raised/elevated slab foundation
- 4) The property owner shall make road improvements as outlined in the approved Traffic Impact Study (TIS), prepared by Charles Smith, P.E., PTOE EPR, Updated June 2022. All road improvements proffered shall be completed or bonded before the first certificate of occupancy
- 5) Materials for the front, sides and rear of the homes shall be brick veneer, stone, cement-based siding, high quality vinyl siding, cement-fiber board siding (i.e. LP "Smartside or approved equal). Vinyl siding shall be a minimum of 0.044 inch thick and may be overlapped or beaded siding
- 6) Roofing shall be copper, metal or fiberglass architectural style shingles which must carry minimum 25-year warranty

Applicant Signature: 

Date: 8/29/22

Printed Name: Bob Arnette

Tax Map Number: 33*75, 33*75A

Property Owner Signature: _____

Date: _____

Printed Name: _____

Tax Map Number: _____

Property Owner Signature: _____

Date: _____

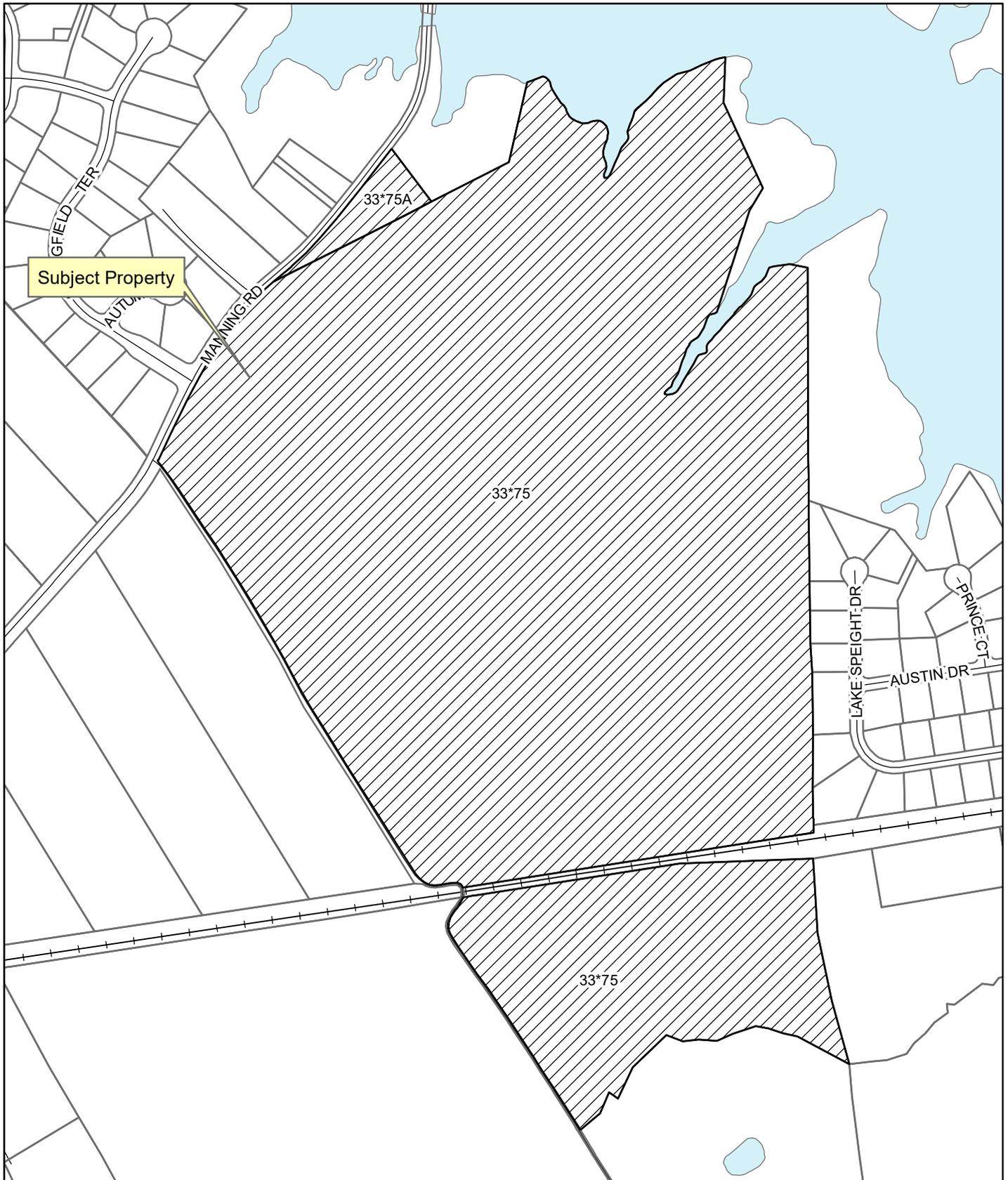
Printed Name: _____

Tax Map Number: _____



PROPERTY MAP RZN2022-007

EXHIBIT C



User Name: Awood
Date: 05/03/2022



I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, IS CORRECT AND COMPLES WITH THE MINIMUM PROCEDURES AND STANDARDS ESTABLISHED BY THE VIRGINIA STATE BOARD OF ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND CERTIFIED LANDSCAPE ARCHITECTS.

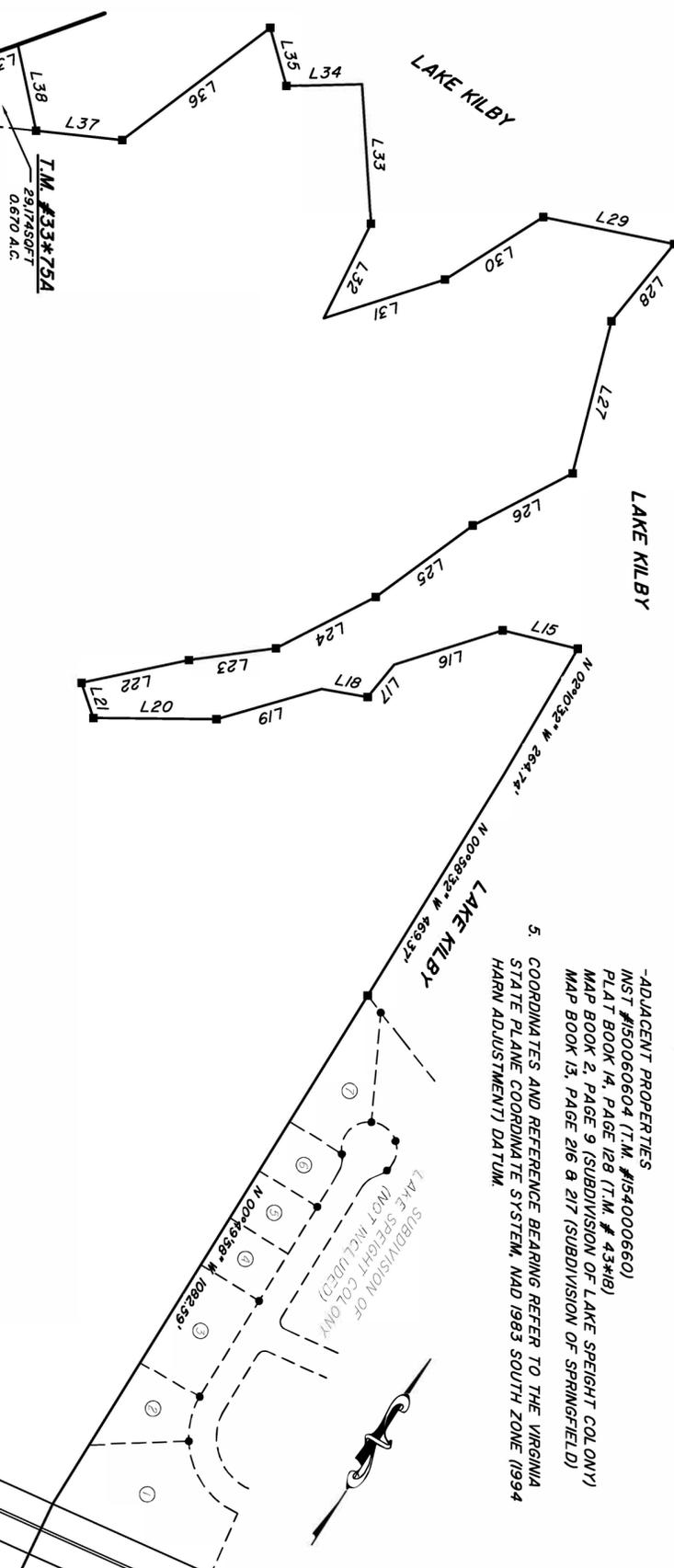
SIGNED: *[Signature]* 04-27-2022 DATE
TIMOTHY M. FALLON, VA L.S. No. 006659



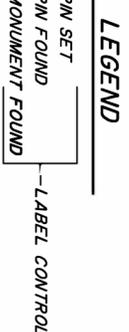
NOTES

- TOTAL AREA = 113.297 ACRES
- THE PROPERTY ENCOMPASSED BY THIS SUBDIVISION APPEARS TO LIE IN FLOOD ZONE 'X', AREA OUTSIDE 500-YEAR FLOODPLAIN AND FLOOD ZONE 'A', AREA OF SPECIAL FLOOD HAZARD, AS SHOWN ON COMMUNITY PANEL No. 510156 0210D, DATED 11-16-2011.
- HIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND CONSEQUENTLY MAY NOT DEPICT ALL MATTERS AFFECTING THE TITLE OF THE PROPERTY SHOWN.
- PLAT REFERENCES
PLAT BOOK 1, PAGES 104 A-D
- ADJACENT PROPERTIES
INST #150060604 (T.M. #154000660)
PLAT BOOK 14, PAGE 128 (T.M. #43*18)
MAP BOOK 2, PAGE 9 (SUBDIVISION OF LAKE SPEIGHT COLONY)
MAP BOOK 13, PAGE 216 & 217 (SUBDIVISION OF SPRINGFIELD)
- COORDINATES AND REFERENCE BEARING REFER TO THE VIRGINIA STATE PLANE COORDINATE SYSTEM, NAD 1983 SOUTH ZONE (1994 HARN ADJUSTMENT) DATUM.

CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	TANGENT	CHORD LENGTH	CHORD BEARING
C1	10°32'00"	1050.78'	193.17'	96.86'	192.90'	N 44°20'27" E
C2	116°53'50"	618.96'	128.23'	64.46'	128.23'	S 42°36'56" W
C3	2°50'44"	3169.83'	157.43'	78.73'	157.41'	S 33°52'27" W
C4	5°55'21"	1520.35'	157.16'	78.55'	157.09'	S 28°39'54" W

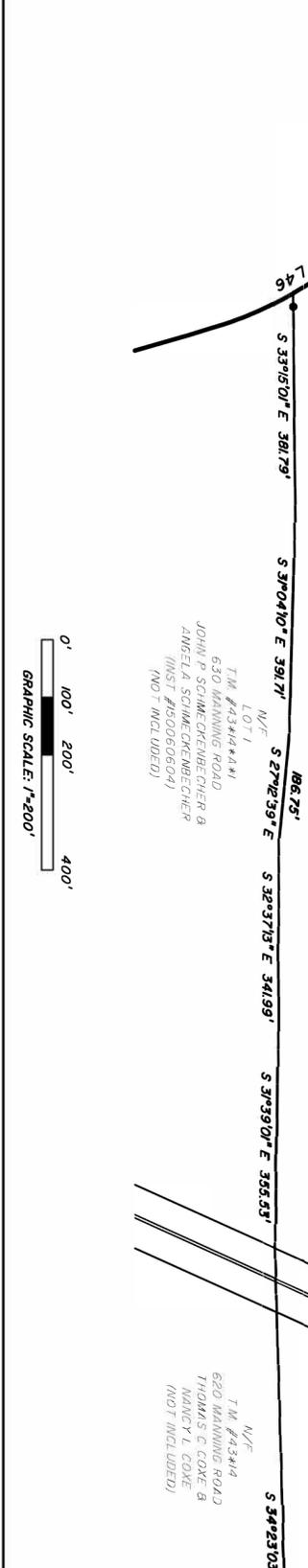


LINE	BEARING	DISTANCE
L1	N 62°24'59" E	35.67'
L2	N 23°55'41" E	68.68'
L3	N 80°00'07" E	27.43'
L4	N 24°09'45" E	75.46'
L5	N 44°45'24" E	37.25'
L6	N 33°53'33" E	26.99'
L7	N 43°13'46" E	86.99'
L8	N 73°15'40" E	86.78'
L9	S 81°10'08" E	50.44'
L10	N 66°36'30" E	75.14'
L11	N 60°31'44" E	148.23'
L12	S 81°26'33" E	74.33'
L13	N 74°34'46" E	47.21'
L14	N 75°52'31" E	140.46'
L15	S 70°58'05" W	206.42'
L16	S 39°49'11" W	75.86'
L17	S 08°37'37" W	84.69'
L18	S 67°13'01" W	223.39'
L19	S 4°20'39" W	67.23'
L20	S 57°51'00" W	199.50'
L21	N 51°34'24" W	199.30'
L22	N 43°22'52" E	203.48'
L23	N 49°40'32" E	204.17'
L24	N 30°06'05" E	284.40'
L25	N 21°01'20" E	284.40'
L26	N 29°47'28" E	242.62'
L27	N 18°20'56" W	210.97'
L28	N 06°31'13" E	230.59'
L29	S 68°53'20" W	191.09'
L30	S 24°53'55" W	253.08'
L31	S 39°39'13" W	137.74'
L32	N 06°09'33" W	109.01'
L33	N 36°16'15" W	336.64'
L34	S 55°56'13" W	157.13'
L35	N 48°21'08" W	159.22'
L36	S 20°33'20" W	7.42'
L37	S 63°23'44" W	108.24'
L38	N 44°46'16" W	103.82'
L39	S 37°28'28" W	17.90'
L40	S 39°25'17" W	105.46'
L41	S 39°08'56" W	27.08'
L42	S 40°06'20" W	218.16'
L43	S 49°43'56" W	3.20'
L44	S 25°41'09" W	
L45	S 25°41'09" W	
L46	S 26°40'32" W	



AREA TABLE

PARCEL #	ACCOUNT NO.	AREA
T.M. 33*75A	151069000	29,174 SQFT 0.670 AC.
T.M. 33*75	151078000	4,103,632 SQFT 94,206 AC.
(NORTH OF RAILROAD ESMT.)		
T.M. 33*75	151078000	802,433 SQFT 18,421 AC.
(SOUTH OF RAILROAD ESMT.)		



TIM FALLON LAND SURVEYING, PLLC
15314 CARROLL TON BOULEVARD
P.O. BOX 189
CARROLL TON, VIRGINIA, 23314

BOUNDARY SURVEY OF PARCEL ID 33*75 & 33*75A FOR COSTAL VIRGINIA DEVELOPERS, LLC

SCALE: 1" = 200' DATE: 04-27-2022 SHEET 1 OF 1