

MECKLENBURG COUNTY Land Use and Environmental Services Agency

July 19, 2006

Mr. David Barley Charlotte-Mecklenburg Planning Commission 600 East Fourth Street Charlotte, North Carolina 28202

Re: Rezoning Petition 2006-107 Approximately 1.29 acres located on the southwest corner of S. Bruns Ave and Sumter Ave.

Dear Mr. Barley:

Representatives of the Air Quality (MCAQ), Groundwater & Wastewater Services (MCGWS), Solid Waste (MCSW), Storm Water Services (MCSWS), and Water Quality (MCWQ) Programs of the Mecklenburg County Land Use and Environmental Services Agency (LUESA) have reviewed the above referenced rezoning petition. The following comments were provided:

Air Quality

No comment.

Groundwater & Wastewater Services

No comment.

<u>Solid Waste</u>

No comment.

Storm Water

No comment.

Water Quality

The Mecklenburg County Water Quality Program cannot support the rezoning of the subject property unless the comments and/or ordinances are implemented and appear on any revised site plans as notes and/or schematics.

The proposed project will include a substantial amount of impervious area, which will directly affect surface water quality due to storm water runoff from the project. Storm water runoff becomes contaminated with pollutants associated with the impervious area usage, transporting these pollutants to surface waters. In addition, this impervious area

PEOPLE • PRIDE • PROGRESS • PARTNERSHIP 700 N. Tryon Street • Suite 205 • Charlotte, NC 28202-2236 • (704) 336-5500 • FAX (704) 336-4391 www.4citizenhelp.com acts to increase the volume and velocity of storm water entering surface waters, which affects stream channel stability and negatively impacts water quality and aquatic habitat. In order to mitigate the impacts of these pollutants and to protect water quality conditions, the proposed project should incorporate the criteria specified below.

Stream Buffers

If applicable to the subject property, intermittent and perennial stream segments draining less than 100 acres shall be delineated by a certified professional using the U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology. The locations of streams and the required buffers shall be depicted on site plans.

If applicable to the subject property, a 35-foot protective buffer shall be established on both sides of intermittent and perennial stream segments draining between 50 acres and 100 acres. A buffer shall include two zones, a 20-foot undisturbed Streamside Zone, and a 15-foot limited-use Upland Zone. The allowable uses in these Zones are to be the same as those outlined in the City of Charlotte Zoning Ordinance, Chapter 12, Part 8, S.W.I.M. Stream Buffers, for streams draining greater than 100 acres, but less than 300 acres. If applicable to the subject property, all intermittent and perennial stream segments draining less than 50 acres should have a minimum 30-foot vegetated buffer including an undisturbed or bioengineered 10-foot zone adjacent to the bank. Disturbance of the buffer is allowed; however, any disturbed area in the 10-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques approved by MCWQP. All buffers shall be measured from the top of the bank on both sides of the stream.

Storm Water Quality Treatment

Any separate, defined drainage area within a project that will have greater than 24% built-upon area is to have water quality best management practices (BMPs) to treat storm water runoff from the entire built-upon area within the separate, defined drainage area. The BMPs are to be constructed to achieve 85% Total Suspended Solid (TSS) removal for the entire post-development runoff volume for the first 1-inch of rainfall. The BMPs must be designed and constructed in accordance with the N.C. Department of Environment and Natural Resources (NCDENR) Best Management Practices Manual, April 1999, Section 4.0.

The use of Low Impact Design (LID) such as bioretention systems in tree islands, grassed swales, vegetated buffers, level spreaders, and other innovative systems in a "treatment train" is optional and encouraged, where applicable. LID systems can be employed in whole or in part, to meet the 85% TSS treatment standard for storm water runoff. LID must be designed and constructed per the NCDENR Best Management Practices Manual, April 1999, Section 4.0.

Storm Water Volume and Peak Controls

Any separate, defined drainage area within a project that will have greater than 24% built-upon area is to have best management practices (BMPs) to control the entire runoff volume for the 1-year, 24-hour. The runoff volume drawdown time for the BMPs shall be a minimum of 24 hours, but not more than 120 hours. The peak runoff rates should be controlled with BMPs to match the predevelopment runoff rates for the 10-year and 25-

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year, 6-hr storms <u>or</u> perform a downstream analysis to determine whether peak control is needed, and if so, for what level of storm frequency.

Storm water runoff from the development shall be transported from the site by vegetated conveyances to the maximum extent practicable.

Please contact the staff members who conducted the reviews if you have any questions. The reviews were conducted by Rusty Rozzelle (<u>rozzers@co.mecklenburg.nc.us</u> with the MCWQ, Leslie Rhodes (<u>rhodelh@co.mecklenburg.nc.us</u>) with MCAQ, Scott Brown (<u>brownsl@co.mecklenburg.nc.us</u>) with MCSW, Bill Tingle (<u>tinglwr@co.mecklenburg.nc.us</u>) with MCSWS ,and Jack Stutts (<u>stuffjl@co.mecklenburg.nc.us</u>) with GWS.

Respectfully,

Rusty Rozzelle Water Quality Program Manager