

Action Item B Local Program Reviews

City of Raleigh

On November 5, 2013, Ashley Rodgers, John Holley, and Matt Poling conducted a review of City of Raleigh's Local Program. Fourteen positions contribute 7 full time equivalents. The city has 221 current projects. The city has reviewed 445 plans, with 197 approvals and 248 disapprovals. The city has conducted 7,675 inspections, issued 134 notices of violations, 5 civil penalties, in the amount of \$580,000, and 1 stop work order in the past 12 months. Six projects were reviewed and inspected. Four of the six projects inspected were in compliance.

The City of Raleigh's Local Program is visiting sites on a frequent basis, which is appreciated. The local program should also implement the following recommendations to improve the program:

- 1) Continue to check for self-inspection records on site.
- 2) Provide the new combined self-inspection form when approving erosion control plans.
- 3) Document when slopes have been graded or areas are left idle in the comments section of inspection reports in order to establish a time frame for establishing ground cover.

Staff recommends continued delegation.

Durham County

On November 21, 2013, Joe Dupree, Karyn Pageau, and Matt Poling conducted a review of Durham County's Local Program. Three positions contribute two full time equivalents. The County currently has 75 projects and has reviewed 100 plans, with 69 approvals and 31 disapprovals. The County has conducted 1,736 inspections, issued 13 notices of violations, and no civil penalties in the past 12 months. Five projects were reviewed and inspected. Four of the five sites were in compliance.

Durham County's Local Program is visiting sites on a frequent basis, which is appreciated. The local program should also implement the following recommendations to improve the program:

- 1) Continue to check for self-inspection records on site.
- 2) Provide the new combined self-inspection form when approving erosion control plans.
- 3) Document when slopes have been graded or areas are left idle in the comments section of inspection reports in order to establish a time frame for establishing ground cover.

Staff recommends continued delegation.

Wake County

On December 4, 2013, Joe Dupree, Karyn Pageau, Gray Hauser, and Matt Poling conducted a review of Wake County's Local Program. Eight positions contribute five full time equivalents. The County currently has 270 projects and has reviewed 145 plans, with 91 approvals and 54 disapprovals. The County has conducted 3,987 inspections, issued 7 notices of violations, 1 stop work order, and 2 civil penalties in the past 12 months. Six plans were reviewed in the office and five projects were evaluated in the field. Two of the five sites inspected in the field were in compliance.

Wake County's Local Program is visiting sites on a frequent basis, which is appreciated. The local program should implement the following recommendations to improve the program:

- 1) Continue to check for self-inspection records on site.
- 2) Provide the new combined self-inspection form when approving erosion control plans.
- 3) Document when slopes have been graded or areas are left idle in the comments section of inspection reports in order to establish a time frame for establishing ground cover. The county should pursue providing ground cover more aggressively during site inspections. This necessitates providing written inspection reports, and not just making database entries.
- 4) As a minimum, inspection reports should be filled out on a monthly basis and placed in the project folder. Contractors should be made aware of how their projects are doing more often.
- 5) Plan reviews for the county should focus more on water conveyance. Slope drains should be required for slopes over 10 feet in height to insure that stormwater is being conveyed in a non-erosive manner down slopes.
- 6) Plan reviews for the county should require construction details and better construction sequences for stream crossings.

In addition, the following details and specifications provided by Wake County need to be updated:

- 1) The silt fence detail should include the burying of the toe of the fabric into a trench and not just covering the skirt. A 4" wide and 8" deep trench is standard.
- 2) The sediment storage volume for custom basins should be 3600 cubic feet per disturbed acre since they do not dewater from the surface. Also, the bottom dewatering holes should be 18 inches above the bottom of the basin.

Staff recommends continued delegation contingent upon the County's adoption of these recommendations.



Environmental Services

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January 3, 2013

Mr. Gray Hauser, Jr., PE, State Sediment Specialist
Mr. Matt Poling, PE, assistant State sediment Specialist
NC Dept. of Environment and Natural Resources
Division of Energy, Mineral and Land Resources
1612 Mail Services Center
Raleigh, NC 27604

Re: Response to 12/16/2013 Letter - Sedimentation and Erosion Control Local Program Review

Dear Mr. Hauser and Mr. Poling,

Wake County appreciates the input received from the State as a result of the regular programmatic reviews conducted by your office. The joint site visits with State staff are particularly helpful as it gives us the opportunity to discuss best management options based on actual field conditions. Below is our response (in red) to your comments and recommendations based on the program review conducted on December 4, 2013.

Gray's Creek Subdivision

Corrective Action:

1. *Provide adequate ground cover on all bare and inactive areas.*

This plan was approved in 2007, prior to the State's adoption of the current ground cover requirements. However, we will encourage the developer to voluntarily comply with the current seeding timeframes.

12/20/13 inspection – paving of roads underway, curbing has been installed and backfilled. Seeding needs to be done.

1/2/14 – Spoke with FRP about paving status. First course of asphalt is complete. Requested seeding ASAP.

1/3/14 - Met the contractor on site. Road shoulders backfilled and seeded where paving complete. Back entrance to site has been seeded up to the creek crossing. The shoulders at the creek crossing have not been seeded as utility work is still underway. There has been no sediment loss. Discussed seeding and matting shoulders to be on the safe side. The seeding crew will return early next week.

Alston Pond S/D Phases 1, 2, 4 & 5 (Alston Ridge)

This site remains under a NOV as some corrective actions have not been completed as of January 3, 2014.

Corrective actions:

1. *Additional slope drains are needed throughout the site. Please submit a revised erosion and sediment control plan that adequately utilizes slope drains throughout the site.*

Following the inspection on 12.4.13 and issuance of a subsequent NOV, the engineer of record was contacted and Wake County staff discussed the issues and the possible corrective actions (slope matting and runoff conveyance) to be included in the requested plan amendment.

Maintenance was performed immediately following the NOV that included removal of sediment from the wooded area (which was within the limits of disturbance), installation of a temporary swale to direct water away from the back slopes, installation of a slope drain, and repair of the impacted slope erosion. The use of the swale and slope drain did not appear to fully address the problem due to the location of the sole slope drain.

The engineer suggested measures that were in place during an inspection on January 3, 2014 which consisted of matting and seeding of all back slopes, berm stabilization, and the addition of another slope drain that more adequately addresses the problem. The engineer was also informed that other slopes within the project limits should also be addressed in the plan amendment to prevent any future issues.

As of January 6, 2014, a plan amendment has not been submitted. Surveyors are surveying the existing slope on January 7th to also address an issue of nonconformance with the approved plan. Once surveyed, the plan will be submitted for modification. The deadline for this submission is Friday, January 17, 2014.

2. *Repair and maintain all inlet protection throughout the site.*

Maintenance on inlet protection was performed immediately as requested by NOV. During an inspection on January 3, 2014, inlets were in need of maintenance again. Wake County will continue to inspect to ensure compliance.

3. *Provide adequate ground cover on all bare and inactive areas.*

Wake County will continue to inspect bare area and inactive areas and document to ensure compliance with stabilization timeframes.

Wake County will continue to pursue the corrective actions required for this site. An inspection report was sent to the FRP on January 6, 2014.

Everett Crossing Subdivision

Corrective Actions:

1. *Repair, maintain and stabilize, Skimmer Sediment Basin #1. Also rock rip rap pad should be placed under skimmer to prevent it from being stuck in the mud.*

Complete.

2. *Finish installing Skimmer Sediment Basin #2.*

Complete.

3. *Provide adequate ground cover on all bare and inactive areas.*

Complete.

4. *Provide slope drains or equal to convey runoff.*

Additional matting was placed adjacent to the retaining walls to prevent sediment loss.

1/3/14 inspection - site disturbed again for installation of utilities. No activity due to rain.

Adeline at White Oak

Corrective Action:

1. *Provide adequate ground cover on all bare and inactive areas. Stabilize erosion on bank of stormwater pond below culvert outlet.*

12/06/13 - Contacted contractor by phone on 12-6-13. Spoke with him regarding concerns from State inspection. Scheduled a site meeting.

12/11/13 - Met contractor on site to discuss repairs to areas that we talked about at state inspection.

12-18-13 - Inspected site. Contractor has installed outlet device and riprap dissipater above private roadway culvert. A horseshoe filter has been installed around private roadway culvert. Area around pond remains unchanged due to planned grading scheduled for early January which will include tree removal and stabilization. The outlet then will be incorporated into that grading operation.

Cotton Place

Comments:

1. Continue to provide adequate ground cover on all bare and inactive areas.

This was a newly disturbed site and while bare areas may have been present, none were past the regulatory time frames required for stabilization. The site is monitored weekly and areas that are past the stabilization time frames will be noted and reported.

2. Repair and maintain silt fence throughout site as needed.

In regards to maintaining silt fence, no breeches were noted or observed during the site visit. There may have been slight build up from recent heavy rains, none however that warranted an NOV or maintenance inspection report. Again the sight is monitored weekly and any accumulation of sediment or breeches of silt fence will be noted and reported.

Conclusion:

1. Continue to check for self-inspection records on-site.

Agreed.

2. Provide the new combined self-inspection form when approving erosion control plans.

Wake County provides a copy of form and discusses related obligations with the developer at the pre-construction conference.

3. *Document when slopes have been graded or areas are left idle in the comments section of inspection reports in order to establish a time frame for establishing ground cover. The County should pursue providing ground cover more aggressively during site inspections. This necessitates providing written inspection reports, and not just making database entries.*

We will make more notes regarding groundcover on our inspection reports. The County's mainframe system is our official repository for notes on inspections. The County administers the erosion and sedimentation control program for 8 jurisdictions in the County, as well as RTP and the building inspections program for numerous jurisdictions. It is imperative that our inspection records be easily entered, searchable and accessible to ensure efficient interdepartmental and multi-jurisdictional coordination. Digital records are also necessitated due to limited staff. Given the workload of approximately 4000 inspections a year, duplicative recordkeeping is infeasible. When this issue came up before in a prior program review, we agreed on an acceptable alternative to providing hardcopy inspection reports in the file on all inspections. That alternate was to provide notes on all inspections in the mainframe (which can be printed out as needed) and that we would issue hard copies of the inspection reports associated with NOVs.

4. *As a minimum, inspection reports should be filled out on a monthly basis and placed in the project folder. Contractors should be made aware of how their projects are doing more often.*

Sites with active grading are inspected on average once a week. Watershed Managers meet with contractors in the field as issues arise when conducting inspections. If the contractor is not available on site, then the Watershed manager calls the contractor to discuss issues. If the contractor has a history of failure to follow-up, an email is sent to the cover the issues that need to be addressed. Re-inspections are conducted to ensure follow-up.

5. *Plan reviews for the county should focus more on water conveyance. Slope drains should be required for slopes over 10 feet in height to insure that stormwater is being conveyed in a non-erosive manner down slopes.*

Agreed.

6. *Plan reviews for the County should require construction details and better construction sequences for stream crossings.*

Agreed.

In addition, the following details and specifications provided by Wake County need to be updated:

- 1) The silt fence detail should include the burying of the toe of the fabric into a trench and not just covering the skirt. A 4" wide and 8" deep trench is standard.

Agreed.

- 2) The sediment storage volume for custom basins should be 3600 cubic feet per disturbed acre since they do not dewater from the surface. Also, the bottom dewatering holes should be 18 inches above the bottom of the basin

Agreed.

Again we, appreciate the support of the State as we work together to ensure the ongoing success of Wake County's sedimentation and erosion control program. If you have any questions or need additional information, please feel free to call me at 919-841-8830.

Sincerely,



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Cc: Britt Stoddard, Director of Water Quality, Wake County Envr. Services