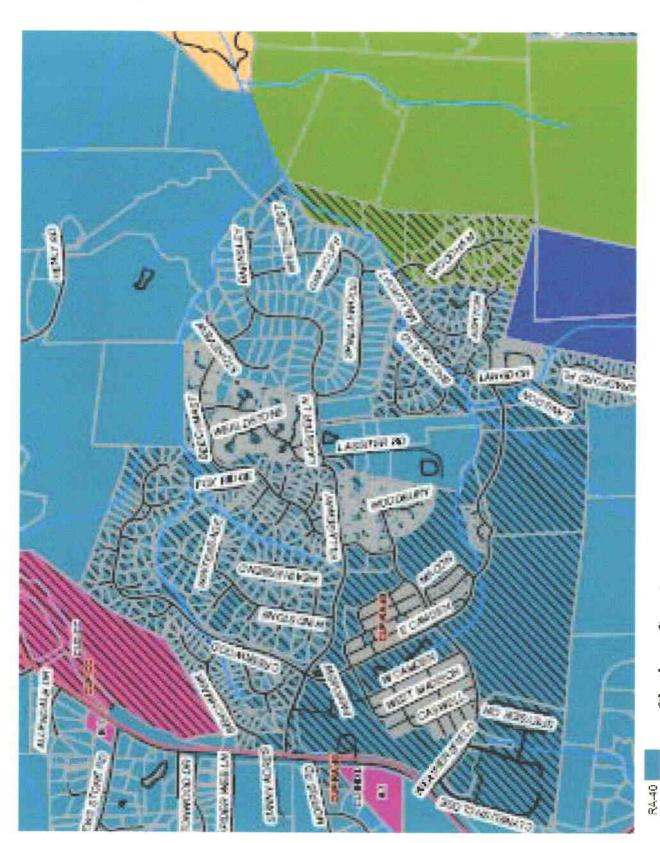
APPENDIX A



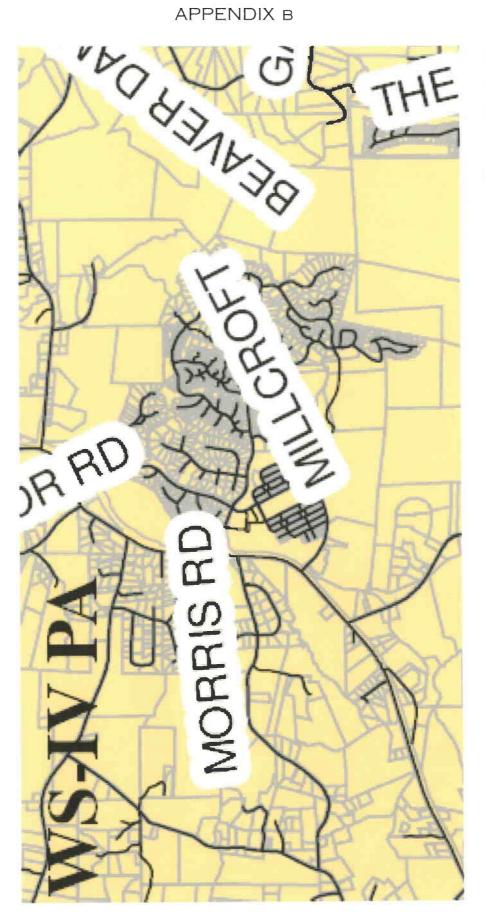
ZONING CLASSIFICATIONS GALLOWAY RIDGE SECTION OF FEARRINGTON P.U.D.

Chatham County Zoning Atlas

> 72.5 72.50

Williams Township

APPENDIX B



WATERSHED MAP

GALLOWAY RIDGE SECTION OF FEARRINGTON P.U.D.

APPENDIX C



Soil & Environmental Consultants, PA

11010 Raven Ridge Road • Raleigh, North Carolina 27614 • Phone: (919) 846-5900 • Fax: (919) 846-9467 www.SandEC.com

> 1 February, 2008 S&EC Project #: 10983.W1

Jason R. Cronk 3000 Galloway Ridge Pittsboro, NC 27312

Re:

Site Assessment for the Galloway Ridge Site Chatham County, NC

Mr. Cronk:

On January 24, 2008, S&EC personnel completed the site assessment on the Galloway Ridge site (+/- 3 acres) in Chatham County, NC. This assessment included a detailed stream and wetland delineation and a survey for potential habitat of federally designated Endangered, Threatened, and Federal Species of Concern.

Wetland Delineation

During the stream and wetland delineation, no waters were found on-site. A stream located west of the property scored 20 on a NC-DWQ Stream Form and was therefore determined to be intermittent.

Chatham County is in the process of implementing buffers on streams, wetlands, and seeps; however these buffers may not apply to the Galloway Ridge project. In the eventuality that these buffers do apply to this site, the 50 foot buffer on the intermittent stream and its associated wetlands located west of the site will come very close to encroaching on a small portion of the Galloway Ridge site. The attached map depicts the off-site stream, wetlands, and potential 50 foot buffers. Please review this information and call our office if you have questions.

Federally Listed Species Habitat Survey

During the survey for potential habitat of federally listed Endangered, Threatened, and Federal Species of Concern, no habitat was located for Endangered or Threatened species. Marginally suitable habitat was located for Sweet Pinesap (Monotropsis odorata), a Federal Species of Concern. Much of the site is covered in Periwinkle (Vinca sp.), making presence of Sweet Pinesap unlikely.

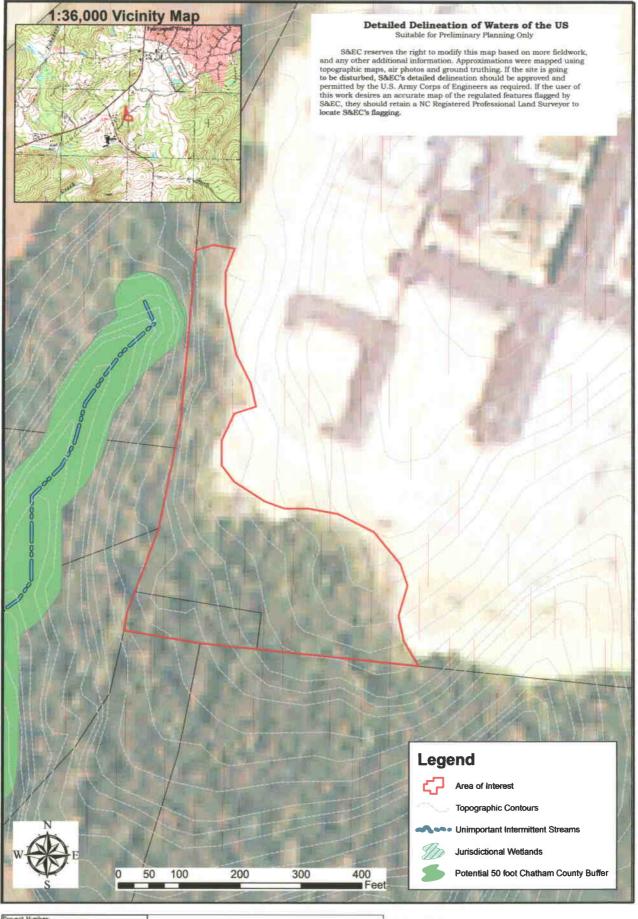
As you move forward in planning your development, S&EC personnel are available for site plan review and permit consultation services. Please contact S&EC if you have any questions related to wetland, stream, and endangered species regulations or if you need clarification of the attached report.

Environmental Specialist/Project Manager

Staff Biologist

Attachments: 1) Wetland and Stream Sketch Map

2) Stream Form for Off-site Stream



Project Number: 10983.W1	C.t. A		
Froject Manager: DG	Site Assessment Map		
Scale: 1 = 100'	Galloway Ridge Site		
Dute: 2/1/2008	Chatham County, NC		



North Carolina Division of Water Quality – Stream Identification Form; Version 3.1

Date: 1/24/08 Project:	10983.WI	Latii	Latitude: 35,792757		
Evaluator: DG/DGC Site: (7a)	lower Airlas	Ridge Longitude: -79,09760 ;		17602	
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30 County:	Chathain		Other Stream Form e.g. Quad Name;		
A. Geomorphology (Subtotal = 1	Absent	Weak	Moderate	Strong	
1ª. Continuous bed and bank	0	1	(2)	3	
2. Sinuosity	0	(D)	2	3	
3. In-channel structure: riffle-pool sequence	0	(1)	2	3	
Soil texture or stream substrate sorting	0	(1)	2	3	
Active/relic floodplain	(6)	1	. 2	3	
Depositional bars or benches	(0)	1	2	3	
7. Braided channel	(<u>6</u>)	1	2	3	
Recent alluvial deposits	0	(1)	2	3	
9 * Natural levees	0	1	2	3	
10. Headcuts	(0)	1	2	3	
11. Grade controls	0	(0.5)	1	1.5	
12. Natural valley or drainageway	0	(0.5)	1	1.5	
 Second or greater order channel on <u>existing</u> USGS or NRCS map or other documented evidence. 	(No = 0)		Yes = 3		
Man-made ditches are not rated; see discussions in mar B. Hydrology (Subtotal =) 14. Groundwater flow/discharge	0	1	(2)	3	
 Water in channel and > 48 hrs since rain, or Water in channel dry or growing season 	0	1	(2)	3	
16. Leaflitter	1.5	1	0.5	0	
17. Sediment on plants or debris	(0)	0.5	1	1.5	
18. Organic debris lines or piles (Wrack lines)	(0)	0.5	1	1.5	
19. Hydric soils (redoximorphic features) present?	No = 0		(Yes = 1.5)		
C. Biology (Subtotal = 1.5)					
20 ^b . Fibrous roots in channel	(3)	2	1	0	
21 ^b . Rooted plants in channel	(3)	2	1	0	
22. Crayfish	0	(0.5)	1	1.5	
23. Bivalves	(0)	1	2	3	
24. Fish	0	0.5	1	1.5	
25. Amphibians	(0)	0.5	1	1.5	
26. Macrobenthos (note diversity and abundance)	0	0.5	(1)	1.5	
27. Filamentous algae; periphyton	(1	7	3	
28. Iron oxidizing bacteria/fungus.	0	0.5	1	1,5	
29 ^b . Wetland plants in streambed	FAC = 0.5; FAC	N = 0.75; OB	L = 1.5 SAV = 2.0); Other = 0	
bitems 20 and 21 focus on the presence of upland plants.	Item 29 focuses on the	presence of a Sketch:	quatic or wetland pla	nts.	

	2.
lotes: (use back side of this form for additional notes.)	Sketch:

APPENDIX D



January 28, 2008

Mr. Jason R. Cronk Executive Director, Galloway Ridge 1000 Galloway Ridge Pittsboro, NC 27312

Mr. Cronk,

Thank you for the opportunity to review and provide input into Galloway Ridge's phase II plans for expansion.

After reviewing the plans FirstHealth-Chatham Emergency Medical Services fully supports Galloway Ridge's plans to expand its independent living, assisted living, and skilled nursing capacity.

Please feel free to contact me if you need any additional assistance.

Sincerely,

James S. Hasbrouck, BS, CCEMTP-P

EMS Director FirstHealth Chatham

APPENDIX F



U.S. Environmental Protection Agency

Smart Growth

Recent Additions | Contact Us |

EPA Home > Environmental Management > Smart Growth > Protecting Water Resources with Higher-Density Development

Protecting Water Resources with Higher-Density Development

Growth and development expand communities' opportunities by bringing in new residents, businesses, and investments. Growth can give a community the resources to revitalize a downtown, refurbish a main street, build new schools, and develop vibrant places to live, work, shop, and play. However, with the benefits come challenges. The environmental impacts of development can make it more difficult for communities to protect their natural resources. Where and how communities accommodate growth has a profound impact on the quality of their streams, rivers, lakes, and beaches. Development that uses land efficiently and protects undisturbed natural lands allows a community to grow and still protect its water resources.

The U.S. Census Bureau projects that the U.S. population will grow by 50 million people, or approximately 18 percent, between 2000 and 2020. Many communities are asking where and how they can accommodate this growth while maintaining and improving their water resources. Some communities have interpreted water-quality research to mean that low-density development will best protect water resources. However, some water-quality experts argue that this strategy can backfire and actually harm water resources. Higher-density development, they believe, may be a better way to protect water resources. This study intends to help guide communities through this debate to better understand the impacts of high- and low-density development on water resources.

To more fully explore this issue, EPA modeled three scenarios of different densities at three scales—one-acre level, lot level, and watershed level—and at three different time series build-out examples to examine the premise that lower-density development is always better for water quality. EPA examined storm water runoff from different development densities to determine the comparative difference between scenarios. This analysis demonstrated:

- The higher-density scenarios generate less storm water runoff per house at all scales— one acre, lot, and watershed—and time series build-out examples;
- For the same amount of development, higher-density development produces less runoff and less impervious cover than low-density development; and
- For a given amount of growth, lower-density development impacts more of the watershed.

Taken together, these findings indicate that low-density development may not always be the preferred strategy for protecting water resources. Higher densities may better protect water quality—especially at the lot and watershed levels. To accommodate the same number of houses, denser developments consume less land than lower density developments. Consuming less land means creating less impervious cover in the watershed. EPA believes that increasing development densities is one strategy communities can use to minimize regional water quality impacts. To fully protect water resources, communities need to employ a wide range of land use strategies, based on local factors, including building a range of development densities, incorporating adequate open space, preserving critical ecological and buffer areas, and minimizing land disturbance.