

# MECKLENBURG COUNTY Land Use and Environmental Services Agency Water Quality Program

# April 28, 2016

## **MEMORANDUM**

- To: Jeanne Quinn, Admin Support Supervisor
- From: David Caldwell, Environmental Supervisor
- Subject: Rezoning Petition: 2016-056

## **Comments are provided for the following petition:**

### **Rezoning Petition 2016-056**

Petitioner: Crescent Communities, LLC and Lincoln Harris
Location: Approximately 1,360 acres located west of I-485 at West Blvd. generally surrounded by I-485, Mt. Olive Church Road, Sadler Road, Lochfoot Drive, Bracebridge Court and Garrison Road.
Current Zoning: R-3, R-5, MH-O, I-1 (LLWPA)
Requested Zoning: MUDD-O 5 Year Vested Rights, MUDD-O (LLWCA) 5 Year Vested Rights, MX-2 (INNOV)(LLWPA) 5 Year Vested Rights
East Morehead St.
Current Zoning: B-1
Requested Zoning: MUDD-O

### **Comments:**

Mecklenburg County Storm Water Services recommends the following measures to aid in the protection of surface water resources within the RiverDistrict project. These measures are in addition to the environmental commitments outlined in the Crescent Communities Environmental Vision and Commitment document.

#### Water Quality Specialist

Provide a staff person dedicated solely to the protection of surface water resources. Duties to include the day to day inspection of erosion control measures and land disturbing activities, the routine

inspection of surface waters and all activities necessary to ensure the compliance with all water quality regulations and rezoning conditions.

#### Justification

A dedicated staff for water quality protection has proven to be effective in several other large development projects. This provides a point of contact for environmental regulators and provides piece of mind for the project developers that someone is always keeping a daily watch out for environmental issues.

#### Bathymetric Surveys

Conduct bathymetric surveys of the lake cove bottoms to document conditions pre and post development in order to monitor and assess potential impacts. The following coves are to be surveyed:

#### 1) Little Paw, 2) Lochfoot Dr. Cove, 3) Lynn Parker Ln. Cove, 4) Browns Cove

The frequency of monitoring is as follows: Pre development (one year prior to any land disturbing activities) and then annual assessments starting after land disturbing activity begins and continuing annually until one year after development is complete. All bathometric surveys should be performed in a manner consistent with the survey completed by Mecklenburg County Storm Water Services in Browns Cove in March 2016. Mecklenburg County Storm Water Services is agreeable to performing these surveys if the River District will cover all staff and equipment costs.

#### Justification

Sedimentation into lake coves can have devastating environmental, recreation and economic impacts. By collecting surveys annually of the conditions, it provides documentation that the project has not impacted the lake coves. If coves are impacted, it provides an estimation of the level of impact.

#### **Chemical Monitoring**

Perform chemical analyses on water in 2 coves (Little Paw and Lochfoot Cove) per standard Mecklenburg County lake sampling protocol. Parameters include: Temperature, DO, pH, Specific Conductance, Secchi, Fecal Coliform, E. Coli, Chlorophyll A, Nutrient Suite, Turbidity. Monitoring frequency to be 8 months per year (Jan, March, May, June, July, Aug, Sept, Nov) Monitoring to begin at least one year prior to land disturbing activity and continue until one year after development is complete. It is recommended that this monitoring be performed by Mecklenburg County Storm Water Services while conducting its routine lake monitoring activities. The River District is to pay the analytical costs associated with the added monitoring.

#### Justification

Mecklenburg County has no historical data on the above coves. This data will provide overall water quality conditions in the coves before and during the project.

#### Automated In-Situ Monitoring

Perform continuous in situ monitoring in any streams which are immediately downstream of active construction. Monitoring should begin prior to land disturbing activity and continue throughout construction until site is stabilized and grading permit is closed. Parameters to be measured are

turbidity, water level, and rainfall. Data must be immediately available via a network communication system and be able to provide immediate alerts to staff when thresholds are exceeded, which may indicate a failure of erosion control devices. It is recommended that this monitoring be performed by Mecklenburg County Storm Water Services. The River District is to pay all costs associated with the installation and maintenance of the monitoring site.

#### Justification

This monitoring will be valuable for detecting any potential erosion control failures and will allow the immediate notification to the project developers and regulators in order to minimize impacts.

#### **Biological Monitoring**

Conduct baseline biological monitoring in all stream draining greater than 50 acres. Monitoring should include a full assessment of fish and macroinvertebrate diversity.

#### Justification

This monitoring will provide a baseline for pre development biological conditions in the streams within the project. This data will provide a historical record of conditions and may be beneficial for future stream restoration projects within the project area.