



North Carolina Department of Environment and Natural Resources  
**Division Energy, Mineral, and Land Resources**  
**Land Quality Section**

Tracy E. Davis, PE, CPM  
Director

Pat McCrory, Governor  
Donald van der Vaart, Secretary

August 2, 2016

Durham County  
Attention: Ryan Eaves  
120 East Parrish Street, 1<sup>st</sup> Floor  
Durham, NC 27701

Subject: Sedimentation and Erosion Control Local Program Review

Dear Mr. Eaves:

On July 28, 2016, Karyn Pageau conducted a review of the Durham County Local Program. Three staff positions contribute 2.5 full time equivalents to the erosion control program. The lead erosion control position was filled since our previous inspection. The county has 140 active projects. During the past year, the County has reviewed 148 plans, with 148 approvals (50 required additional revisions prior to approval), 0 disapprovals, and has conducted 1,573 inspections. The County issued 27 notices of violations, no stop work orders, and has assessed 1 civil penalty in the past 12 months. **Three projects were reviewed and inspected in the field. Two sites were in the Jordan Lake Watershed and 1 in the Neuse Watershed.**

**Weather and Soil Conditions:** **Hot, Sunny, Workable.** *Picture dates are incorrect, site inspected on 7/26/16.*

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

**1. Sierra Phase 1/Laurel Grove (Fendol Farms) (submitted 8/21/14, approved ?)**

This site is a 150.6 acre residential project. The file for this project did contain adequate documentation. The erosion and sediment control plan was approved and was not adequate. Per our previous review, additional sediment controls needed for site, phased erosion control needed, additional runoff conveyance and basins needed for clearing and grubbing phase, no information shown on the plans for existing streams to be crossed, and no calculations for supporting erosion and sediment control measures. The site was last inspected on 6/21/16 and was found out of compliance. The site was under a Notice of Continuing Violations at time of inspection with DWR, DEMLR, and Durham County. The site was not active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to take all reasonable measures, insufficient measures to retain sediment on site, inadequate buffer zone, and failure to maintain erosion control measures.

Corrective Actions: 1) A revised plan is needed to provide a phased erosion and sediment control plan with additional runoff conveyance and sediment control/storage. Additional conveyances provided should outlet into a sediment basin prior to leaving site. 2) Additional groundcover is needed on site. Repair and stabilize bare and eroded areas around site. 3) Removal of sediment from stream and buffer zones should be accomplished to the satisfaction of DWR. Removal of

offsite sediment. 4) Maintenance and repair of perimeter sediment silt fence and check dams is needed. 5) Continue slope drains to the toe of the slope.

Comments: Provide adequate ground cover on all bare and inactive areas. A revised plan is needed immediately to prevent further offsite deposition to adjacent properties and stream. Additional sediment controls need to be installed immediately to prevent further offsite deposition. Corrective actions have been taken including sediment removal from a stream location. Sub-contractor onsite making repairs during our site visit. This site has a high potential for additional offsite sediment.

2. **Meadows at SouthPoint** (*revised plan submitted 10/10/14, approved 10/22/14*)

This site is a 31.85 acre commercial project. The file for this project did include adequate documentation. The erosion and sediment control plan was approved and appeared adequate. The last inspection was conducted on 7/25/16 and the site was not in compliance and an NOV was to be drafted based on this inspection. The site has received a Notice of Violations previously. The site was active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, insufficient measures to retain sediment on site, failure to take all reasonable measures, and failure to maintain erosion control measures.

Corrective Actions: 1) Maintain and repair silt fence and silt fence outlets and sediment basin located along perimeter of site. Provide check dam type silt fence outlet downstream of sediment basin outlet. 2) Provide groundcover on slopes of sediment basin and other areas on site. 3) Use concrete washout area located onsite. 3) Removal of sediment from stream and buffer zones should be accomplished to the satisfaction of DWR.

Comment: Overseed sparsely vegetated areas. Provide ground cover on all bare and inactive areas.

3. **West Pettigrew Parking Deck** (*submitted 5/4/16, approved 5/24/16*)

This site is a 4.3 acre commercial project. The file for this project did contain adequate documentation. The erosion and sediment control plan was approved and was adequate. Site has no previous inspections and has not received a Notice of Violations. The site was active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to take all reasonable measures, and failure to maintain erosion control measures.

Corrective Actions: 1) Install basins and diversions. 2) Install adequate inlet protection.

Comments: Provide adequate ground cover on all bare and inactive areas. Site is denuded. Construction started recently.

**Conclusion:**

The Durham County Local Program has hired a Stormwater and Erosion Control Division Manager and created an Inspections Supervisor since their last program review. The newly created position is expected to be advertised soon, increasing the Program from 2.5 to 3.5 FTEs. The staff has also attended NCDOT Level 1 and 2. DEMLR presented a training manual/book on behalf of the Sedimentation Commission to Ryan Eaves for erosion and sediment control training webinar that was purchased for the program and provided a last minute opportunity for a staff member to attend the NCDOT Level 3 course. The program is also actively using the decision tree for enforcement protocols presented at the May 2016 SCC meeting. The local program should implement the following recommendations to improve the program:

- 1) Continue to check for self-inspection records on site.
- 2) Remember to implement all of the new NPDES requirements during the plan review process. Ensure sequence for converting sediment basins to permanent stormwater measures (including dewatering sequence), stream crossing sequence/detail and sediment control, the use of slope drains, concrete washout areas, and the use of flocculants are considered during the plan approval process.
- 3) Organize paperwork in files to adequately document the plan review process, including calculations, landowner authorizations, DWR authorizations, and buffered sites that fall in the Upper Falls Lake or Jordan Lake Watershed.

A summary of the review will be presented to the Sedimentation Control Commission (SCC) on August 4, 2016. Staff recommends continuing the delegation under the condition that the Local Program continues to implement the enforcement procedures, advertisement of the newly created position, evaluate the integrity and consistency of inspections and enforcement, while working with the Raleigh Regional Office on plan reviews with the understanding that a formal review of this Local Program will be presented at the August 2017 SCC Meeting. Staff will provide an update at the February 2017 Commission meeting, based on the Commission's decision. Thank you again for the efforts of you and your staff to protect the State's waters from sedimentation.

Sincerely,



Karyn Pageau, EI, CPESC  
Regional Engineer Associate

cc: John Holley, PE, CPESC, Raleigh Regional Engineer  
Joe Dupree, Senior Environmental Specialist



Site 1 – Stream crossing needs additional upstream runoff conveyance and sediment storage.



Site 2 – Silt fence undermined causing erosion on downstream slope.



Site 3 – Inlet protection blocked with compacted fill.



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August 2, 2016

City of Greenville  
Attention: Scott Godefroy  
1500 Beatty Street  
Greenville, NC 27834

Subject: Sedimentation and Erosion Control Local Program Review

Dear Mr. Godefroy:

On July 26, 2016, Richard Peed and Karyn Pageau conducted a review of the City of Greenville Local Program. Two positions would contribute 1.4 full time equivalents to the erosion control program, however these positions are currently vacant and the program is being managed by the City Engineer and another member of his staff. The city has 27 active projects. During the past year, the City has reviewed 33 plans, with 21 approvals and 12 disapprovals, and has conducted 17 inspections. The City has issued 6 notice of violations and no civil penalties have been assessed in the past 12 months. **Three projects were reviewed and inspected in the field. Two projects were located in the Neuse and one in the Tar-Pamlico River Basin.**

**Weather and Soil Conditions:** **Hot, Sunny, Workable.** *Picture dates are incorrect, site inspected on 7/26/16.*

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

**1. Berkley Apartments** *(submitted 10/28/13, approved 11/7/13)*

This site is a 19.5 acre multi-family residential project. The file for this project included adequate documentation. The erosion and sediment control plan was approved and was not adequate. Some details were not shown on the drawings for planned sediment and erosion control measures, also NPDES requirements not shown including concrete washout areas, stockpiles, groundcover stabilization timeframes. The last inspection was conducted on 1/27/16 and the site was out of compliance and received a Notice of Violations. The site was active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to submit a revised plan, failure to provide groundcover; failure to take all reasonable measures, unprotected exposed slopes, and failure to maintain erosion control measures.

Corrective Actions: 1) Maintain construction entrance, additional clean stone is needed. 2) Provide groundcover on stockpiles. Remove stockpile located within 50 ft of curb or yard inlets. 3) Maintain perimeter silt fence and provide additional silt fence upstream of sediment basin along tree line. 4) Additional clean stone needed at yard inlets, especially in ditch adjacent to construction entrance. 5) Provide revised plan to include concrete washout area and ditch disturbance. 6) Provide copy of NPDES/Self-Inspection records.

Comment: Provide adequate ground cover on all bare and inactive areas. A revised plan is needed to show lined concrete washout with detail. Site has a high potential for offsite sediment.

2. **Greenville U-Haul** (submitted 2/9/16, approved 4/12/16)

This site is an 8.2 acre commercial project. The file for this project was missing the deed and the easement for utility installation. The erosion and sediment control plan was approved and was adequate. No inspections were documented in the file. The site has not received a Notice of Violations. The site was not active at the time of the inspection and was **in** compliance.

Corrective Actions: 1) Maintain and add clean stone at construction entrance and yard inlets. 2) Repair breach in silt fence.

Comments: Provide adequate ground cover on all bare and inactive areas.

3. **Morgan Printers** (submitted 12/28/15, approved 1/20/16)

This site is a 1.4 acre commercial project. The file for this project did contain adequate documentation. The erosion and sediment control plan was approved and was adequate. No recent inspections were documented in the file. The site has not received a Notice of Violations. The site was not active at the time of the inspection and was **in** compliance.

Comments: Project is completed. Continue to overseed sparsely vegetated areas until dense groundcover is achieved.

**Conclusion:**

The City of Greenville Local Program has made changes since our last review including requiring phased erosion and sediment control plans, pre-construction meetings, and all the new files were well organized. The local program plans to make an offer to a candidate for the CE1 position that is vacant and is interviewing for the CE2 position that is vacant. DEMLR presented a training manual/book on behalf of the Sedimentation Commission to Scott Godefroy for erosion and sediment control training webinar that was purchased for the program. Their plan is to provide this to the new employees once hired. The local program should implement the following recommendations to improve the program:

- 1) Continue to check for self-inspection records on site.
- 2) Remember to implement all of the new NPDES requirements during the plan review process including concrete washout area and stockpile locations.
- 3) Document inspections made on each of approved sites. Projects should be inspected at least monthly. These inspection reports should be located in the project file folder.
- 4) Organize paperwork in files to adequately document the plan review process, approval letters/certificate of plan approvals, FRO forms, inspection reports, deeds, and landowner authorization letters (when applicable).

A summary of the review will be presented to the Sedimentation Control Commission (SCC) on August 4, 2016. Staff will recommend continued probation of this delegation. Thank you again for the efforts of you and your staff to protect the State's waters from sedimentation.

Sincerely,

A handwritten signature in cursive script that reads "Karyn Pageau". The signature is written in black ink and is centered below the word "Sincerely,".

Karyn Pageau, EI, CPESC  
Regional Engineer Associate

cc: Samir Dumpor, PE, Acting Washington Regional Engineer  
Richard Peed, CPESC, Regional Engineer Associate





Site 1 – Poor groundcover observed on eroding stockpile areas.



Site 2 – Sediment in street at construction entrance.



Site 3 – Groundcover establishment underway on completed site.