Local Program Report to the SCC City of Charlotte, April 4, 2019

On April 4, 2019 personnel from the NCDEQ, Land Quality Section, conducted a review of the City of Charlotte's Erosion and Sedimentation Control Program. The City of Charlotte was last reviewed on 2/28/2012. The City has 7 staff members that currently contribute 6.5 full time equivalents to the erosion control program. The City requires a sediment and erosion control plan for sites that have one acre or more of total land disturbance. They also require enhanced erosion control for any projects that fall in one of their critical areas. Enhanced erosion control includes such requirements as basin designs for a 25-year storm event, fill slopes limited to 3:1, all storage basins must provide additional storage volume in a rock coffer forebay, potential required polyacrylamide use in basins and silt sacks, etc. In 2018, the City of Charlotte reviewed 1,361 erosion and sedimentation control plans (including re-reviews), approved 985 plans, and disapproved 253 plans. In the same year, the City conducted 3871 site inspections, issued 65 NOVs, and 53 CPAs. Charlotte currently has 477 active projects. During our review of the program, we reviewed three sets of plans, as well as inspected three job sites.

The following is a summary of the projects that were reviewed:

1. Freedom Drive

This project consist of 24.45 acres with 12.51 disturbed acres for residential development. The file for this project contained the plan, approval letter, calculations, inspection reports, and the FRO form. The deed was not in the file but is checked during the plan review using an online database. The erosion control plan was originally received on 4/4/2018 and finally approved on 10/2/2018 after a few resubmittals. The approved plan was adequate. This site has received 3 inspections, with the last inspection being conducted on 12/28/2018. The site was in compliance with the SPCA during the last inspection. No NOVs or CPAs have been issued to the site. The program inspector for this site had recently suffered an injury and was unable to walk the site during the time of the review. Because of this our inspection was conducted by the program administrator. During our inspection, the site was active and continued to be in compliance. When we arrived on site, we met with the General Contractor to receive updates on site work and asked him to join us on site walk. The program administrator made several comments to the general contractor about maintaining measures such as the construction entrance, and silt fence, as well as establishing temporary ground cover on new stockpiles and exposed slopes. The administrator also gave the contractor advice on how to redirect water towards a protected catch basin to prevent offsite sedimentation in a potential trouble area.

2. Sutton by the Lake

This project consists of 66.04 disturbed acres for residential development. This project is located within one of Charlotte's critical areas and required enhanced erosion control. The file for this project contained the plan, approval letter, calculations, inspection reports, and the FRO form. The deed was not in the file but is checked during the plan review using an online database. Both the FRO and approval letter listed this project as 65.09 disturbed acres however the plan had 66.04 acres. The original plan submittal was received on 11/16/2015and was finally approved on 8/9/2016. The approved plan was adequate. The site has had 31 inspections, with the last inspection being conducted on 3/29/2019. As of the most recent inspection, the site is no longer under an NOV. The site has received multiple NOVs and CPAs, with the most recent CPA of \$24,000 having been paid just prior to this review. The Charlotte inspector for this site was not available during the time of the review and thus our inspection was conducted by the program administrator. During our inspection, the site was active and in compliance with the SPCA but required some maintenance. While the issues mentioned in the NOV had been corrected, an old, permanently stabilized area had been redisturbed and needed to be reseeded. The work crew was actively building a few new basins, installing super silt fence, and repairing some damaged silt fence in a new phase of the project. The General Contractor asked the administrator his opinion on a redesign of one of the sediment basins that they were proposing, but the inspector needed calculations to be done before it could be approved.

3. Steele Creek Courtyard

This project consists of 3.5 disturbed acres for commercial development. The file for this project contained the plan, approval letter, calculations, inspection reports, and the FRO form. The deed was not in the file but is checked during the plan review using an online database. The FRO and plan did not have matching disturbed acreage. The original plan submittal was received on 9/28/2017 and was finally approved on 5/4/2018. The approved plan was adequate. The site had last been inspected on 1/16/2019 and was in compliance at the time. During our inspection the site was in compliance with the SPCA but required some actions to prevent them from falling out of compliance in the future. The Charlotte inspector recommended the contractor do the following: install/ finish installing inlet protection as specified on the plan, install temporary or permanent groundcover at the back of the curb in inactive areas as well as the inactive stockpiles, install riprap at end of active slope drain leading into the skimmer basin, and install concrete washout on site and ensure concrete slurry is captured and contained on site.

Conclusion:

During our review we found that the City of Charlotte is effectively implementing their Locally Delegated Erosion and Sediment Control Program. All the approved plans that were reviewed were adequate and project sites are inspected frequently. The City of Charlotte should implement the following the improve the program:

- 1. Require an agreement to be signed whenever the name on the FRO does not the name on the deed to prevent any land disturbance that was not permitted.
- 2. Make sure that the listed disturbed acreage matches across all submitted forms and plans during review.
- 3. Continue to add further details on inspection reports as well as photos to give contractor a better understanding of what needs correcting.
- 4. Continue to attend state-provided workshops to keep staff education current.
- 5. Continue to use Regional Office and Central Office as a resource to help with potential trouble sites.

Based on the review, staff will recommend "continuing delegation" for the City of Charlotte's Erosion and Sedimentation Control Program.

This report has been prepared based on the review of the City of Charlotte's Local Program conducted on 4/4/2019. This report will be presented to the Sedimentation Control Commission (SCC) on May 29, 2019.