

## **Local Program Report to the SCC City of Raleigh, May 19, 2022**

On March 24, 2022, personnel from the NCDEQ Land Quality Section conducted a formal review of the City of Raleigh Erosion and Sedimentation Control Program. The City of Raleigh was last reviewed on 2/9/2016. The City has 14 staff that contribute approximately 7 full time equivalents to the erosion control program. The City requires an erosion and sediment control plan for all projects disturbing greater than 12,000 square feet. Jurisdiction of the program covers all areas within the City of Raleigh corporate limits and extra territorial jurisdiction (ETJ). During the period of March 2021 through February 2022, the City conducted 726 plan reviews or re-reviews with 620 disapprovals issued before approving 106 plans. During this period, the City conducted 7,475 inspections and issued 14 NOVs. No CPAs had been issued during this period; however, the City reported that one was issued just prior to this period on 2/15/2021. The City stated that they can and will place a hold on all construction inspections and/or permits as an additional tool to bring a site into compliance. At the time of our review the City had 265 projects. On the morning of our review, the area received approximately 0.47 inches of rain. During our review of the program, we looked at four project files. Due to time constraints, we conducted inspections on only three projects.

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

### **1. Milburnie Ridge (File Review Only):**

This project consists of 45.3 acres disturbed for residential development. The project file contained the approved plan, letter of approval, design calculations, previous inspection reports and the FRO form. A copy of the property deed was missing from the project file. The approved plan for this project appeared to be adequate from a design standpoint, however the plans were missing a construction detail for silt fence. The plan for this project went through 4 review cycles and was approved by the City on 5/13/2021. Construction on this project began at the end of September 2021 and the City had conducted 11 inspections prior to the day of our review. The City had recently issued an NOV to this site on 2/28/2022. The FRP received the NOV on 3/8/2022 and was given 10-days to bring the site into compliance. The City conducted a follow up inspection on 3/18/2022 and found that while progress had been made to address the violations noted in the NOV a recent rain had prevented all corrective actions from being completed. The City allowed an extension of the deadline in order to resolve all remaining violations. The City conducted a follow-up inspection on 3/28/2022 and found that all corrective actions in the NOV had been completed.

### **2. Glenlake Office Building III:**

This project consists of 4.2 acres disturbed for commercial development. The project file contained the approved plan, letter of approval, design calculations, previous inspection reports and the FRO form. The disturbed acreage shown on the approved plan differed from the disturbed acreage indicated on the FRO form. A copy of the property deed was missing from the project file. The plan for this project went through 2 review cycles and was approved by the City on 12/1/2021. The approved plan for this project appeared to be adequate. This project began construction in December 2021 and the City had conducted 7 inspections prior to our review. The City found this site to be in compliance during its most recent inspection on 3/9/2022. No NOVs or CPAs have been issued to this project. On the day of our review, concrete for the parking deck basement was being poured. One inlet protection device needed to be maintained

and a section of slope needed to be stabilized. Perimeter silt fence and the remaining inlet protection devices appeared to be well maintained. The construction entrance had been installed and was well maintained. Self-inspection records were incomplete or improperly filled out. Obtaining coverage under the NPDES Stormwater Permit (NCG01) is the first step in the construction sequence of the approved plan. This project had not obtained coverage and was therefore out of compliance for failing to follow the approved plan. It should be noted that the local program is not delegated to enforce these violations. It is a request by DEMLR staff that the City monitor for violations of this nature and refer them to the DEMLR Regional Office. Overall, this site had measures installed and needed some general maintenance. No offsite sedimentation was noted. The City conducted a follow-up inspection on 3/31/2022 and found this site in compliance. The inlet protection device had been maintained and slopes matted.

### **3. Altair:**

This project consists of 10.6 acres disturbed for residential development. The project file contained the approved plan, letter of approval, design calculations, previous inspection reports and the FRO form. A copy of the property deed was missing from the project file. The plan for this project appeared adequate from a design standpoint; however, the plan was missing a construction detail for riprap aprons which were shown on the plans. The plan for this project underwent 4 review cycles and was approved by the City on 5/21/2021. This project started construction in July 2021 and the City had conducted 19 inspections prior to our review. The City found this site to be in compliance during its most recent inspection on 3/17/2022. No NOV's or CPAs have been issued to this project. On the day of our review, grading of the roadbed had begun and retaining walls were being installed. A stream crossing and culvert had been installed and stabilized per the approved plan. Rills had started to form along some slopes and needed to be repaired and restabilized; however, it appeared that the majority of slopes and completed areas were being stabilized properly. Inlet protection devices had been installed and appeared to be maintained. One sediment basin needed maintenance. The staking for the baffles left a long run with no support in the middle of the basin and the flexible arm of the skimmer was covered in mud which would not allow the skimmer to function properly as the water level rose. Overall, this site was out of compliance, needing to repair and maintain some measures. No offsite sedimentation was noted. The City conducted a follow-up inspection on 3/31/2022 and found that all corrective actions had been completed and the site was in compliance.

### **4. Stony Brook:**

This project consists of 4.75 acres disturbed for commercial development. The project file contained the approved plan, letter of approval, design calculations, previous inspections and the FRO form. A copy of the property deed was missing from the project file. The approved plan contained stabilization timeframes that contradicted those of the NCG01 permit, and the baffles shown on the plans were too close together and did not create equal sections. The plan for this project underwent 2 review cycles and was approved by the City on 10/7/2021. This project started construction in September 2021 and the City had conducted 8 inspections prior to our review. The City found this site to be in compliance during its most recent inspection on 3/17/2022. No NOV's or CPAs have been issued to this site. On the day of our review, utilities had recently been installed and the building pads were being prepared for foundations to be poured. Inlet protection devices throughout the site were installed and appeared well maintained. The construction entrance was maintained and functioning. Silt fence throughout the site needed to be maintained or repaired. The skimmer basin appeared to be functioning and stable, however

the baffles were not properly spaced. City staff recommended that an additional baffle be installed. Sediment loss was noted in the southeast corner of the site. Silt fence in this areas had recently been repaired per City guidance during previous inspections but was not keyed in properly and a small amount of sediment had been lost at this location just beyond the silt fence outlet. Slopes throughout the site needed to be stabilized. Overall, this site was out of compliance, needing to maintain silt fence, clean minor sediment loss and stabilize completed areas.

### **Positive Findings:**

During our review we noted a few positive aspects about the City of Raleigh Local Erosion and Sediment Control Program including:

- The City has a stricter criterion than the State when requiring an erosion and sediment control plan. The City requires a plan for all projects which will disturb greater than 12,000 sq. ft.
- The City requires that any 404/401 permits must be obtained and submitted as part of the complete application prior to the approval of the erosion and sediment control plan.
- The City is conducting inspections on a bi-weekly basis.
- The City requires a preconstruction meeting for all projects.
- The City provides reference to the NCG01 permit process in their approval letters and on the City website.

### **Issues Noted and Required Actions:**

During our review we found that the City of Raleigh Erosion and Sedimentation Control Program had deficiencies including:

- Documentation of land ownership was not kept in all project files.
- Letters of Disapproval are not being sent with the ability to track when the applicant receives the letter.
- A few inconsistencies were noted while reviewing approved plans and project files. On two plans, measures were proposed but a construction detail was not included for said measures. Also, on two projects the disturbed acreage indicated on the approved plan was larger than the disturbed acreage shown on the FRO form.
- City staff are not checking that self-inspection records are being properly filled out and kept onsite during site inspections.

The City shall implement the following changes to correct the deficiencies found during our review and noted above:

- Documentation of land ownership must be obtained prior to approval of a plan. 15A NCAC 04B.0188(c). City staff indicated that they will often verify an indicated landowner by searching the property deed themselves; however, a record of the deed is not kept in the project file. A copy of the property deed should be obtained and retained in each project file.
- When plans are reviewed and found to be inadequate, comments can be sent to the applicants and addressed within the 30-day review period prior to an official decision being rendered. Applicants can resubmit at any time prior to an official review decision being rendered. The disapproval of a proposed erosion and sedimentation control plan entitles the person submitting the plan to a public hearing if the person submits written demand for a hearing within 15 days after receipt of written notice of the disapproval.

G.S. 113A-61(c). The City should continue to render a review decision within 30-days from receiving a complete application but should start sending all official notices of disapproval with the ability to confirm receipt via Certified Mail or other means pursuant to G.S. 1A-1 Rule 4.

- While the City has developed a set of Standard Detail Drawings based on the Erosion and Sediment Control Planning and Design Manual allowing for consistency in the design and implementation of measures, staff have previously approved plans that were missing construction details. City staff should ensure that all measures proposed on the erosion and sediment plan include details for their construction. Staff should also ensure that information in the FRO form and the design calculations accurately reflect the conditions in the proposed plan.
- City staff should be checking for self-inspection records during site inspections. Self-inspections should be conducted for initial installation or modification of any erosion and sedimentation control devices and practices described in the approved plan as well as during or after each phase of the approved plan. G.S. 113A-54.1(e). and 15A NCAC 04B.0131. In addition to those required under the SPCA, weekly and rain-event self-inspections are required by federal regulations that are implemented through the NPDES Construction General Permit No. NCG010000.

#### **Recommendations for Improvement:**

DEMLR staff has also compiled a list of recommendations that would help to improve the program:

- The City stated that they were in the process of updating their local ordinance in accordance with the most recent Model Ordinance for Local Programs. Once the local ordinance is up to date, update all template letters and inspection reports to reflect the most current references to the North Carolina Administrative Code, General Statutes and City of Raleigh UDO. Template letters and inspection reports can be found on our Local Program Reporting SharePoint site.
- Monitor and provide guidance for NPDES violations including operating without a permit, improper concrete washout, and fuel containment on site during inspections. Note possible NPDES violations and refer to the NCDEQ Raleigh Regional Office when necessary.

#### **Conclusion:**

During our review we found that the City of Raleigh locally delegated erosion and sedimentation control program had a few minor deficiencies. The City needs to adjust their plan review practices and procedures to address the inconsistencies in disturbed acreage, missing construction details and missing documentation of property ownership. The City also must start sending letters of disapproval with the ability to track when the applicant receives the letter, as the applicant has the right to appeal the decision if requested within 15 days. Self-inspection reports as required under the SPCA should be reviewed during site inspections. It should be noted that the area received almost half an inch of rain during the morning of our review. Although all three sites inspected were out of compliance on the day of our review, one site only had minor maintenance needs and was out of compliance for failing to obtain coverage under the NCG01 permit and thus failing to follow the construction sequence on the approved plan along with additional violations of the NCG01 permit. Local programs are not delegated the authority to enforce the NCG01 permit. We ask that the City provide guidance and monitor for these types of violations but refer them to the State when necessary for enforcement. City inspection staff

demonstrated their ability to conduct adequate inspections and noted all the areas of concern and violations seen by State staff. The City demonstrated an adequate understanding of the Enforcement and Civil Penalty process. The City is using NOVs, CPAs and other enforcement tools when necessary to ensure compliance with the SPCA and Local Ordinance. Overall, the City demonstrated their knowledge and ability to effectively implement the local program's delegated authority.

DEMLR staff recommends to "Continue Delegation" of the City of Raleigh Erosion and Sedimentation Control Program.

This report has been prepared based on the formal review of the City of Raleigh Erosion and Sedimentation Control Program conducted on March 24, 2022 and will be presented to the Sedimentation Control Commission (SCC) during its 2022 Q2 meeting on May 19, 2022.