BOARD OF SUPERVISORS
COUNTY OF NEW KENT
VIRGINIA

O-16-05

At the regular meeting of the Board of Supervisors of the County of New Kent in the Boardroom of the Administration Building in New Kent, Virginia, on the 9th day of May, 2005:

Present:	Vote:
Mark E. Hill	Aye
D. M. Sparks	Absent
James H. Burrell	Aye
Stran L. Trout	Aye
W. R. Davis, Jr.	Aye

Motion was made by Mr. Hill, which carried 4:0, to adopt the following ordinance:

AN ORDINANCE TO AMEND THE NEW KENT COUNTY
COMPREHENSIVE PLAN, *VISION 2020*, TO
INCORPORATE UTILITY SERVICE AREAS

WHEREAS, the New Kent County Comprehensive Plan, *Vision 2020*, was adopted on 4 August 2003; and

WHEREAS, among the objectives and strategies of *Vision 2020* is the development of a public utility infrastructure to serve the economic development priority areas in the County; and

WHEREAS, in 2004 the New Kent County Board of Supervisors voted to implement a Service District in Bottoms Bridge and extend the public sewer system along the Interstate 64 corridor to serve the economic development areas at the four Interstate interchanges in the County; and

WHEREAS, in conjunction with the decision to develop a public sewer infrastructure, the Board directed the County staff to develop policies and plans

that would preserve the capacity of the sewer system for economic development priorities; and

WHEREAS, *Vision 2020* indicates that the use of utility service areas is the preferred method of accomplishing this goal; and

WHEREAS, the Board on 26 January 2005 directed the Planning Commission to take the draft proposals made by staff and refine them for incorporation into the Comprehensive Plan;

WHEREAS, this application was carefully considered by the New Kent County Planning Commission; and

WHEREAS, after conducting a duly advertised public hearing, the Planning Commission voted to recommend approval of the application; and

WHEREAS, this application has been advertised for public hearing before the Board in full accord with applicable provisions of the Code of Virginia; and

WHEREAS, in order to assure compliance with §15.2-2286.A.7 of the Code of Virginia, it is stated by the Board that the public purpose for this Ordinance is to further the public necessity, convenience, general welfare and good zoning and planning practices in the County of New Kent and that approval will further these public purposes,

NOW THEREFORE BE IT ORDAINED this, the 9th day of May, 2005, by the New Kent County Board of Supervisors that the New Kent County Comprehensive Plan, *Vision 2020*, be, and it is hereby, amended to incorporate designated Sewer Service Areas.

BE IT FURTHER ORDAINED that the text amendments attached hereto and incorporated herein by reference shall be added to the Public Utilities existing conditions chapter (pp. 32-34) and to the Public Utilities Goals, Objectives and Implementation Strategies (pp. 74-76) respectively and the Sewer Service Areas Map be added under the "Land Use Maps" heading of the adopted Comprehensive Plan, *Vision 2020*.

John A. Budesky
County Administrator

W. R. Davis, Jr.
Chairman

PUBLIC UTILITIES

WATER SYSTEMS

There are presently 15 individual well systems in the County. All of these were constructed by private developers and turned over to the County. Virginia Department of Health requirements provide that for central water systems, whether publicly or privately operated, one well may serve up to 49 residential connections. The 50th lot triggers the need for a second, interconnected well. The majority of these well systems are residential. However, some non-residential uses are on public water. Water to the Providence Forge Shopping Center is provided from the Minitree Glen residential system. The Colonial Downs water system provides water to the racetrack, the Brickshire residential community, the commercially-designated properties near the track and the Interstate 64 rest areas. Water is provided to the Winn-Dixie supermarket and the Crossings shopping center in Bottoms Bridge from separate stand-alone systems.

The County expanded the Parham Landing water system beginning in 1999 to serve industrial customers in the Route 33 corridor. This was accomplished primarily with Community Development Block Grant funding.

The County has a non-producing well at the Route 106 (Talleysville) exit for which work has begun to obtain a new groundwater withdrawal permit.

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In addition to the public water systems, there are six private central water systems in the County. These are found in the following subdivisions: Woodhaven Shores, Brookwood Manor, Wedgewood, Five Lakes #1, Brianwood and Windsor Park. All of the water systems are fed by wells from groundwater. The water is of good quality and minimal treatment is required.

The City of Newport News has been pursuing the development of a major surface water reservoir in King William County for the past decade. This project has still not cleared all of the regulatory hurdles that will have to be overcome before this project can be built. The County presently has a water agreement with the City of Newport News which could provide the County with up to one million gallons of raw water per day if the reservoir becomes a reality.

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SANITARY SEWER

The Department of Public Works operates two sanitary sewer systems in the County. The County took over operation of the 580,000 gallon-per-day (gpd) Parham Landing sewage treatment plant in 1999. The plant was built to serve the regional jail facility on Route 30, for which one-half of the capacity is reserved, and was designed for excess capacity for the County's industrial needs in the Route 33 corridor. The plant treats to the tertiary level and discharges into the Pamunkey River at Lee Marsh. The plant can be doubled in capacity at an approximate cost of $7 million (estimated in 2002).

The other public sewer system is at Colonial Downs and is known as the Chickahominy treatment plant. This plant has a current capacity of approximately 500,000 gpd, and

serves Colonial Downs, Brickshire, the surrounding commercial area and the Interstate 64 rest areas. The existing capacity of this plant is committed to existing users and to the remaining development of the Kentland property. This system currently uses treated gray water to irrigate at both Colonial Downs and at the Brickshire Golf Course. Discharges to the Chickahominy River must be treated to a higher level because the Chickahominy is a source of public drinking water.

New Kent County also has an agreement with Henrico County to treat up to 500,000 gpd of sewage from the Bottoms Bridge area. The County has not implemented this alternative.

Of the four Interstate 64 interchanges located in New Kent County, only the Route 155 interchange is serviced with public water and sewer. While there is public water and sewer located along the Route 33 corridor, there are no such utilities in place near the interchange itself.

In 2004, the County committed to construction and operation of a major sanitary sewer trunk system along the I-64 corridor that would serve economic development at all four of the County's Interstate interchanges. The system is to be constructed in phases—first from Bottoms Bridge eastward to the Chickahominy plant, second connecting to Parham Landing plant, and third expansion of the Parham Landing plant. The first phase is scheduled to be operation in early 2006 with subsequent phases being completed in 2007 and 2008. In addition, the Board of Supervisors has approved extending sewer service to New Kent Courthouse Village to serve the schools, governmental, and village activities existing or planned there.

Natural Gas

There is a major 16-inch natural gas trunk line owned by Virginia Natural Gas that traverses the southwestern corner of the County and the southern part east of Providence Forge. Despite the presence of this major transmission line, there are no natural gas distribution lines, and hence no natural gas service in the County. Development of a natural gas infrastructure will require a concentration of residential and/or industrial users in order for such distribution to be cost-effective.

Electricity

Dominion Virginia Power is the electrical supplier for New Kent County. There are major transmission lines in the southeastern and eastern portions of the County. One of these lines serves the Route 33 industrial corridor, and three-phase power is available in this area.

Telecommunications

Verizon provides telephone service in the County. Such service is customer-driven, and Verizon will provide the infrastructure that the County needs at Verizon's cost. The modem speed over conventional telephone lines is at a maximum of 56K. The Federal Communications Commission defines broadband at 200K and above. Cable modems can provide substantially higher speeds. Fiber optic lines are along all the major roads in the

County, and delivery to individual properties can be accomplished within 60-90 days if easements and rights-of-way are in place.

The County is being called upon to host a growing number of cellular telephone towers to serve this burgeoning industry. These towers must be sited not only to minimize visual blight, but so as not to interfere with communications equipment or become a hazard to air navigation at the New Kent County Airport, as well.

Solid Waste Disposal

There are four convenience centers in the County where solid wastes and recyclable items are collected. These facilities are located along Route 612 near the New Kent County Airport, on Route 618 in the center of the County, on Route 634 across from the Regional Jail and at the intersection of Routes 60 and 647. Each site accepts newspaper, mixed paper, glass, cardboard, plastics, aluminum and bimetal cans for recycling as well as used motor oil and oil filters.

Solid waste disposal is handled regionally. The County is a member of the Central Virginia Waste Management Authority, and all of the County's solid waste goes to the Charles City County landfill.

GOALS, OBJECTIVES AND IMPLEMENTATION STRATEGIES

PUBLIC UTILITIES

At present, New Kent County is largely underserved by public utilities. Most of the utilities infrastructure in the County has been developed privately and turned over to the County for operation. An exception is the Route 33 corridor, where excess public water and sewer capacity was provided to this area of the County as a result of the construction of the regional jail. The County is currently developing a backbone sewer system along the I-64 corridor in phases to serve the economic development opportunities along the corridor and especially at the four interchanges. If the County is to promote balanced economic growth while protecting the environment, more intensive development must be served by public water and sewer. Given limitations on the carrying capacity of the land, the County should seek innovative approaches to both the provision of potable water and the treatment and disposal of waste water.

Goal 1: Promote the extension of public utilities to designated growth priority areas.

Objective A: Extend public water and sewer to designated villages and economic development priority areas (I-64 interchanges with state Routes 249, 106, 155 and 33) in the County.

Strategies:

1. Prioritize villages for provision of public utilities based on cost-to-benefit analysis of projected tax revenues per dollar of public expenditure.
2. Investigate combination of public and private funding sources.
3. Incorporate the publicly funded portion of public utilities extension to prioritized villages within the County's Capital Improvement Plan.
4. Provide water services to eliminate fire hazards and risks.

Objective B: Establish a utility service area boundary outside of which public sewer will not be made available and using all means available to ensure that the County investment in public utilities does not fuel undue residential growth.

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Strategies:

1. Limit sewer extensions to those designated utility service areas shown on the Utility Service Areas map and those planned developments approved by the Board of Supervisors and require connection of new development within those designated areas.
2. Review the designated sewer service areas shown on the Utility Service Areas map contemporaneously with the review of the Comprehensive Plan, at least once each five years but no more frequently than a three-year interval.
3. Use the County's Capital Improvement Plan to direct utilities to specific areas, providing sufficient capacity for those areas and reserving the capacity exclusively for those areas.

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4. Authorize private utility extensions through a legislative permit process that ensures that the County's policies are maintained.
5. Prevent public sewer connections in areas designated for rural development.
6. Develop and implement a utility policy that determines when central water systems are required.

Goal 2: Explore creative and innovative approaches to the provision of public utilities.

Objective A: Compare local and regional approaches to the provision of public utilities.

Strategies:

1. Begin a dialogue with all neighboring jurisdictions to explore the possibility of cooperative utility arrangements.
2. Begin dialogue with regional providers of water, sewage treatment, natural gas, etc. to explore the possibility of New Kent County participating in regional efforts.
3. Prepare cost-to-benefit analyses of both local and regional approaches to determine the most cost-effective path for New Kent County.
4. When financially feasible, enter into cooperative agreements with other jurisdictions and/or regional utility providers for the provision of those public utilities best provided on a regional basis.
5. Work with the Virginia Department of Forestry to install dry hydrants in portions of the County where water services do not exist.
6. Protect the Black Creek and/or other potential water impoundment areas to serve the future water needs of the County, as well as conduct a comprehensive study for the County's long range water supply needs.

Objective B: Study the long-term viability of ground water resources.

Strategies:

1. Work closely with the Virginia Department of Environmental Quality and the State Water Control Board to stay abreast of the latest research into aquifer quality and capacity.
2. Investigate alternatives such as desalination of groundwater from lower-quality, higher producing aquifers, and if financially feasible, identify funding for such alternatives from a combination of public and private sources.

Objective C: Investigate alternatives for water reuse and recycling and encourage creative approaches to waste water treatment.

Strategies:

1. Utilize Colonial Downs' use of treated wastewater for irrigation as a model for future planned developments and consider expanding the concept to include a dual water system to facilitate using treated wastewater for private irrigation.
2. Explore the possibility of piping treated wastewater to industrial users, both within and outside the County, for reuse in industrial applications.
3. Investigate the cost and feasibility of utilizing treated wastewater for ground water recharge.

4. Implement those wastewater alternatives that are determined to be the most environmentally beneficial and cost-effective through a combination of public and private funding sources.

Objective D: Develop a public utilities master plan and dedicate funding in the County Capital Improvement Program for implementation.

Strategies:

1. Prioritize areas for the extension of public utilities to village and economic development priority areas based on a cost-to-benefit model.
2. Prioritize areas for the extension of public utilities to existing residential developments based on the incidence of septic system failure.
3. Correlate the master plan priority areas with the designated sewer service areas shown on the Sewer Service Areas map.
4. Identify a combination of local and private funding for the extension of public utilities to villages and economic development areas.
5. Seek state and federal grant funding, in conjunction with local funding, for the extension of public utilities to existing residential areas with failing septic systems.
6. Begin a dialogue with Virginia Natural Gas concerning the extension of gas distribution lines to villages and economic development priority areas.
7. Draft a major portion of the utilities master plan for the extension of public utilities for fire protection.

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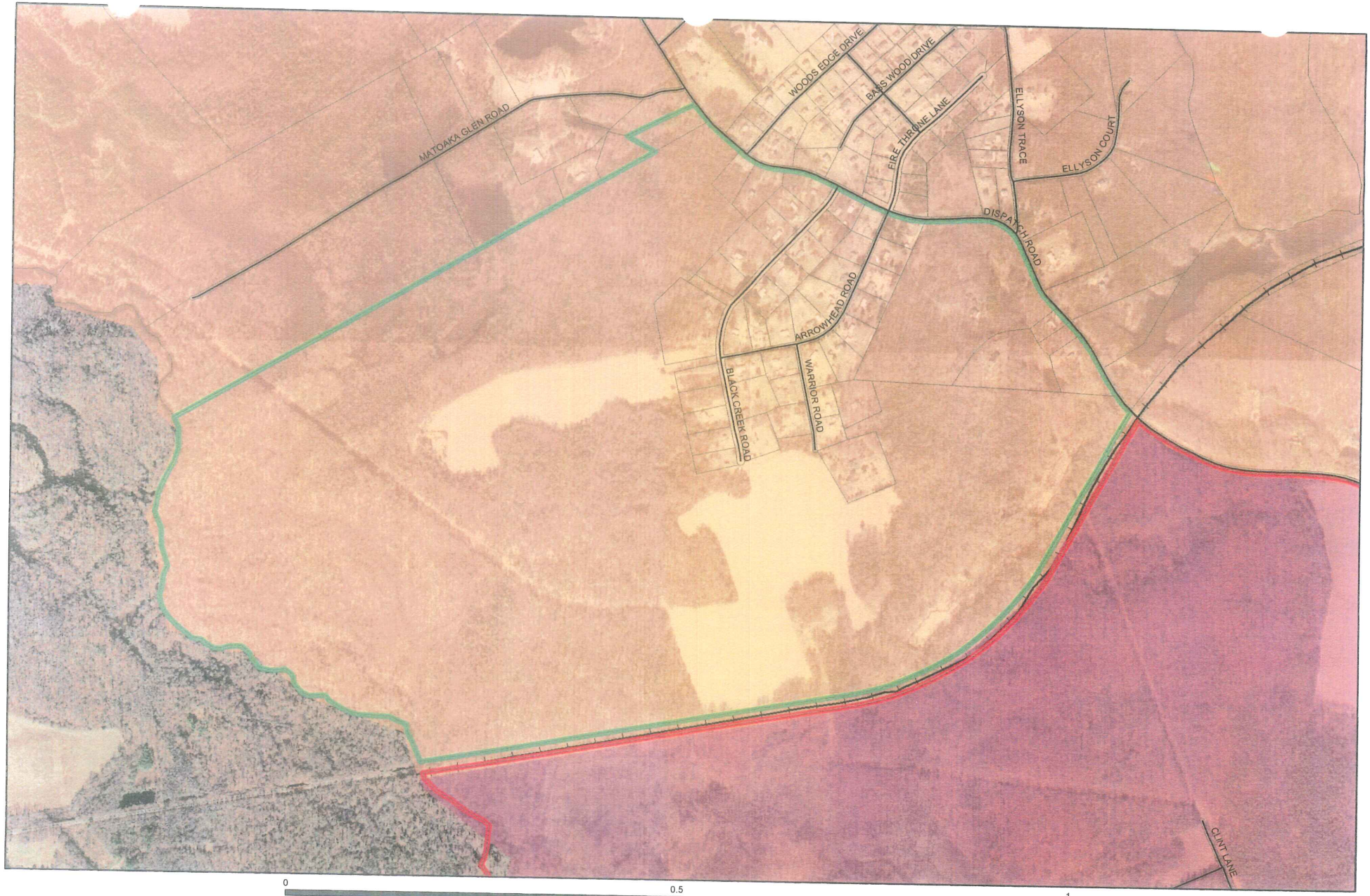

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Future Land Use

- Agricultural / Forest
- Commercial
- Conservation
- Economic Opportunity
- Hamlet
- Industrial
- River, Lake, Pond
- Rural Lands
- Suburban Housing Detached
- Village
- Sewer Service Areas
- Bottoms Bridge Service District
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N W E S

New Kent County
COMMUNITY DEVELOPMENT

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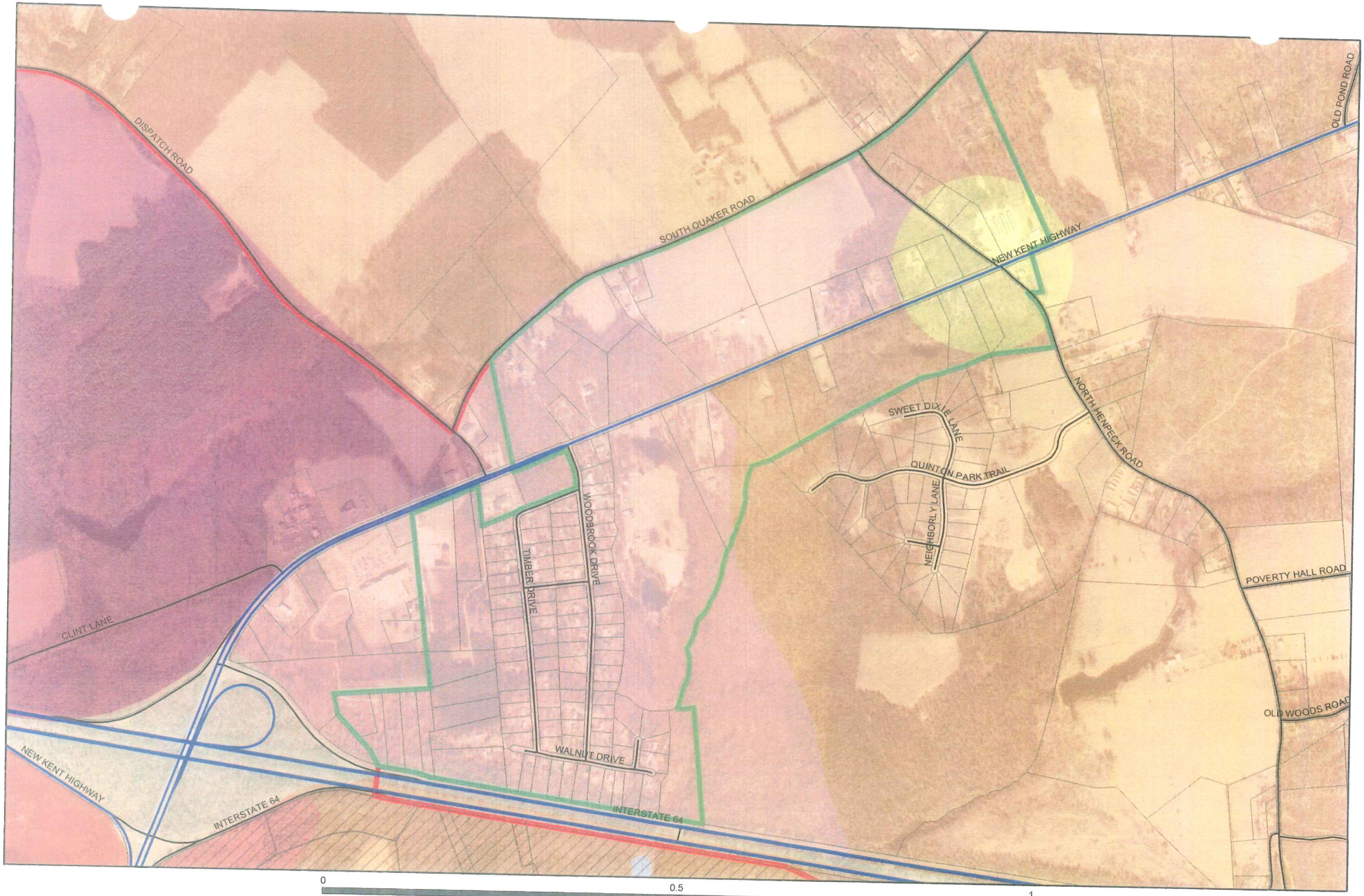
It is not suitable for detailed site planning.
Prepared by the New Kent County GIS office 4/26/2005



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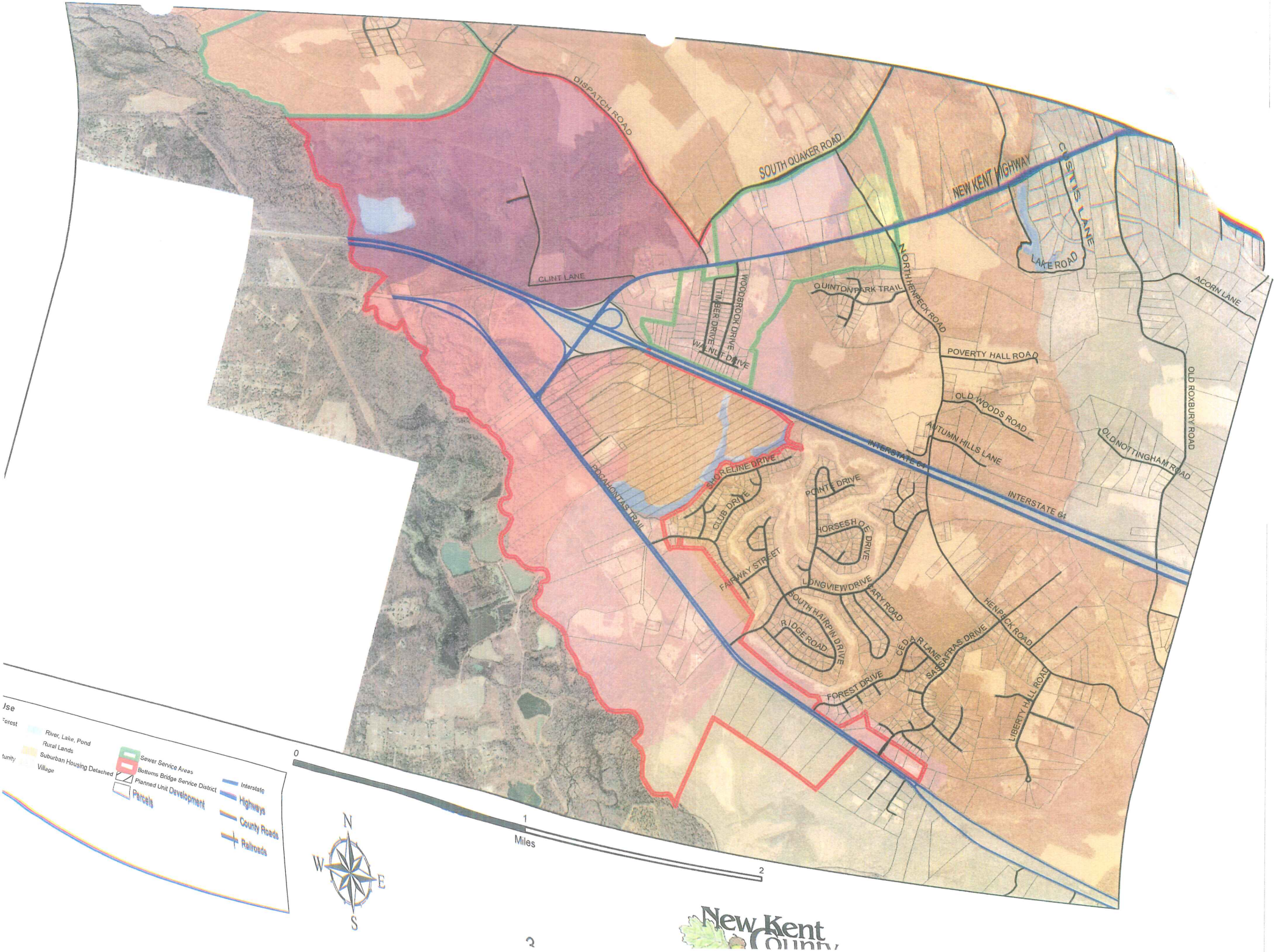
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TIMBER DRIVE
WALNUT DRIVE
QUINTON PARK TRAIL
NORTH HENPECK ROAD
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HORSESHOE DRIVE
FAIRWAY STREET
LONGVIEW DRIVE
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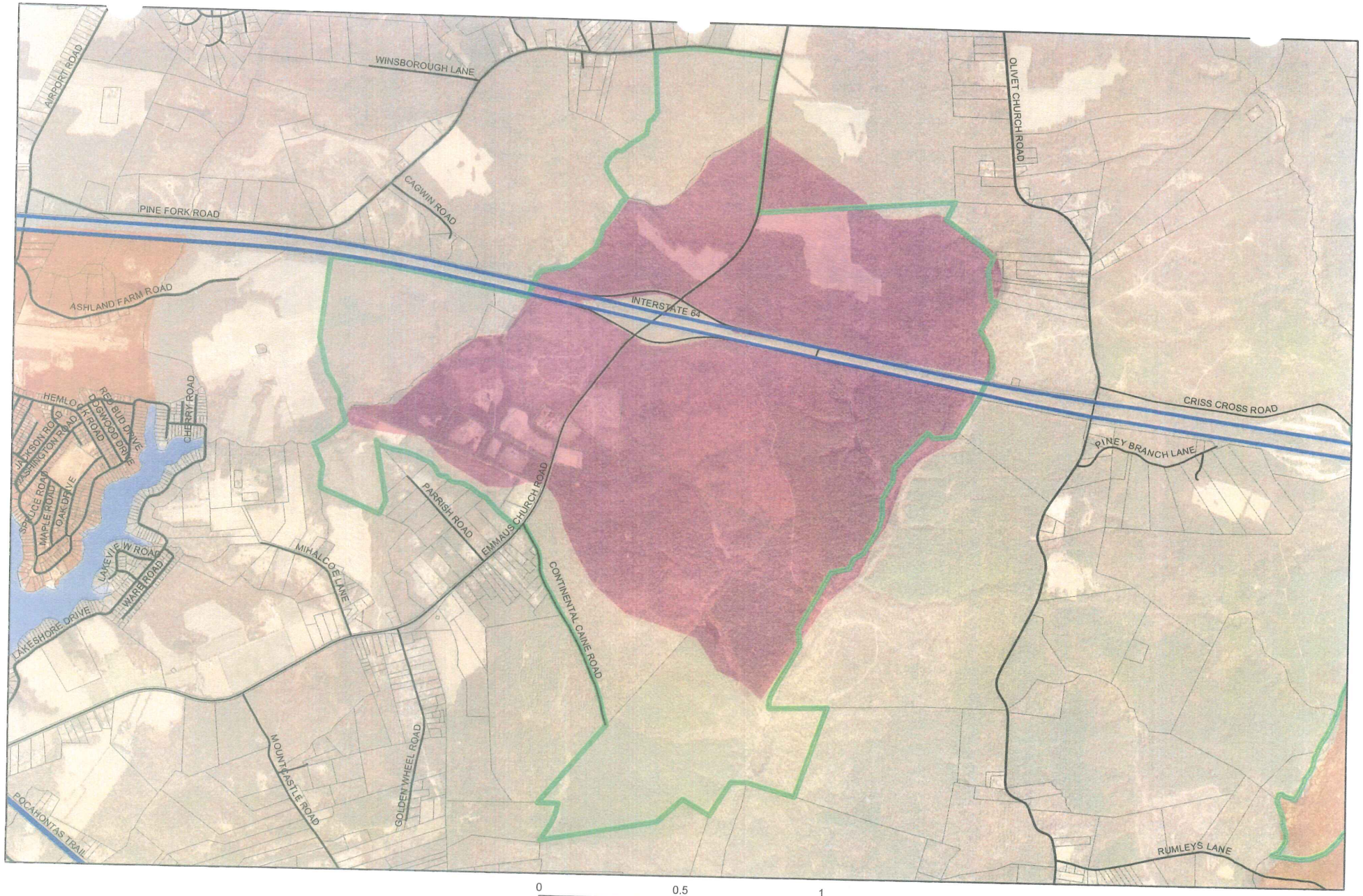

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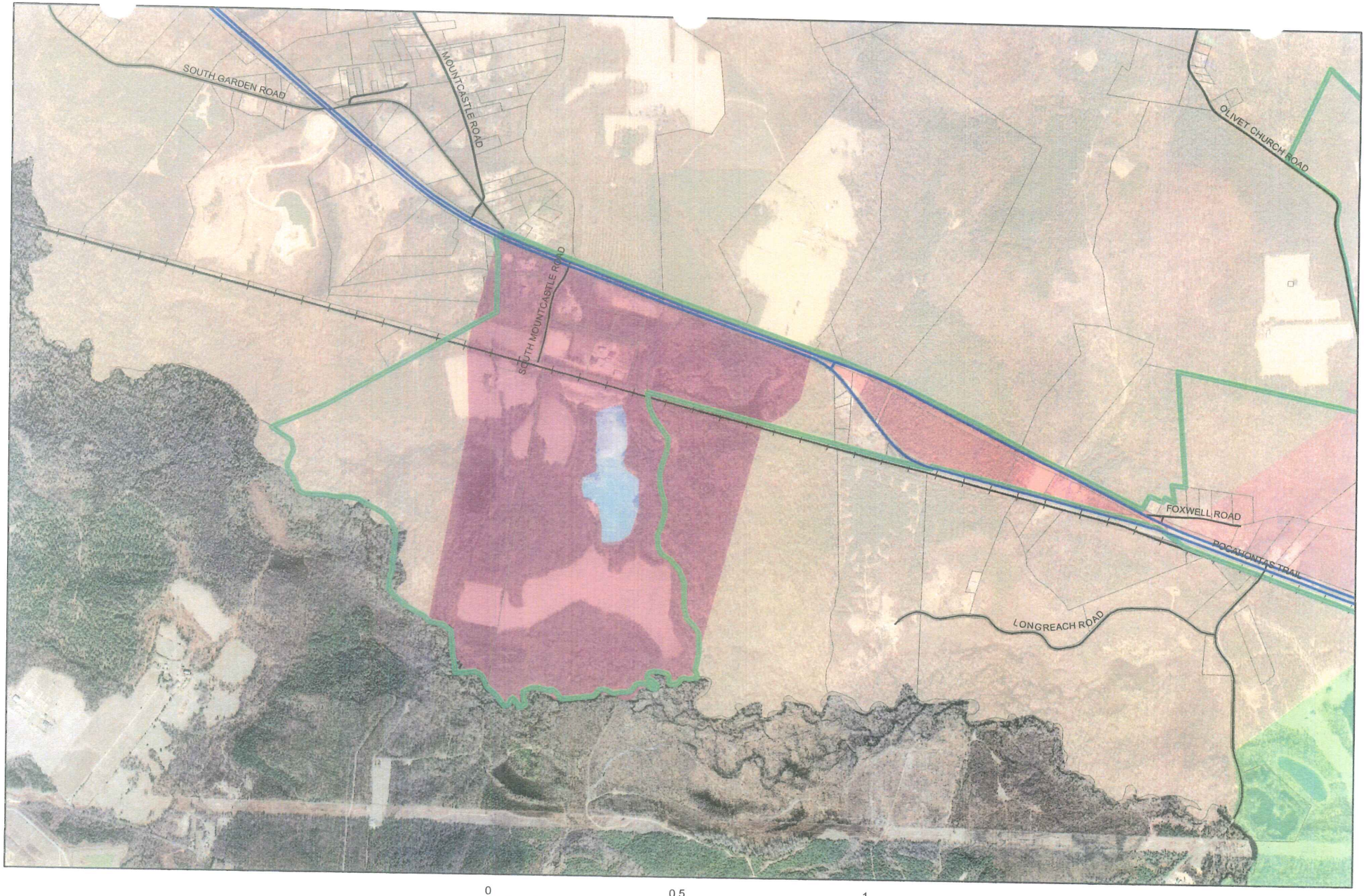

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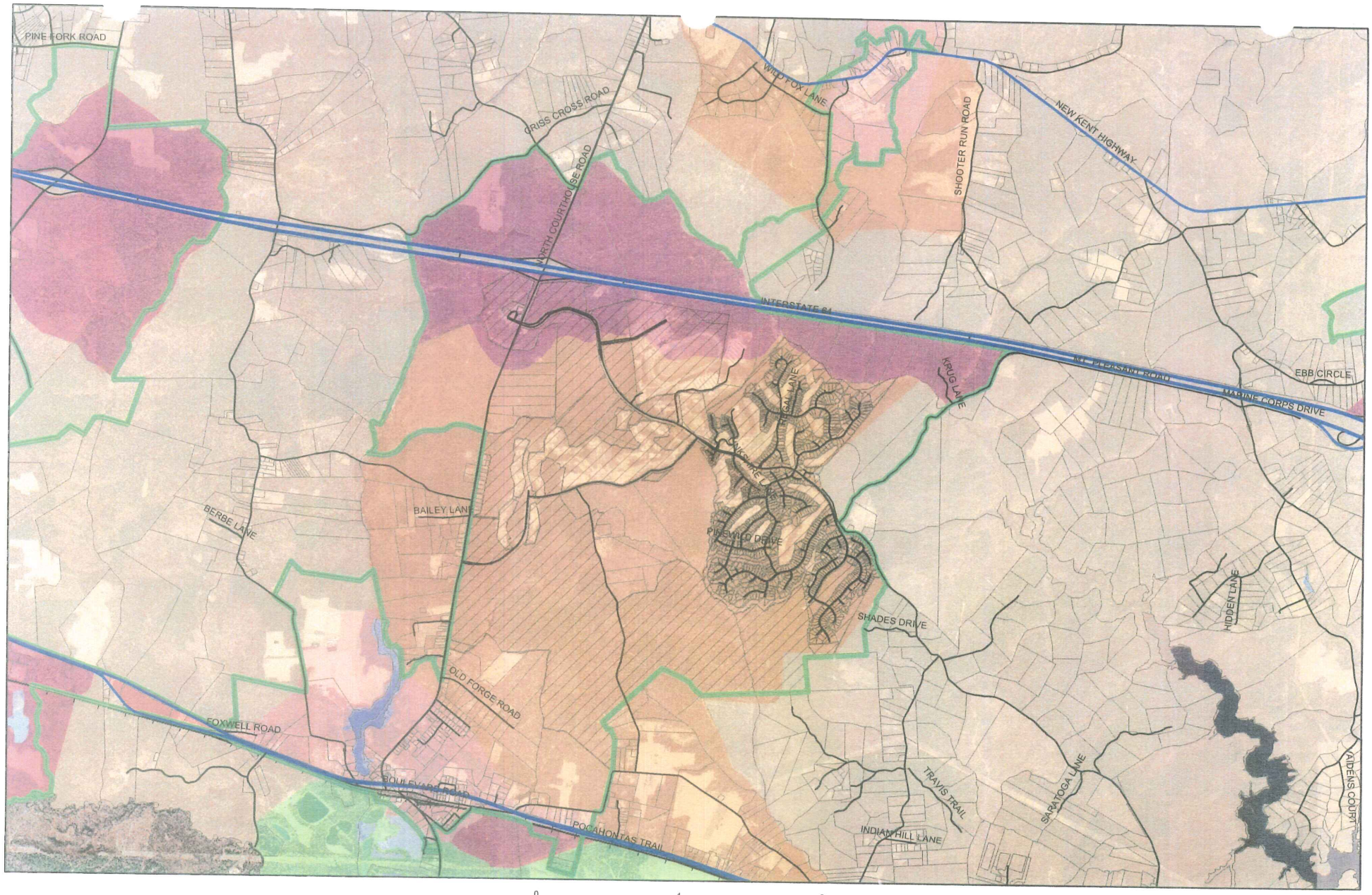

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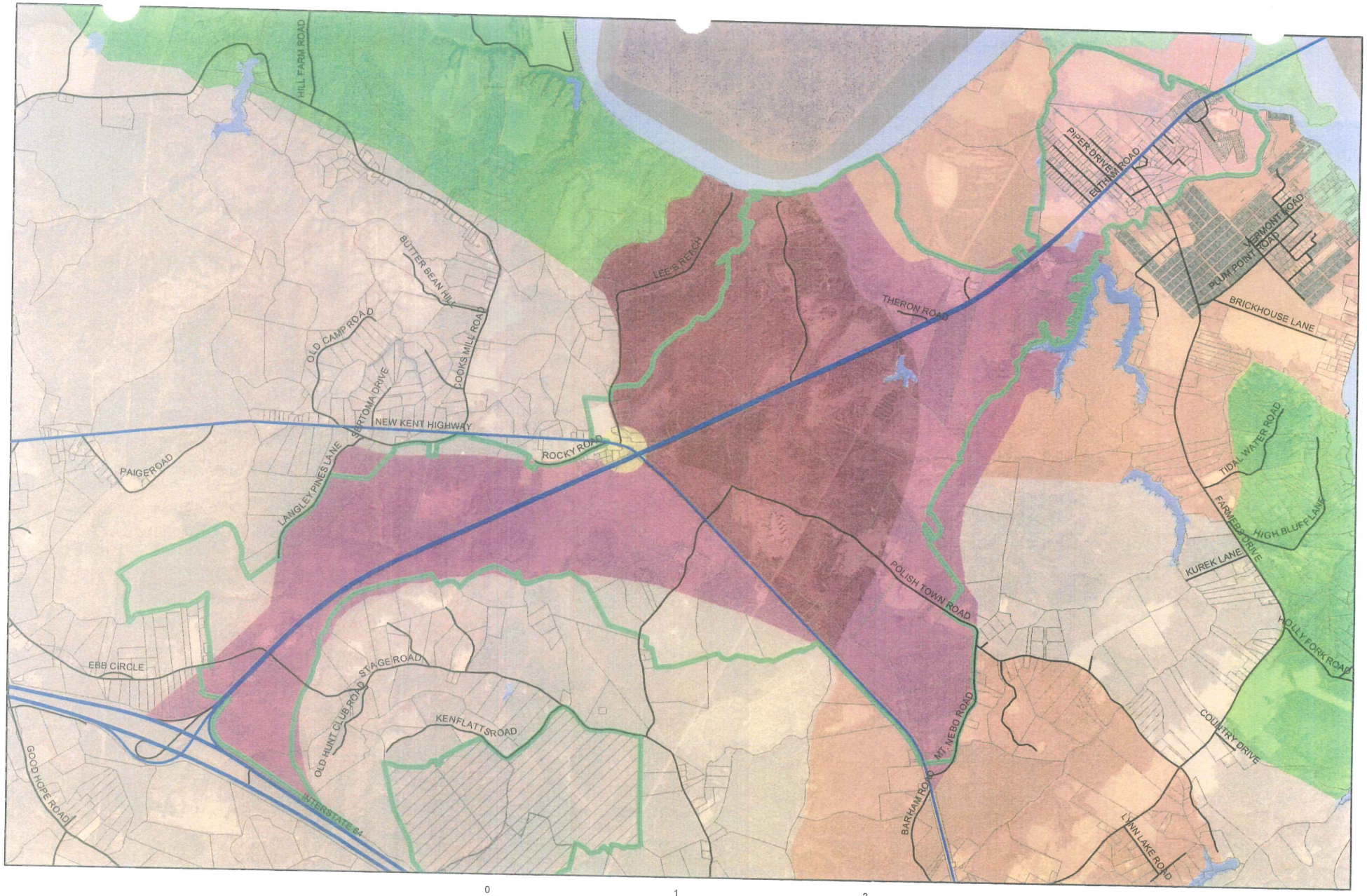

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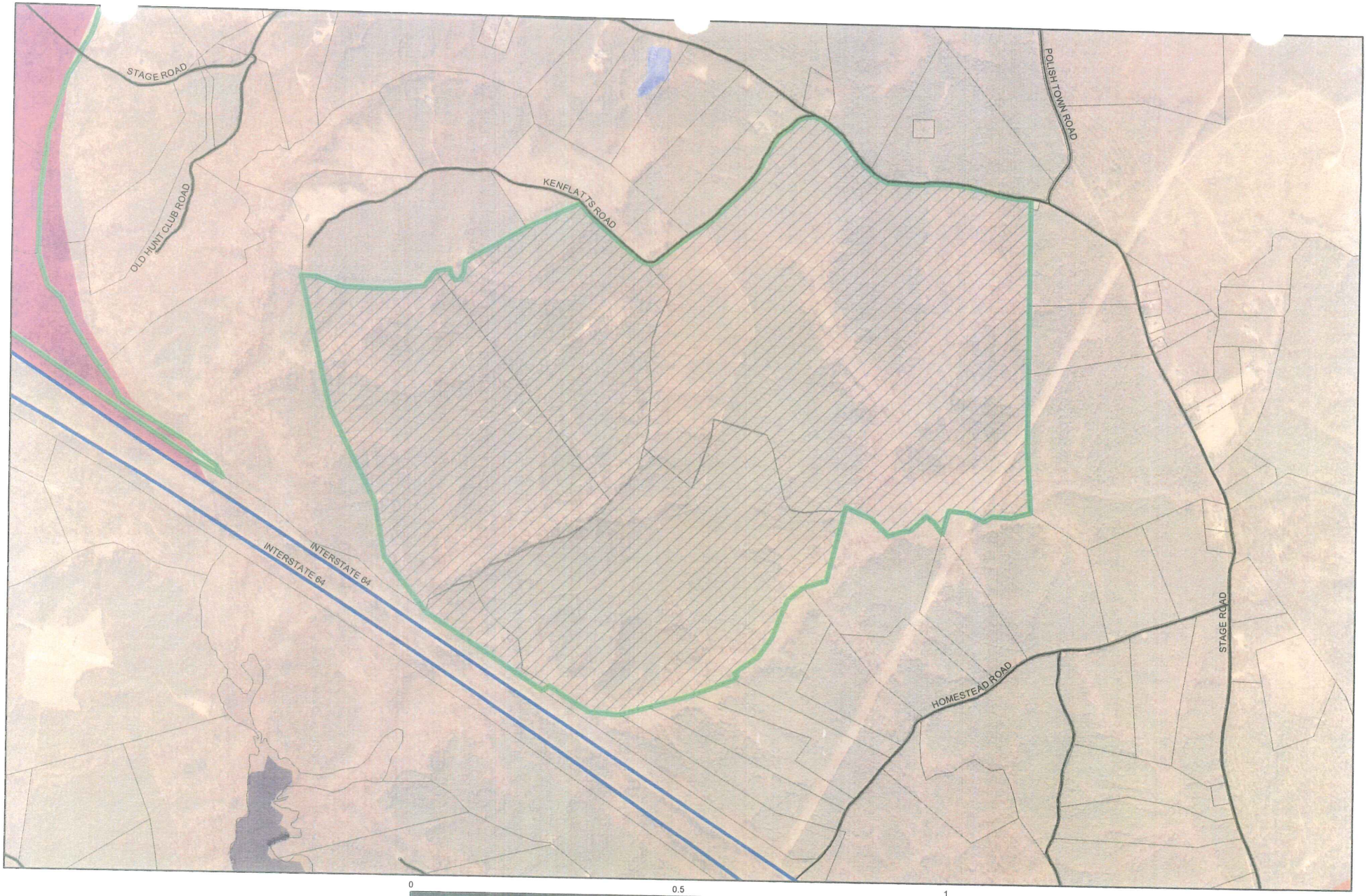

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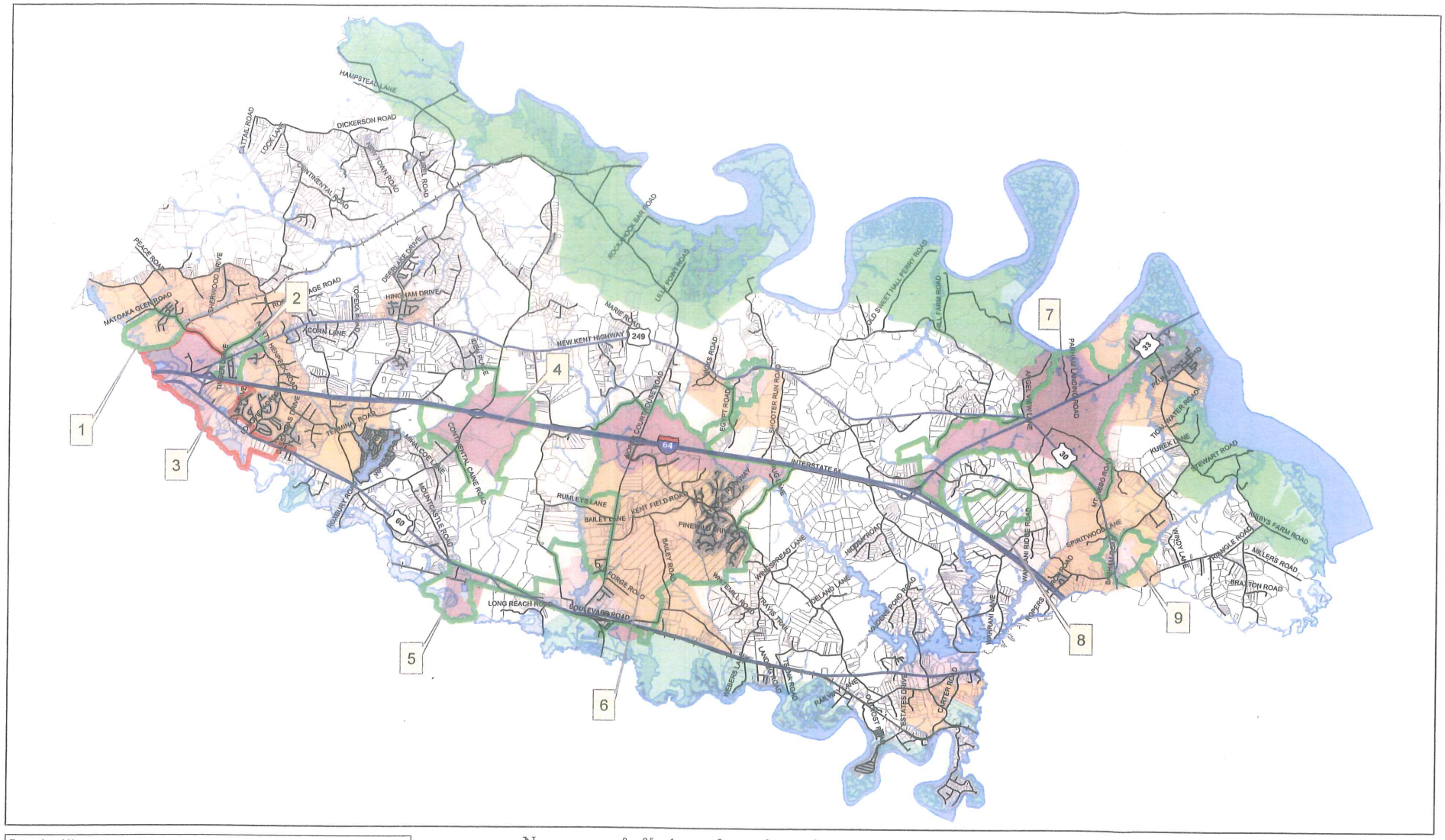

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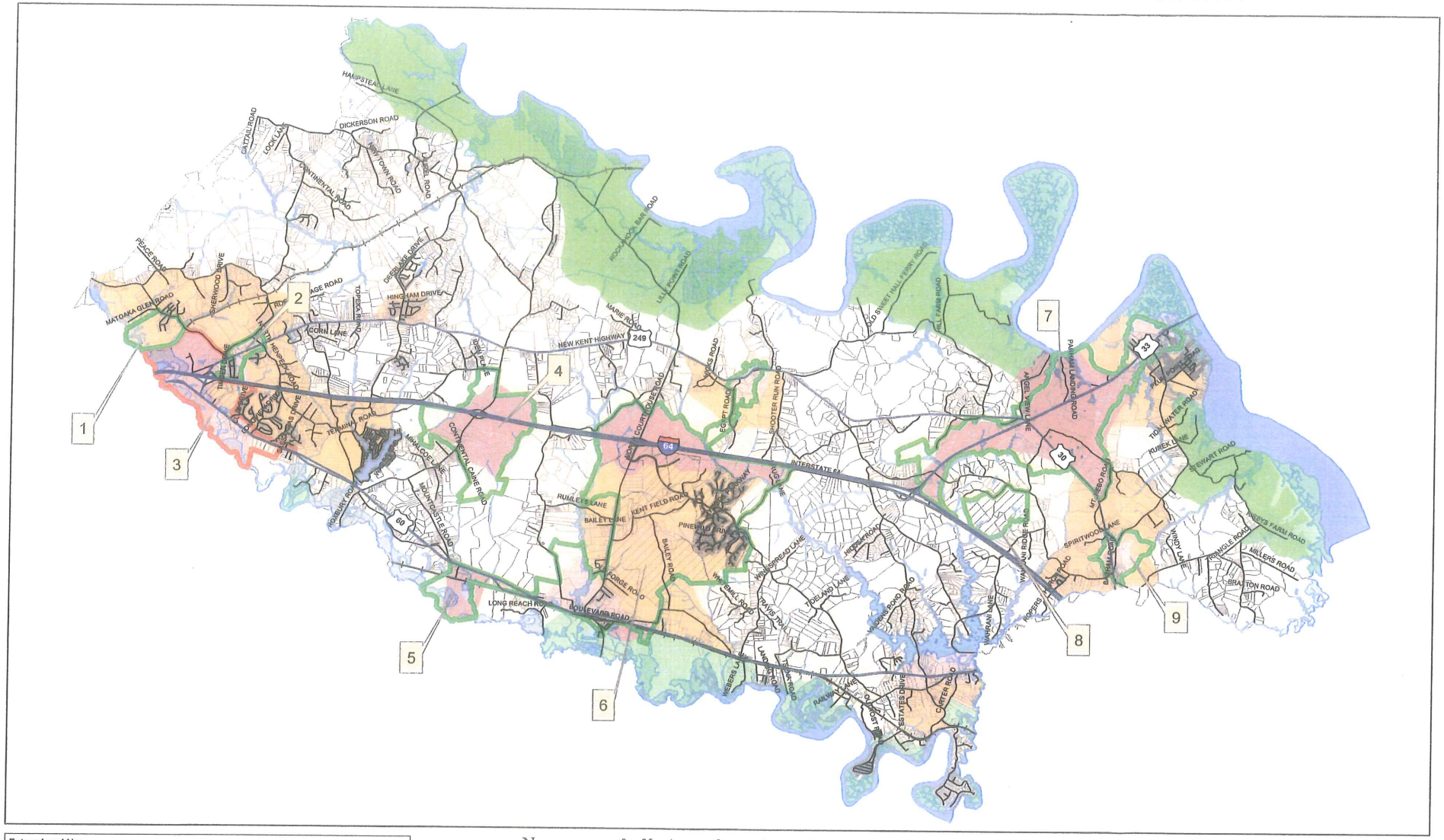

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