



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

November 15, 2007

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

**Re: Rezoning Petition 2008-017**  
**Approximately 59.22 acres located on the south side of Freedom Drive**  
**between Allenbrook Drive and Toddville Road**

Dear Mr. Fortune:

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. 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:

**Air Quality**

The proposed project may be subject to certain air quality permit requirements in accordance with Mecklenburg County Air Pollution Control Ordinance (MCAPCO) Regulation 2.0805 - "Parking Facilities". A letter of notification and copy of the regulations will be mailed directly to the petitioner by MCAQ.

**Groundwater & Wastewater Services**

Based on review of property records, parcel 059-061-04 contains an existing water supply well located at the single family residence (constructed in 1931) facing Freedom Drive. The well must be protected from damage during site development or it must be properly abandoned prior to site work beginning. The Mecklenburg County Groundwater & Wastewater Services (GWS) Program should be contacted at 704-336-5500 prior to undertaking any well related activity.

An on-site wastewater disposal system (septic system) may also exist on the parcel. No regulation governs the abandonment of septic systems; however, GWS does recommend that septic tanks be pumped by a licensed waste hauler to removal any residual contents, and then crushed and backfilled. This recommendation is made because tanks that

collapse pose a safety hazard and improperly abandoned septic tanks may not be able to support the weight of vehicular traffic, structural foundations, or people.

Groundwater & Wastewater Services request the following statements be added to the notes of the site plan:

All water supply wells shall be protected by flagging and fencing during site development or abandoned per the Mecklenburg County Groundwater Well Regulations prior to any demolition or grading activity.

Existing septic tanks shall be located, pumped by a licensed waste hauler to removal residual contents, crushed and backfilled prior to any demolition or grading activity.

### **Solid Waste**

Mecklenburg County Solid Waste requests the petitioner submit a Solid Waste Management Plan prior to initiating demolition and/or construction activities to include, at a minimum, the procedures that will be used to recycle all clean wood, metal, and concrete generated during demolition and construction activities. Additionally, the plan should specify that all land clearing and/or inert debris shall be taken to a properly permitted facility. The Plan shall also state that monthly reporting of all tonnage disposed and recycled will be made to the Mecklenburg County Solid Waste Program. The report shall include the identification and location of all facilities receiving disposed or recycled materials.

Mecklenburg County is committed to reduction of construction/demolition waste. Technical assistance is available at no charge to those companies willing to partner with the County in this effort.

### **Storm Water**

No Comment.

### **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.

**A 100 foot undisturbed Watershed Buffer shall extend the full length of the main stem of Paw Creek throughout the project. Mecklenburg County will not support this petition unless the golf course is developed outside the Watershed Buffer.**

### **Applicable Ordinances:**

#### ***35 foot S.W.I.M. Buffer***

Two stream segments located on the subject property drain more than or equal to 100 acres and less than 300 acres. According to the City of Charlotte Zoning Ordinance, Chapter 12, Part 8- Surface Water Improvement and Management (S.W.I.M.) Stream Buffers, Section 12.804, *Buffer Standards*, streams meeting this criterion are required to have buffers of 35 feet in width on the applicable sides of the stream.

***100 foot S.W.I.M. Buffer***

A stream segment on the subject property drains greater than or equal to 640 acres. According to the City of Charlotte Zoning Ordinance, Chapter 12, Part 8- Surface Water Improvement and Management (S.W.I.M.) Stream Buffers, Section 12.804, *Buffer Standards*, streams meeting this criterion are required to have buffers of 100 feet in width, plus 50% of the Federal Emergency Management Agency (F.E.M.A.) Floodfringe. The buffers are required on the applicable sides of the stream measured from the top of the bank.

***Lower Lake Wylie Watershed Overlay District***

The subject property is located in the Lower Lake Wylie Watershed Overlay, Protected Area, as specified in the City of Charlotte Zoning Ordinance. The undisturbed perennial stream buffer and built-upon area requirements specified in the Zoning Ordinance shall apply to the property.

According to the project Site Plan, the property is to be developed as greater than 24% impervious area, which is the High Density option of the zoning Overlay, requiring 100-foot undisturbed buffers along all perennial streams. The High Density option of the zoning Overlay also requires that structural best management practices (BMPs) be employed to treat storm water from the site. The BMPs are to be constructed to treat the runoff generated from the first inch of rainfall for 85% Total Suspended Solids removal. All BMPs are to 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 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, Leslie Rhodes

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Respectfully,

Heidi Pruess

Environmental Policy Administrator