To: Chatham Board of Commissioners

From: Cynthia Crossen Date: April 16, 2007

Re: Follow-up on Stream Delineations and further comments on The Glens

Dear Board of Commissioners,

I have attached, and pasted in below, my more detailed account of the Stream Delineations done by NC DWQ on The Glens, as well as my additional comments on protecting these streams.

To summarize:

John Dorney and Eric Kulz corroborated the U.S. Army Corps of Engineers' assessments of Creek A, B, and C flowing from the McBane property (proposed The Glens development) onto my property.

The Developers of The Glens have made provisions to buffer Creek A and Creek C. I would like them to also protect Creek B. Although designated an "ephemeral creek", nonetheless this creek contains creek and wetland features such as Sphagnum moss and Isoetes (obligate wetland plants), Fontalis (a water moss that must stay submerged all the time), scuds and sowbugs, crayfish holes in the bank, and iron bacteria indicating groundwater seepage.

At this point, only Creek B is unbuffered. I would like to reiterate to you that, delineations aside, the reason to protect this creek in addition to the other two is that it drains a large area of land, and carries quite a bit of water often during the year. My goal is to keep the currently clean water carried by these creeks as clean as possible during and after this development is built. The protection of smaller creeks such as these is crucial in protecting our larger perennial streams, the Haw River, and Jordan Lake.

Thank for for any help you can give in protecting these streams,

Cynthia Crossen 1116 Marshall Road, Pittsboro, NC 27312 919-967-2500 (w); 919-542-3827 (h)

Full Report on Stream Delineation Assessment of McBane Property, by John Dorney and Eric Kulz of N.C. Division of Water Quality (DWQ), April 3, 2007; and Further Comments to the Board of Commissioners on These Creeks

By Cynthia Crossen, 1116 Marshall Road, Pittsboro, NC 27312; 919-967-2500 (w); 919-542-3827 (h)

Summary and Comments:

John Dorney and Eric Kulz corroborated the U.S. Army Corps of Engineers' assessments of Creek

A, B, and C flowing from the McBane property (proposed The Glens development) onto my property. (I have attached, and pasted in below, my more detailed account of the Stream Delineations done by NC DWQ on The Glens.)

The Developers of The Glens have made provisions to buffer Creek A and Creek C. I would like them to also protect Creek B. Although designated an "ephemeral creek", none-the-less this creek contains creek and wetland features such as Sphagnum moss and Isoetes (obligate wetland plants), Fontalis (a water moss that must stay submerged all the time), scuds and sowbugs, crayfish holes in the bank, and iron bacteria indicating groundwater seepage.

At this point, only Creek B is unbuffered. I would like to reiterate to you that, delineations aside, the reason to protect this creek in addition to the other two is that it drains a large area of land, and carries quite a bit of water often during the year. My goal is to keep the currently clean water carried by these creeks as clean as possible during and after this development is built. The protection of smaller creeks such as these is crucial in protecting our larger perennial streams, the Haw River, and Jordan Lake.

More Detailed Report:

John Dorney and Eric Kulz of DWQ came out to delineate the three streams that flow from the McBane property onto the Crossen land. The McBane property is the proposed site of The Glens, to be developed by Robbie Swain and Tommy Fonville. Allison Weakley of the Chatham Environmental Review Board joined us, in order to see these creeks firsthand, and learn with me more about stream and wetlands delineation.

I tried to get permission from the McBane owners via the developers, to go onto the McBane property with John and Eric for purposes of these stream delineations; that permission was not granted by the landowner.

John and Eric examined Creek A (the farthest west creek), on either side of my property border; some of that time they were within earshot of Allison and I. Using the DWQ Stream Delineation point system devised by John Dorney, they judged Creek A to be an intermittent stream, agreeing with the Army Corps stream delineation. Note: If I am reading their map correctly, S&EC deemed this creek "Marginal Waters/Linear Wetlands of the U.S. subject to the proposed Cape Fear Buffers (must be confirmed by the USACE and DWQ)". This creek is labeled "intermittent" on The Glens plan, and will be buffered for 50 feet on either side.

At Creek B, John and Eric were within earshot some of the time, so that Allison and I were able to ask a few questions about some of the salient features of intermittent and ephemeral streams. Again using the DWQ point system, they judged Creek B to be ephemeral, despite the presence of sphagnum moss and Isoetes (obligate wetland plants), scuds and sowbugs, crayfish holes in the bank, and iron bacteria indicating groundwater seepage. Although these features were present, they were deemed "weak". John's and Eric's delineation agreed with that of the Army Corps.

Fontinalis, a water moss that must stay submerged all the time, was found in Creek A, and believed by Allison Weakley to be also in Creek B. Note: John Dorney said at Creek A that they treat

Fontinalis as "algae" in their stream classification; however, it is a moss, not an algae.

At Creek B, we were joined by 4 S&EC staffers, including Sean Clark, James Graham, David Gainey (S&EC had done the original stream delineations); Keith Megginson of Chatham Planning Dept.; Nick Robinson, lawyer (I believe) for both the McBane's and the developers; and Tommy Fonville, developer of the McBane property.

At Creek C, John, Eric, and everyone else traveled quite a bit upstream of my border, out of eyesight and earshot of Allison and I, who were left on my border. After about 15-20 minutes, Tommy Fonville came back and said that he would take responsibility with the landowner for giving us permission to come onto the McBane property. We declined because we did not feel comfortable putting him in that position. At this point, Allison and I felt that most of the stream delineation discussion and noting of stream features would have already been accomplished. We were informed that Creek C, too, was deemed ephemeral by John and Eric.

A few days before, I had received the FOIA information from the Army Corps. Allison looked at this with me. Apparently, S&EC had judged Creek C to have an intermittent stretch up to my border "Waters of the U.S. subject to the proposed Cape Fear buffers {intermittent streams; must be confirmed by the USACE and DWQ)". The Army Corps "down-classified" this stream, calling it "non-jurisdictional", which means that this creek does not have to be buffered. This is the designation made by DWQ as well. However, as I understand it, the developers are buffering this creek 50' on either side, for most of the creek, except where stormwater features must be installed.