



**MECKLENBURG COUNTY**  
Land Use and Environmental Services Agency

April 26, 2007

Mr. Solomon Fortune  
Charlotte-Mecklenburg Planning Commission  
600 East Fourth Street  
Charlotte, North Carolina 28202

**Re: Rezoning Petition 2006-119**  
**Approximately 4.00 acres located on the north side of Shamrock Road**  
**between Sharon Amity Road and Hickory Grove Road**

Dear Mr. Fortune:

Representatives of the Water Quality (MCWQ) Programs of the Mecklenburg County Land Use and Environmental Services Agency (LUESA) have reviewed the above referenced rezoning petition. In order for the Mecklenburg County LUESA to support this rezoning, the following recommendations should be implemented and appear as notes or modifications on site plans:

**Water Quality**

In order for the Mecklenburg County Water Quality Program to support this rezoning, the following recommendations should be implemented and appear as notes on site plans.

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 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.

**General Recommendations:**

***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-year, 6-hr storms or 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 (Rusty.Rozzelle@mecklenburgcountync.gov) with the MCWQ.

Respectfully,

Heidi Pruess  
Environmental Policy Administrator