Date: May 4, 2008

To: Chatham County Board of Commissioners (BoC)

From: Chatham County Environmental Review Board (ERB)
Subject: Parkers Springs EA Addendum – Peer Review by the ERB

As requested by the Board of Commissioners, the Chatham County Environmental Review Board has conducted a peer review of the Parkers Springs EA Addendum submitted to the on March 17, 2008. A subcommittee of the ERB met on April 22, 2008, and the full ERB voted to approve the recommendations of the subcommittee on April 24, 2008. The minutes from that meeting are attached.

Our general finding is as follows: The applicant has not produced a meaningful EA document (including the EA Addendum), and has not met the requirements of an EA as outlined in Section 5.2 of the Chatham County Subdivision Ordinance. The ERB cannot provide a peer review of unsubstantiated statements or inadequate information and use the document as the basis to make a recommendation to the Board of Commissioners regarding the potential environmental impacts of the proposed development.

The EA Addendum did not address many of the questions and concerns raised in the initial peer review recommendations in a memo to the BoC dated February 21, 2008, and the ERB unanimously agreed on April 24th that the EA and the Addendum do not sufficiently describe:

- a. The environmental impact of the proposed action;
- b. Any significant adverse environmental effects which cannot be avoided should the proposal be implemented;
- c. Mitigation measures proposed to minimize the impact;
- d. Alternatives to the proposed action;
- e. The relationship between the short term uses of the environment involved in the proposed action and the maintenance and enhancement of long term productivity; and
- f. Any irreversible and irretrievable environmental changes which would be involved in the proposed action should it be implemented.

Section 5.2A of the Chatham County Subdivision Ordinance specifically states it is the responsibility of the subdivider to provide such information on environmental impacts, and to provide information on how such impacts may be alleviated or minimized to the satisfaction of the Board of County Commissioners. The failure to provide reasonably adequate or accurate information under any item specified shall be cause for disapproval of the preliminary plat.

A few specific examples in the EA Addendum, dated March 17, 2008, provided by ECS Carolinas, LLP, that the ERB found to be deficient are as follows:

1. Alternatives are still not addressed. No alternatives to 50 lots and "no action" are provided, despite the existing conditions and concerns raised in the initial ERB peer review. Examples of alternatives could include a plan with fewer houses; a density that more closely matches that of the neighboring area and that considers potential water quality impacts; placement of lots and roads with consideration of soils, slopes, storm water, wildlife habitat, etc.; the elimination of the proposed Parker Creek stream crossing (and other stream crossings); or modifications in

stream crossings that result in less impact; less fragmentation of the remaining Big Woods Significant Natural Heritage Area, etc.

- 2. Impacts to Aquatic and Terrestrial Habitats are not sufficiently acknowledged or mitigated.
 - a. Impacts to streams and wetlands are not sufficiently addressed. Streams and wetland determinations on site should be reviewed by County staff, and the applicant should follow the minimum requirements of Section 304 of the Chatham County Watershed Protection Ordinance as revised in January 2008 for all surface waters on the property. Staff should review all surface waters identified on site, and review the proposed plans with respect to stream buffers (e.g., ensure utilities are not being proposed for buffers).
 - b. Impacts to the Big Woods Significant Natural Heritage Area are not sufficiently addressed. The EA Addendum (Pg. 7, Section 4.7) states that because the Big Woods Significant Natural Heritage Area (SNHA) was the "largest tract of unbroken forest remaining in the Triangle area," and the SNHA has already been fragmented by existing development, that therefore "the value of the Big Woods area in the Parkers Springs tract has already been compromised since it has already been effectively fragmented from the major Big Woods area to the north." This section does not provide information about what the impact to Aquatic and Terrestrial habitats will be from this development, where the tract contains significant habitat for numerous important aquatic and terrestrial species, especially area-sensitive species that require mature hardwood forests in close proximity to water and connected with other tracts that offer similar habitat (see Figure 1 below).

Figure 1. Aerial photo of southern Big Woods area, illustrating extent of intact hardwood forests connected to streams and Jordan Lake.

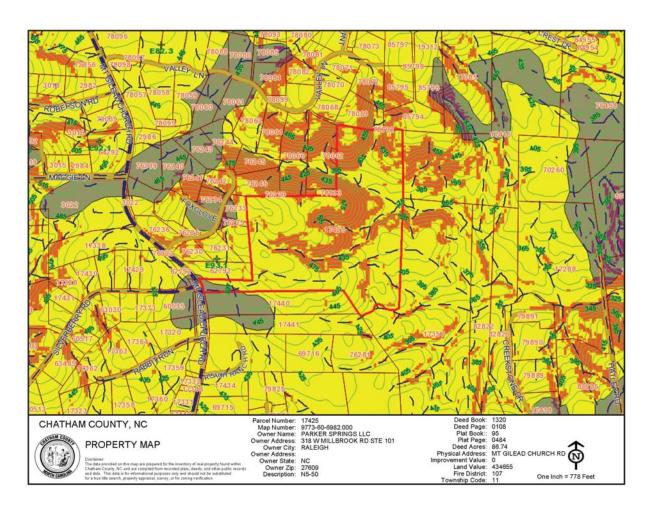


No development surrounding the proposed project has the density of this development, which will clearly destroy more habitat as it is replaced by houses. Parkers Creek serves as an important wildlife corridor, and the mature hardwoods on site provide core habitat. Impacts to these habitats have not been acknowledged or mitigated. This area (the Big Woods SNHA) was specifically included in both the Triangle GreenPrint (2002) and The Nature Conservancy (Smith et al. 2002) as an area important for water quality and natural areas in the region, and is a Resource Protection Area as designated in the Chatham County Land Conservation and Development Plan (see the ERB recommendations to the BoC dated February 21, 2008). Further, the EA Addendum does not address impacts to wildlife habitat by clearing that occurred in 2007 and was never acknowledged in the original EA.

- c. Impacts from development of steep slopes and potential sedimentation are not sufficiently addressed. The EA Addendum (Pg. 8, Section 4.7.1.1) states that "Potential impacts to aquatic habitat from sedimentation due to the slopes on the property is expected to be minimal because RLA will obtain a Sediment and Erosion Control Permit from the NC Division of Land Resources (DLR) and Chatham County, and will follow the requirements of those permits." The same language is used in the Addendum on Pg. 6 (Section 4.5.1) to describe impacts to water quality from sedimentation due to steep slopes -- " expected to be minimal." According to a document in this same Addendum (Appendix B), Parkers Springs LLC has already failed to comply with the Chatham County Sedimentation and Erosion Control Ordinance and received a Notice of Violation on February 21, 2008 for conducting land disturbing activity prior to obtaining a permit from the County. According to the report, the temporary stream crossings required by the plan were not installed and the machinery used to clear areas of the site was driven through jurisdictional stream features. This information does not support the expectation of minimal impacts described in the Addendum.
- d. Impacts to water quality from storm water are not sufficiently addressed. The letter dated December 18, 2007 from Keith Roberts, PE to Fred Royal, PE states that the internal streets were re-aligned in order to avoid areas of environmental interest. While this approach is to be commended, the EA and the Addendum do not describe how or what areas of interest were avoided. The EA and Addendum state that the street drainage will be designed with ditch sections and not curb and gutter "in order to avoid concentrated flows", and that the discharge points were "designed in a way to ensure pipe flows would be minimized and sheet flow utilized", but there was no discussion of what best management practices would be utilized to support this statement. Further, the applicant claims that the proposed 12% impervious surface will not have significant impact, yet provides no support for such a conclusion. Impacts are known with impervious surfaces of 10% and greater. Finally, secondary and cumulative impacts to Parkers Creek Recreation Area of Jordan Lake were not addressed.

3. Impacts from proposed development on steep slopes (15% slope or greater) was not addressed in neither the EA nor the EA Addendum. The EA Addendum suggests that impacts from development of steep slopes will be mitigated by adherence to the Chatham County Sedimentation and Erosion Control Ordinance, but this does not address avoidance, minimization and any irreversible and irretrievable environmental changes which would be involved in the proposed action should it be implemented. Activities proposed on these steeps slopes include roads, residential lots, water and other utilities and septic fields and systems. The extent of land clearing on site (clearing and grading) is still not addressed for road rights-of-ways and individual lots. Stormwater management from lots on steep slopes is not at all addressed. See below Figure 2 which illustrates the extent of steep slopes on the Parkers Springs subdivision site.

Figure 2. Steep slopes (15% or greater) on the Parkers Springs subdivision site shown in red shading. Slopes less than 15% shown in yellow. Soils with k-factor of 0.45 and greater are shown in grey.



4. **Impacts from the proposed wastewater system are not acknowledged.** The proposed actions are not defined or presented in a way that <u>acknowledges potential impacts from off-site septic</u> wastewater, including depth to groundwater.

In summary, no new information has been submitted that changes the ERB recommendations from February 21st.

Cc: Fred Royal, Director, Chatham County Environmental Resources Division Sally Kost, Chair, Chatham County Planning Board Keith Megginson, Director, Chatham County Planning Department