



CITY OF DURHAM | DURHAM COUNTY
NORTH CAROLINA



ZONING MAP CHANGE REPORT

Meeting Date: November 21, 2011

Table A. Summary			
Application Summary			
Case Number	Z1000014	Jurisdiction	City
Applicant	Adam Ashbaugh, LStar Management	Submittal Date	November 8, 2010
Reference Name	Cardinal Oaks	Site Acreage	47.03
Location	South side of Cheek Road, west of Fletchers Chapel Road		
PIN(s)	0852-02-45-4380, -54-2858 (partial)		
Request			
Proposed Zoning	Planned Development Residential – 3.840 (PDR-3.840)	Proposal	Single-family residential
Site Characteristics			
Development Tier	Suburban		
Land Use Designation	Institutional and Very Low Density Residential (2 DU/Ac. or less)		
Existing Zoning	Residential Rural (RR) , Planned Development Residential 2.980 (PDR 2.980)		
Existing Use	Vacant		
Overlay	F/J-B	Drainage Basin	Falls Lake
River Basin	Neuse	Stream Basin	Little Lick Creek, Panther Creek
Determination/Recommendation/Comments			
Staff	Staff determines that, should the plan amendment be approved, this request is consistent with the <i>Comprehensive Plan</i> and other adopted policies and ordinances.		
Planning Commission	Denial, 8 – 3 on September 13, 2011. The Planning Commission finds that the ordinance request is not consistent with the adopted <i>Comprehensive Plan</i> . However, should the plan amendment be approved, the request would be consistent with the <i>Comprehensive Plan</i> . The Commission believes the request is not reasonable nor in the public interest and recommends denial based on problems of traffic congestion and inadequate transportation infrastructure, excessive impact on school facilities, and opposition from the community.		
DOST	No comment		
BPAC	See Attachment 8, Bicycle and Pedestrian Advisory Commission Memorandum		

A. Summary

This is a request to change the zoning designation of one 46.9-acre parcel and a 0.13-acre portion of a second parcel, totaling 47.03 acres, from RR to PDR 3.840 for 140 single-family units. The subject property is located on the south side of Cheek Road, west of Fletchers Chapel Road (see Attachment 1, Context Map). This project will require access to Cheek Road prior to the first certificate of occupancy. However, the property and entitlements for the required access are not part of this application.

This request is not consistent with the *Comprehensive Plan* which designates this property as Institutional and Very Low Density Residential (2 DU/Ac. or less). A plan amendment, Case A1000010, is requested from Institutional to Low Density residential (4 DU/Ac. or less). Staff is recommending approval of the plan amendment. A plan amendment is not required for the property designated as Very Low Density Residential (2 DU/Ac. or less) because there are no residential units proposed on this 0.13-acre portion.

Appendix A provides supporting information.

B. Site History

The majority of this site was annexed into the City, effective June 30, 2011. The initial zoning map change associated with this site, Case #Z1000014A, Cardinal Oaks Initial, was approved on June 20, 2011. This initial zoning was a direct translation from the Residential Rural (RR) district from County jurisdiction to City jurisdiction.

C. Review Requirements

Planning staff has performed a sufficiency review for this Zoning Map Change request (reference UDO Sec. 3.2.4, Application Requirements [general] and 3.5.5, Application Requirements [for a Zoning Map Change]). This staff report presents the staff findings per Sec. 3.5.8, Action by the Planning Director, on the request's consistency with the Unified Development Ordinance and applicable adopted plans.

This review is based primarily on compliance with any applicable laws, plans, or adopted policies of the City Council. Any issues or concerns raised in this report are based on best professional planning practice unless they have a basis in adopted plans, policies, and/or laws.

D. Unified Development Ordinance (UDO) Compliance

This request is consistent with the requirements of the Unified Development Ordinance. The associated development plan (Attachment 4, Development Plan reduction) provides the required elements for zoning map change requests in the PDR district (Sec. 3.5.6.D and Sec. 6.11.3). In addition, commitments in excess of UDO requirements have been made (see Appendix D for supporting information):

Graphic Commitments. Elements depicted on a development plan (including but not limited to labels and descriptive information) become commitments. A summary of graphic commitments (see Table D5, Summary of Development Plan) includes: housing type, project boundary buffer width, and locations of one potential stream and one potential wetlands crossing (Attachment 4).

Text Commitments. Text commitments have been proffered to commit to requirements in excess of ordinance standards. A summary of these commitments (see Table D5, Summary of Development Plan) includes: dedication of right-of-way, turn lanes on Cheek Road, off-site access to Cheek Road, and a sidewalk along the connection to Cheek Road.

Determination. The requested PDR 3.840 zoning district and associated development plan meets or exceeds the applicable requirements of the UDO. If this zoning map change request is approved, the attached development plan (Attachment 4) shall establish the level of development allowed on the property.

E. Adopted Plans

A zoning map change request must be consistent with the *Comprehensive Plan*. As such, other adopted plans have been included by reference in this document. Table E, Adopted Plans, in Appendix E identifies the applicable policies of the *Comprehensive Plan* and other adopted plans included by reference.

Determination. The requested zoning district and associated development plan are not consistent with Future Land Use Map of the *Comprehensive Plan*. The portion of the site that is proposed for single-family residential is currently designated as Institutional (see Attachment 3, Future Land Use Map). A plan amendment (Case A1000010) for this portion of the site has been requested to Low Density Residential (4 DU/Ac. or less).

Conditions in other adopted plans have been identified (see Appendix E, Table E):

Long Range Bicycle Plan Map 4.7. A proposed bicycle lane along Cheek Road is shown as a recommendation of the Long Range Bicycle Plan Map 4.7. This request has 25 feet of street frontage along Cheek Road and the development plan associated with this request indicates that the existing driveway at this location will remain. The extent of road improvements required of this project, if approved, along Cheek Road have not been determined.

Eastern Durham Open Space Plan. The Land Use and Development Goal of the Eastern Durham Open Space Plan is to ensure the preservation of eastern Durham's natural, historic and scenic features as the area continues to grow. The plan does not provide specific recommendations on how to achieve this goal as it relates to the subject property. Although the applicant indicates "the proposed development plan has been designed with sensitivity to the preservation of wildlife habitat and provides for nature trails and nature-based recreation such as trails, fishing, and environmental education" no commitments have been made regarding how this will be achieved.

F. Site Conditions and Context

Site Conditions. This site consists of 47.03 acres of property that is currently vacant and predominantly tree-covered with pine trees and areas, mostly in the stream buffer and along the northeast property boundary, that contain deciduous trees. The site is impacted by streams and stream buffers and has several small areas of isolated or linear unregulated wetlands.

Area Characteristics. This site is in the Suburban Tier in an area experiencing a transition from rural residential housing patterns to a suburban residential housing pattern. It is adjacent to the developing Cardinal Lakes subdivision with the zoning designation of PDR 2.980 to the south, a cemetery to the east, 1-2 acre single-family residential lots to the north and larger tract (up to 12 acres) single-family residential tracts to the west.

The site is within the F/J-B Watershed Protection Overlay.

Appendix F provides a summary of the uses and zoning in the more immediate vicinity of the subject site.

Determination. The proposed PDR 3.840 district meets the ordinance and policy requirements in relation to site and context and is a reasonable request given the surrounding uses and densities. However, the subject property is a large interior tract of land that does not have adequate direct access to the road system. Commitments for access to Cheek Road have been proffered to mitigate this concern, however the affected parcel is not part of this application.

It is important to note that the density of the developing Cardinal Lakes subdivision to the south, with a zoning designation of PDR 2.980, was calculated differently than the UDO currently requires. Presently there is no density credit given for property in required stream buffers or for the area of surface water which was the case when Cardinal Lakes was approved. For comparison purposes, if the density of Cardinal Lakes were calculated using the present standards, it would yield approximately 3.45 DU/Ac.

G. Infrastructure

The impact of the requested change has been evaluated to suggest its potential impact on the transportation system, water and sewer systems, and schools. In each case, the impact of the change is evaluated based upon a change from the most intense development using the existing land use and zoning to the most intense use allowed under the request.

See Appendix G for additional information.

Determination. The proposed PDR district is consistent with *Comprehensive Plan* policies regarding infrastructure impacts.

H. Staff Analysis

This request is not consistent with the *Comprehensive Plan*. The accompanying plan amendment (Case A1000010) is being recommended for approval to change the Institutional designation to Low Density Residential (4 DU/Ac. or less). If this plan amendment is approved this request would be consistent with the *Comprehensive Plan* and other adopted policies and ordinances. The development plan does not include property that will provide this development adequate access to Cheek Road, which will be required prior to the issuance of any certificates of occupancy.

I. Contacts

Table I. Contacts		
Staff Contact		
Amy Wolff, Senior Planner	Ph: 919-560-4137, ext. 28235	Amy.Wolff@DurhamNC.gov
Applicant Contact		
Adam Ashbaugh, LStar Management	Ph: 919-256-1981	adam@lstarland.com

J. Notification

Staff certifies that newspaper advertisements, letters to property owners within 600 feet of the site and the posting of a zoning sign on the property has been carried out in accordance with Section 3.2.5 of the UDO. In addition, the following neighborhood organizations were mailed notices:

- Inter-Neighborhood Council
- Partners Against Crime – District 1
- Gorman and Panther Creek Neighbors
- Fayetteville Street Planning Group
- Ellerbee Creek Watershed Association
- Friends of Durham
- Unity in the Community for Progress

K. Summary of Planning Commission Meeting September 13, 2011 (Case Z1000014)

Zoning Map Change Request: RR, PDR 2.98; F/J-B to PDR 3.84; F/J-B

Staff Report: Ms. Wolff presented the staff report.

Public Hearing: Chair Brown opened the public hearing. One person spoke in favor and three spoke against. Chair Brown closed the public hearing.

Commission Discussion: Commission discussion centered around access from Cheek Road, density, school impacts, and cut-through traffic.

Motion: Approval of the Plan Amendment. (Mr. Whitley, Ms. Board 2nd)

Action: Motion failed, 3-8 (Beechwood, Board, Brown, Harris, Martin, Monds, Whitley and Winders voting no and Jones recused).

Motion: Approval of the Zoning Map Change. (Mr. Whitley, Ms. Board 2nd)

Action: Motion failed, 3-8 (Beechwood, Board, Brown, Harris, Martin, Monds, Whitley and Winders voting no and Jones recused).

Findings: The Planning Commission finds that the ordinance request is not consistent with the adopted *Comprehensive Plan*. However, should the plan amendment be approved, the request would be consistent with the *Comprehensive Plan*. The Commission believes the request is not reasonable nor in the public interest and recommends denial based on problems of traffic congestion and inadequate transportation infrastructure, excessive impact on school facilities, and opposition from the community.

L. Supporting Information

Table K. Supporting Information		
Applicability of Supporting Information		
Appendix A	Application	Attachments: 1. Context Map 2. Future Land Use Map 3. Aerial Photography 4. Development Plan Reduction 5. Application 6. Owner’s Acknowledgement 7. Offsite Owner’s Acknowledgement 8. Submittal and Review History 9. Bicycle and Pedestrian Advisory Commission Memorandum
Appendix B	Site History	n/a
Appendix C	Review Requirements	n/a
Appendix D	Unified Development Ordinance	Table D1: Designation Intent Table D2: District Requirements Table D3: Environmental Protection Table D4: Project Boundary Buffers Table D5: Summary of Development Plan
Appendix E	Adopted Plans	Table E: Adopted Plans
Appendix F	Site Conditions and Context	Table F: Site Context
Appendix G	Infrastructure	Table G1: Road Impacts Table G2: Transit Impacts Table G3: Utility Impacts

		Table G4: Drainage/Stormwater Impacts Table G5: School Impacts Table G6: Water Impacts
Appendix H	Staff Analysis	n/a
Appendix I	Contacts	n/a
Appendix J	Notification	n/a
Appendix K	Summary of Planning Commission Meeting	Attachments: 10. Planning Commissioner’s Written Comments 11. Ordinance Form

Appendix A: Application Supporting Information

Attachments:

1. Context Map
2. Future Land Use Map
3. Aerial Photography
4. Development Plan Reduction
5. Application
6. Owner’s Acknowledgement
7. Offsite Owner’s Acknowledgement
8. Submittal and Review History
9. Bicycle and Pedestrian Advisory Commission Memorandum

Appendix D: Unified Development Plan Supporting Information

Table D1. UDO Designation Intent	
PDR	<p>Planned Development Residential: The PDR district is established to allow for design flexibility in residential development. The district is intended to encourage efficient use of land and public services and to promote high quality design that will provide a variety of dwelling types as well as adequate support services and open space for the residents of the development. The district regulations are intended to allow innovative development that is integrated with proposed adjacent uses and compatible with existing patterns of development.</p>
F/J-B	<p>Falls/Jordan District B Watershed Protection Overlay: The purpose this overlay district is to preserve the quality of the region's drinking water supplies through application of the development standards intended to protect the environment. In general, water supply protection will be accomplished by establishing and maintaining low intensity land use and development on land near the region's water supply rivers and reservoirs. Where high density development is desired, water supply protection will be accomplished through the use of engineered stormwater controls. The overall objective is to:</p> <ul style="list-style-type: none"> • Reduce the risk of pollution from stormwater running off of paved and other impervious surfaces; and • Reduce the risk of discharges of hazardous and toxic materials into the natural drainage system tributary to drinking water supplies.

Table D2. District Requirements – PDR			
	Code Provision	Required	Proposed
Minimum Site Area (acres)	6.11.3.B.1	4	47.03
Residential Density	6.11.3.C	Must be specified on plan	3.840 (DU/Ac.)
Maximum Height (feet)	6.11.3.C.3	35	35
Minimum Open Space (%)	6.11.3.F	16 (7.52 ac.)	31.89 (15 ac.)

Table D3. Environmental Protection			
Resource Feature	UDO Provision	Required	Proposed
Tree Coverage (%)	8.3.1C	20 (7.28 acres)	20.6 (7.51 acres)
Impervious Surface (%)	8.7.2B	70 maximum	70 (32.92 acres)
Stream Protection (buffer in feet)	8.5.4.B	100	100

Table D4. Project Boundary Buffers			
Cardinal Direction	Adjacent Zone	Required Opacity	Proposed Opacity
North	RR	0.2/0.2	0.2 (25-feet)
East	RR	0.2/0.2	0.2 (25 feet)
South	PDR 2.980	0/0	n/a
West	RR	0.2/0.2	0.2 (25 feet)
	PDR 2.980	0/0	n/a

Table D5. Summary of Development Plan		
Components	Description	Development Plan Sheet
Required Information	Intensity/Density. 3.840 DU/Ac. = 140 single-family units	D000/D100
	Building/Parking Envelope is appropriately identified.	D100
	Project Boundary Buffers. Appropriately identified.	D100
	Stream Crossing. One utility easement is shown impacting the stream buffer. (one crossing of the wetlands has been identified)	D100
	Access Points. Two (2) site access drives have been identified.	D100
	Dedications and Reservations. 10 feet right-of-way dedication along frontage on Cheek Road.	D000/D100
	Impervious Area. 70% = 32.92 acres	D100
	Environmental Features: The following protected environmental features have been identified: <ul style="list-style-type: none"> • Streams – 10.57 acres of stream buffers 	D100
	Areas for Preservation. There were no conditions identified that require preservation.	n/a
	Tree Coverage. 20.6% = 7.51 acres	D100
Graphic Commitments	Housing type will be single-family residential.	D000/D100
	Project boundary buffer width will be 25 feet where applicable on graphic sheet D100	
	Location of stream crossing and wetland crossing	

Table D5. Summary of Development Plan		
Text Commitments	<ol style="list-style-type: none"> 1. An additional 10 feet of right-of-way will be dedicated for the site frontage along Cheek Road. The right-of-way dedication will occur prior to the issuance of any building permits. 2. Eastbound and westbound left turn lanes on Cheek Road at the intersection with Carpenter Road will be provided. These improvements will be provided prior to the issuance of a certificate of occupancy. 3. An off-site access road connection between Cheek Road and the northern boundary of the development plan shall be provided on the adjacent Freeman parcel (PIN 0852-01-46-3299). This access road connection shall be constructed within a public right-of-way to minimum City of Durham and NCDOT Standards prior to the issuance of any certificate of occupancy. 4. A concrete sidewalk with a minimum width of 5 feet will be provided along one side of the proposed off-site street connection to Cheek Road on the adjacent Freeman parcel (PIN 0852-01-46-3299). 5. The area identified as “undisturbed open space except for utilities” on the Development plan (D100), shall be permanently protected as such. 6. Prior to the first Certificate of Occupancy, the Developer shall contribute a maximum of \$5,000 toward the installation of two traffic calming devices, if approved by City Transportation and Fire Department, along Cardinal Lake Drive. 	D000
SIA Commitments	Stormwater commitments have not been proffered.	n/a
Design Commitments	Not required for single-family residential development.	n/a

Appendix E: Adopted Plans Supporting Information

Table E. Adopted Plans	
Comprehensive Plan	
Policy	Requirement
Future Land Use Map	Institutional and Very Low Density Residential (2 DU/Ac. or less)
2.2.2b	Demand for Residential Land
8.1.2m	Transportation Level of Service
9.4.1a, b, c	Water Quantity and Quality Level of Service
11.1.1a	School Level of Service
Long Range Bicycle Plan	
Map 4.7 shows a proposed paved shoulder along Cheek Road.	
Eastern Durham Open Space Plan	
The subject property is with the boundaries covered by the Eastern Durham Open Space Plan. There are no specific recommendations in the plan that encumber this site.	

Appendix F: Site Conditions and Context Supporting Information

Table F. Site Context			
	Existing Uses	Zoning Districts	Overlays
North	Single-family residential	RR	F/J-B
East	Cemetery	RR	F/J-B
South	Single-family residential, multi-family residential	PDR 2.980	F/J-B
West	Single-family residential	RR, PDR 2.980	F/J-B

Appendix G: Infrastructure Supporting Information

Table G1. Road Impacts		
Cheek Road and Fletchers Chapel Road are the major roads impacted by the proposed zoning change. There are no scheduled NCDOT roadway improvement projects in the area.		
Affected Segments	Cheek Road	Fletchers Chapel Road
Current Roadway Capacity (LOS D) (ADT)	11,700	11,700
Latest Traffic Volume (AADT)	4,800	6,200
Traffic Generated by Present Designation (average 24 hour)*	590	
Traffic Generated by Proposed Designation (average 24 hour)**	1,417	
Impact of Proposed Designation	+827	

Source of LOS Capacity: FDOT Generalized Level of Service Volume Table 4-1 (2002)

Cheek Road: 2-lane major city/county roadway without left-turn lanes

Fletchers Chapel Road: 2-lane major city/county roadway without left-turn lanes

Source of Latest Traffic Volume: 2009 NCDOT Traffic Count Map

*Assumption (Max Use of Existing Zoning) – 54 single-family lots

**Assumption (Max Use of Proposed Zoning) – 140 single-family lots

Table G2. Transit Impacts
Transit service is not currently provided within ¼ mile of the site.

Table G3. Utility Impacts
This site will be served by City water and sewer.

Table G4. Drainage/Stormwater Impacts
The impacts of any change will be assessed at the time of site plan review.

Table G5. School Impacts			
The proposed zoning is estimated to generate 48 students. This represents an increase of 30 students over the maximum potential (if developed with the current zone) projected for the proposed development. Durham Public Schools serving the site are Merrick-Moore Elementary School, Neal Middle School, and Southern High School.			
Students	Elementary School	Middle School	High School
Current Building Capacity	15,871	8,647	9,951
Maximum Building Capacity (110% of Building Capacity)	17,458	9,512	10,946
20th Day Attendance (2009-10 School Year)	16,027	6,723	9,639
Committed to Date (July 2008–June 2011)	504	181	150
Available Capacity	927	2,608	1,157
Potential Students Generated – Current Zoning*	8	4	6
Potential Students Generated – Proposed Zoning**	21	11	16
Impact of Proposed Zoning	13	7	10

*Assumption (Max Use of Existing Zoning) – 54 single-family lots

**Assumption (Max Use of Proposed Zoning) – 140 single-family lots

Table G6. Water Supply Impacts	
This site is estimated to generate a total of 21,700 GPD if developed to its maximum potential with the proposed zoning district. This represents an increase of 13,330 GPD increase over the existing zoning district.	
Current Water Supply Capacity	37.00 MGD
Present Usage	26.88 MGD
Approved Zoning Map Changes (July 2008 –June 2011)	0.68 MGD
Available Capacity	9.44 MGD
Estimated Water Demand Under Present Zoning*	8,370 GPD
Potential Water Demand Under Proposed Zoning**	21,700 GPD
Potential Impact of Zoning Map Change	+13,330

Notes: MGD = Million gallons per day

*Assumption (Max Use of Existing Zoning) – 54 single-family lots

**Assumption (Max Use of Proposed Zoning) – 140 single-family lots

Appendix K: Summary of Planning Commission Meeting Supporting Information

Attachments:

10. Planning Commissioner’s Written Comments
11. Ordinance Form