## DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES

# SEDIMENTATION CONTROL COMMISSION MEETING

10:00 A.M. Thursday November 16, 2023

# ONLINE MEETING via TEAMS In-Person Meeting: ARCHDALE BUILDING GROUND FLOOR HEARING ROOM

If you have any questions concerning this meeting, please contact Julie Coco at (919) 707- 9215

#### **AGENDA**

#### North Carolina Sedimentation Control Commission Business Meeting

Ground Floor Hearing Room
Archdale Building
512 N. Salisbury Street
Raleigh North Carolina
This meeting will be held at the above location and via webinar.

November 16, 2023, 10:00 AM

The Elections and Ethics Enforcement Act mandates that the Chair inquire as to whether any member knows of any known conflict of interest or appearance of conflict with respect to matters before the Commission. Executive Order 34 requires any member to recuse herself or himself from voting on any matter before this Commission which would confer a financial benefit on the member. If any member knows of a conflict of interest, appearance of a conflict, or possible financial benefit please so state at this time.

Dr. Susan White, Chair, Presiding

#### I. Preliminary Matters

- A. Call to Order
- B. Recognition of Those Attending
- C. Swearing in of New Members, if Present
- D. Approval of Meeting Minutes from August 1, 2023 meeting

#### II. Action Items

- A. 2024 & 2025 Local Program Workshops Ms. Rebecca Coppa Staff are requesting approval of funds for a contract with the WRRI to assist in the planning and execution of these annual workshops.
- B. Buncombe County Review Ms. Davy Conners Staff are presenting findings and recommending continuing delegation with review of this program.
- C. City of Archdale Review Mr. Graham Parrish

  Staff are presenting findings and recommending continuing delegation of this program
- D. Town of Lake Lure Review Mr. Graham Parrish

  Staff are presenting findings and recommending continuing delegation of this program

- E. Town of Cary Review Ms. Davy Conners

  Staff are presenting findings and recommending continuing delegation of this program
- F. County of Lincoln Program Review Ms. Davy Conners

  Staff are presenting findings and recommending continuing delegation of this program
- G. County of Rowan Ordinance Review Ms. Julie Coco Staff are asking the members to approve changes to the program's ordinance.
- H. NCDOT Annual Program Review Mr. Graham Parrish Staff are presenting findings and recommending continuing the delegation of this program.

#### **III.** Information Items

- A. NCDOT, DOH-NCDEQ, DEMLR Memorandum of Agreement Ms. Julie Coco Staff are asking the members to review updates to this memorandum last approved in 1991 and appended in 2003.
- B. Lincoln County Ordinance Review Ms. Julie Coco Staff are asking the members to discuss proposed changes to the program's ordinance as part of an informal review.
- C. Commission Technical Committee Update Mr. Mark Taylor *The Committee Chair will provide an update on this committee's meetings.*
- D. Land Quality Section Active Sediment Cases and Enforcement Ms. Julie Coco Staff will report on the status of Civil Penalty Assessments, action on Civil Penalty Assessments, and Judicial Actions.
- E. Education Program Status Report Ms. Rebecca Coppa Staff will report on Sediment Education Program activities.
- F. Sediment Program Status Report Ms. Julie Coco Staff will report on LQS's current statewide plan approval, inspection, and enforcement activities.
- G. Land Quality Section Vacancy Report Mr. Toby Vinson Staff will provide a report on the current number of vacancies in the Section and other LQS activities.
- H. Legislative Updates Mr. Toby Vinson
  Staff will provide an update on the progress of bills affecting DEMLR or Local
  Programs

#### I. 2024 Commission Meeting Dates

Commission meetings are scheduled for next year on the following dates: February 21<sup>st</sup>, May 23<sup>rd</sup>, August 1<sup>st</sup> and November 21, 2024.

#### IV. Conclusion

- A. Remarks by DEMLR Interim Director
- B. Remarks by Commission Members
- C. Remarks by Chairman
- D. Adjournment

#### I. Preliminary Matters

- A. Call to Order
- B. Recognition of Those Attending
- C. Swearing in of New Members, if Present
- D. Approval of Meeting Minutes from August 1, 2023

#### **MINUTES**

#### NORTH CAROLINA SEDIMENTATION CONTROL COMMISSION

#### AUGUST 1, 2023

GROUND FLOOR HEARING ROOM, ARCHDALE BUILDING
RALEIGH, NORTH CAROLINA

The North Carolina Sedimentation Control Commission met on August 1, 2023, at 10:00 a.m. in person in the Ground Floor Hearing Room of DEQ's Archdale Building located at 512 N Salisbury St, Raleigh, and remotely. The following persons were in attendance (either in-person or remotely) for all or part of the meeting.

#### **COMMISSION MEMBERS**

Dr. Susan White (Chair)

Mr. Benjamin Brown (Vice Chair)

Mr. Michael Taylor

Mr. James Lamb

Dr. Richard McLaughlin

Ms. Emily Sutton

Ms. Marion Deerhake

Mr. Mark Taylor

#### **OTHERS**

Douglas Ansel, Assistant General Counsel and Acting Director, DEMLR Toby Vinson, Program Operations Chief, DEMLR

Julie Coco, State Sedimentation Specialist, DEMLR Rebecca Coppa, State Sedimentation Education Specialist, DEMLR Davy Conners, Environmental Program Consultant, DEMLR Josh Kastrinsky, Public Information Officer, DEMLR Paula Chappell, Notary Public, NCDEQ Anne Deaton, NCDEQ Division of Marine Fisheries Jimmy Johnson, Albemarle-Pamlico National Estuary Partnership Sarah Zambon, Commission Counsel, Attorney General's Office Ryan Carter, Environmental Conservation Ryan Eaves, Durham County Jonathan McNeill, Durham County Jay Gibson, Durham County Jeevan Neupane, Wake County Karyn Pageau, Wake County Sarah McAllister, City of Monroe Sila Vlachou, City of Monroe Travis Welborn, City of Greenville

Josh Canup, Rowan County
Joseph Alm, Gaston County
Joshua Baird, Town of Clayton
Alexandra Farrell, Southern Environmental Law Center
Mike Wallace, Haw River Assembly
Robert Freedland

#### **PRELIMINARY MATTERS**

Dr. Susan White called the meeting to order at 10:05 am.

Dr. White read Executive Order No. 1 regarding avoidance of conflict of interest. She asked if anyone has a known of a conflict of interest or potential conflicts. None heard.

Those in attendance introduced themselves.

Dr. White asked for a motion to approve the minutes from the May 23, 2023, meeting. Mr. Michael Taylor moved to approve the minutes. Ms. Emily Sutton made a second. The motion passed.

#### **ACTION ITEMS**

#### **Town of Clayton Local Program Review**

Ms. Davy Conners presented the findings from her review of this program. Staff's recommendation was to continue the county's delegation with review for a period of 6 months with a follow up report to be presented at the 2024 Q1 meeting. A discussion ensued. Ms. Marion Deerhake encouraged the local programs to work with the Division of Water Resources for cleanup and restoration in buffers, waters, or wetlands. Ms. Sutton recommended the Town of Clayton staff attend training such as the Local Program Workshop or Designers Workshop during the review period. Dr. McLaughlin stated he would like to see evidence of staff training as part of the 2024 Q1 follow-up review report. Mr. Benjamin Brown made a motion to approve the recommendation made by the DEMLR staff. Ms. Sutton made a second; the motion passed.

#### **Durham City/County Local Program Review**

Ms. Conners presented the findings from her review of this program. Staff's recommendation was to continue the program's delegation. A discussion ensued. Dr. White and Ms. Sutton encouraged the program to make the GIS dashboard tool available to the public. Mr. Michael Taylor made a motion to approve the recommendation made by the DEMLR staff. Mr. James Lamb made a second; the motion passed.

#### **Durham City/County Memorandum of Agreement**

Ms. Julie Coco provided an overview of the Memorandum of Agreement between Durham City/County and the Sedimentation Control Commission. Mr. Michael Taylor made a motion to allow the Chair to sign the MOA on behalf of the Commission. Ms. Sutton made a second; the

motion passed.

#### **Gaston County Local Program Review**

Ms. Conners presented the findings from her review of this program. Staff's recommendation was to continue the county's delegation. Ms. Sutton made a motion to approve the recommendation made by the DEMLR staff. Mr. Brown made a second; the motion passed.

#### **City of Greenville Ordinance Review**

Ms. Coco provided an overview of the city's ordinance. Ms. Sarah Zambon reminded the commission that an informal review had been conducted during the February 21, 2023, SCC meeting and that the ordinance had been adopted by the city. Ms. Zambon recommended that the Commission approve the ordinance. A discussion ensued. Mr. Lamb moved to approve the ordinance. Dr. McLaughlin made a second; the motion passed.

#### **INFORMATION ITEMS**

#### **City of Monroe Ordinance Review**

Ms. Coco introduced the city's ordinance and proposed changes for an informal review by the members. A discussion ensued. Ms. Coco informed the commission that the notes sections of the model ordinance were not intended to be in the body of the ordinance adopted by the local programs. Ms. Zambon stated that the note about who has the burden in an appeal should be in the body of the model ordinance in its next update.

#### **Rowan County Ordinance Review**

Ms. Coco introduced the county's ordinance and proposed changes for an informal review by the members. A discussion ensued.

#### **Coastal Habitat Protection Plan**

Jimmy Johnson, Coastal Habitats Coordinator for Albemarle-Pamlico National Estuary Partnership, and Anne Deaton, Habitat Assessment Supervisor for the Division of Marine Fisheries, presented on the Coastal Habitat Protection Plan and discussed the impacts of sedimentation on coastal habitats.

#### **NCDOT Report**

Ms. Coco presented that NCDOT received one trout buffer waiver from DEMLR for the previous quarter. No ICA reports were issued by NCDOT for the previous quarter. Ms. Deerhake noted that the EMC approved the reclassification of several streams including trout waters in Watauga County. Ms. Coco stated that she was aware of the reclassifications and had made the regional offices aware of it, as well.

#### **Commission Technical Committee Update**

Mr. Mark Taylor, the Chair of the Committee, shared that the committee continues to meet monthly to review practice standards. The committee recently completed a draft of the skimmer basin practice standard, for DEMLR's review. The committee is in the process of increasing membership and, with the help of the commission, is vetting 11 candidates to fill 6 open positions. Dr. White commended Mr. Mark Taylor for his leadership on this technical committee, Ms. Rebecca Coppa for her coordination support, and DEMLR for their technical support.

#### **Land Quality Section Active Sediment Cases and Enforcement**

Ms. Coco reported on the status of civil penalty assessments and judicial actions.

#### **Education Program Status Report**

Ms. Coppa provided an update on the Education Program including two early education summer camps programs that she was involved with and teacher trainings for STEM teachers. The annual Designers Workshop is scheduled for December 6, 2023, and will be held both in-person at the McKimmon Center and virtually.

#### **Sediment Program Status Report**

Ms. Coco reported on the Land Quality Section's statewide plan approvals, inspections, and enforcement activities. Numbers were available through the end of June.

#### **Land Quality Section Vacancy Report**

Mr. Vinson reported that there are 37 or 38 vacancies within the regional offices that deal with the Sedimentation Program. Current available positions include those for engineers, environmental program consultants, and environmental specialists. The Department continues to work to fill these vacancies.

#### **Status of Draft House Bills**

Mr. Ansel reported on the status of bills in the legislature that might affect the Sedimentation Program. The General Assembly is completing its current session. There is not much happening with House Bill 579. House Bill 488 was vetoed by Governor Cooper and is on the calendar for August 7 for the vote to be overridden.

#### CONCLUSION

#### **Remarks by Division Director**

Mr. Ansel stated that he will likely step down as the Acting Director after the end of this General Assembly's session.

#### **Remarks by Chairman**

Dr. White thanked Commission members for their participation in person and online and the DEMLR staff for their organization.

#### Adjournment

The Chair adjourned the meeting at 1:15 pm.

Julie Coco, State Sediment Engineer Division of Energy, Mineral, and Land Resources

William Vinson, Jr.
Chief of Program Operations
Division of Energy, Mineral, and
Land Resources

Susan White (Chair)

Sedimentation Control Commission

#### II. Action Items

- A. 2023 & 2024 Local Program Workshops Ms. Rebecca Coppa
- B. Buncombe County Review Ms. Davy Conners
- C. City of Archdale Review Mr. Graham Parrish
- D. Town of Lake Lure Review Mr. Graham Parrish
- E. Town of Cary Review Ms. Davy Conners
- F. County of Lincoln Review Ms. Davy Conners
- G. County of Rowan Ordinance Review Ms. Julie Coco
- H. NCDOT Annual Program Review Mr. Graham Parrish

### Local Program Report to the SCC Buncombe County, November 16, 2023

On October 11, 2023, personnel from NCDEQ, DEMLR conducted a formal review of the Buncombe County Erosion and Sedimentation Control Program. The County was last reviewed and presented to the Sediment Control Commission on October 15, 2019. The County requires an erosion and sediment control plan for all projects disturbing 1.0 or more acres and for Hillside Developments disturbing ¼ or more acres. Hillside Development is defined by the County Ordinance as subdivisions where the average natural slope is 25% or greater. Jurisdiction of the program covers the unincorporated areas of the County and within the towns of Woodfin, Weaverville, Biltmore Forest, Black Mountain, and Montreat. The program consists of two staff whose positions contribute full-time to erosion and sedimentation control. During the previous year from September 2022 through August 2023, the County conducted 140 plan reviews or rereviews, issued 53 approvals and 39 disapprovals. During this period, the County conducted 1703 inspections and issued 21 Notices of Violation, no Civil Penalties, and 1 Stop Work Order. The County can issue building permits and inspection holds as additional tools to bring sites into compliance. Although these tools had not been utilized in the past year. When plans are submitted to the County, they are reviewed and either "Approved with Modification" or, if found to be inadequate, "Disapproved", with notification of the decision being sent to the applicant. The Letters of Disapproval were being sent via certified mail and contained necessary language informing the applicant of their right to appeal; however, the timeframe for appeal was 60 days instead of the statutory requirement of 15 days. Additionally, Letters of Approval with Modification were not being sent with the ability to track receipt and did not notify the applicant of their right to appeal. It appeared that many of the modifications listed in these approvals were standard comments not related to the Erosion and Sediment Control Plan but rather general permitting processes and other developmental requirements. Approval with modifications should be sent when minor changes to the proposed ESC plan are needed but a complete revision is not necessary. Additional requirements or processes in the overall developmental permitting should not be listed as modifications to the ESC plan approval. At the time of our review the County had 325 active projects. During our review of the program, DEMLR staff looked at three project files and conducted site inspections on two of those projects.

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

#### 1. The Village (paperwork review only due to time constraints):

This project consists of 3.46 acres disturbed for commercial development and is located within the Upper French Broad Subbasin of the French Broad River Basin. The project file contained the approved plan, letter of approval with modification, design calculations, a copy of the property deed, previous inspection reports, and a digital copy of the FRO form. The FRO form did not include all parties listed on the property deed and no written letter of landowner consent was included in the file. The County should verify that all landowners are included on the FRO form and obtain landowner consent if the landowner differs from the FRP. The County should retain the notarized original FRO form. The County received the complete application on October

14, 2021, and underwent 2 review cycles before issuing the approval with modification letter on March 28, 2022. A review cycle starts when the package is deemed complete and ends when a plan has been approved, approved with modification, or disapproved. Not all review cycles for this project were completed within the statutory timeframe. The approved plan appeared to be adequate. The County issued an NOV to this project on February 25, 2022, for conducting land disturbing activities without an approved plan. The County had conducted 3 inspections prior to our review; the most recent inspection was on April 12, 2023, and had found the site was in need of stabilization. A site inspection was not conducted on this project due to time constraints.

#### 2. Villages at Bradley Branch Lots 61-76:

This project consists of 2.86 acres disturbed for residential development and is located within the Upper French Broad Subbasin of the French Broad River Basin. The file contained the approved plan, letter of approval, previous inspection reports and the FRO form. A copy of the property deed was not retained within the project file; however, County staff was able to retrieve it online through the register of deeds. This project consisted of 16 single family residential lots within a common plan of development and a standard single family lot plan was submitted for approval. The County received the complete application on February 7, 2023, and issued the approval letter on February 14, 2023. The County's standard single family lot plan package reflects the State's package. The approved plan appeared to be adequate. The County had conducted 2 inspections prior to our review, and no NOVs or CPAs had been issued to this project. During our review, vertical construction of the homes was underway. One silt fence outlet on lot 75 needed to be maintained and stone refreshed. The inlet protection devices behind lots 73, 74, and 75 needed to be maintained. The slopes behind the lots needed to be stabilized, in particular lots 64-68 were recommended to be hydroseeded to establish vegetation and prevent rill erosion. The silt fence and construction entrances for each lot were being maintained. Overall, this site was in compliance with some maintenance issues noted.

#### 3. Creekside Community:

This project consists of 29.3 acres disturbed for residential development and is located within the Upper French Broad Subbasin of the French Broad River Basin. The project file contained the approved plan, letter of approval, design calculations, previous inspection reports and the FRO form. The FRO form did not include an area for businesses to list their Registered Agent information. Any business doing work in the state of North Carolina must be registered with the NC Secretary of State (NC SOS) and must have a Registered Agent responsible for forwarding any legal notices to the business. The County should update its FRO form to include Registered Agent information and should verify this information with the NC SOS website. A copy of the property deed was not retained within the project file; however, County staff was able to retrieve it online through the register of deeds. The County received the complete application for this project on November 7, 2022, and after two review cycles, approved it on May 10, 2023. Not all review cycles for this project were completed within the statutory timeframe. The plans appeared to be adequate. The County conducted 2 inspections of the site prior to our review, the most recent on October 3, 2023, noted that vegetative stabilization and dust control were needed. No NOVs or CPAs had been issued to this project. During our review, mass grading was underway with little stabilization. Diversion ditches throughout the site had been graded over and were not function per the approved plan. Sediment basins throughout the site were missing baffles and basin slopes needed to be stabilized. Conversion of numerous basins to the permanent stormwater design had begun and one basin had been relocated without approval by the County. Inlet protection measures needed to be installed throughout the site. Perimeter silt fence was missing from a long stretch adjacent to Brevard Road and the gravel residential road bordering the site. Skimmer device outlets needed rock outlet protection. Overall, this site was out of compliance for failure to follow the approved plan, failure to provide exposed graded slopes or fills with temporary ground cover sufficient to restrain erosion, and failure to install and maintain all temporary and permanent ESC measures as required by the approved plan. The County issued an NOV and Stop Work order on October 13, 2023, in response to this inspection.

#### **Positive Findings:**

During the review DEMLR Staff noted positive aspects about the Buncombe County Local Erosion and Sedimentation Control Program including:

- The County has a more restrictive criterion than the State as to when an Erosion and Sediment Control Plan is required. Plans are required for all projects disturbing 1 acre or greater and for Hillside Developments disturbing ¼ acre or greater. Hillside Development is defined by the County Ordinance as subdivisions where the average natural slope is 25% or greater.
- The County requires a preconstruction meeting for all projects prior to a grading permit being issued. Staff state they require proof of coverage under the NCG01 permit at the preconstruction meeting.
- The County requires that erosion and sedimentation control measures, structures and devices be planned, designed, and constructed to provide protection from the calculated-maximum peak of runoff from the 25-year storm.
- County staff has the ability to place holds on various permits and construction inspections as additional tools to bring sites into compliance.

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

During the review DEMLR Staff found that the Buncombe County Erosion and Sedimentation Control Program had deficiencies including:

- When plans are submitted to the County, they are reviewed and either "Approved with Modification" or, if found to be inadequate, "Disapproved", with notification of the decision being sent to the applicant.
  - Letters of Disapproval were being sent via certified mail and contained necessary language informing the applicant of their right to appeal; however, the timeframe for appeal was 60 days instead of the statutory requirement of 15 days.
  - Letters of Approval with Modification were not being sent with the ability to track receipt and did not notify the applicant of their right to appeal. These Letters of Approval with Modification were being used as Approval Letters with standard comments unrelated to the Erosion and Sediment Control Plan.
- Staff stated that they verified property ownership during plan review, however, a copy of the property deeds were not always being retained in the project file.

- The FRO form did not include an area for businesses to list their Registered Agent information. Any business doing work in the state of North Carolina must be registered with the NC Secretary of State and must have a Registered Agent responsible for forwarding any legal notices to the business.
- The FRO form did not include all parties listed on the property deed and no written letter
  of landowner consent was included in the file for one of the projects. Additionally, the
  County's template Landowner Authorization form did not contain language explicitly
  granting permission from the landowner to the FRP to conduct land disturbing activities.
- For some of the projects, ESC plans were not reviewed by the County, a decision rendered, and sent to the applicant within the statutory timeframe.
- The County's monthly activity reports and project file reflect a low inspection frequency of between 2-3 months.

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

- The disapproval or modification of any proposed erosion and sedimentation control plan by a local government shall entitle 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 or modification. § 113A-61(c).
  - The County should update the Letter of Disapproval to notify the recipient of their right to appeal within 15 days instead of 60 days. Template letters with references to the NCAC and state statute can be found on our <u>Local Program SharePoint</u> <u>Reporting site</u>.
  - The County should send all Letters of Approval with Modification, with the ability to track receipt, and notify the recipient of their right to appeal. The County should send Letters of Approval in cases where no modifications of the plan are necessary. The County can add language referencing standard comments and additional developmental approval requirements to their standard letter of approval.
- Documentation of land ownership must be obtained prior to approval of a plan. 15A NCAC 04B.018(c). The County should retain land ownership documentation in the project file.
- The County should update its FRO form to include Registered Agent information and should verify this information with the NC SOS website.
- Except for certain utility construction, if the applicant is not the owner of the land to be disturbed, the erosion and sediment control plan must include the landowner's written consent for the applicant to submit a plan and to conduct the land-disturbing activity. G.S. 113A-54.1(a). The County should obtain a letter of consent when the landowner(s) and FRP differ and retain this in the project file. The County's template Landowner Authorization form should contain language explicitly granting permission from the landowner to the FRP to submit the erosion and sediment control plan application and conduct land disturbing activities.

- Once a complete application is received, plans are to be reviewed and the person submitting the plan notified that it has been approved, approved with modifications, or disapproved within 30 days of receipt of a new plan and within 15 days of receipt of a revised plan. G.S. 113A-61(b) and MOA Part III.C.1 & 3. Staff should ensure that plans are being reviewed and notices of the official review decisions are being sent within the statutory timeframes.
- The County will need to increase inspection frequency in order to effectively monitor projects for compliance with the SPCA and local ordinance. The Sedimentation Control Commission has long viewed an inspection frequency of monthly to generally be adequate. Staff stated that a new position which would contribute time to the ESC program has been approved for next fiscal years budget.

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

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

- It is recommended to review the local ordinance to ensure that the most recent state statutes and administrative codes are reflected and to update all template letters to reflect any changes.
- It is recommended that the County continue to monitor and provide guidance for NPDES violations including operating without a permit, improper or incomplete self-inspection records and improper concrete washouts. Note possible violations and refer to the NCDEQ Asheville Regional Office when necessary.

#### **Conclusion:**

During our review we found that the Buncombe County locally delegated erosion and sedimentation control program had a few deficiencies. The County will need to ensure that plans are reviewed, and the review decision sent to the applicant within the appropriate statutory timeframes. The County will need to update the Letter of Disapproval language to reflect the correct statutory timeframe requirements. The County will need to adjust its process to send Letters of Approval when no modifications are needed and send Letters Approval with Modification with the ability to track receipt and include notification of the applicants right to appeal. The County will need to update its FRO form to include business registered agent information, verify, and retain documentation of land ownership, and obtain landowner consent when the FRP differs from the landowner(s). The County has the ability to issue stop work orders and place holds on various other inspections. Staff stated that they will utilize these additional tools to bring sites into compliance. The County has a more restrictive criterion than the State as to when an Erosion and Sediment Control Plan is required. The County requires a preconstruction meeting for all projects. The County is currently reporting a low inspection frequency. This was evident in the project files and onsite. The County will need to increase inspection frequency to sufficient levels to ensure active projects are compliant with the SPCA and local ordinance. Staff stated that a new position has been approved for the next fiscal year's budget. This additional position will aid in distributing workload once filled. County staff demonstrated a technical understanding of plan reviews and overall program administration; however, the County will need to work to address the deficiencies listed above to ensure the expectations and responsibilities of their delegated authority are being met. DEMLR staff will recommend to "Continue Delegation with Review" for a period of 9-months of the Buncombe County locally delegated program with a follow up report to be presented during the 2024 Q3 meeting.

This report has been prepared based on the formal review of the Buncombe County Erosion and Sedimentation Control Program conducted on October 11, 2023, and will be presented to the Sedimentation Control Commission during its 2023 Q4 meeting on November 16, 2023.

#### LOCAL PROGRAM REPORT TO THE SCC City of Archdale Follow Up, November 16, 2023

On May 23, 2023, a report was presented to the Sedimentation Control Commission (SCC) based on the formal review of the City of Archdale Erosion and Sediment Control Program conducted on March 9<sup>th</sup> and 29<sup>th</sup>, 2023. The Commission voted to "Continue Delegation with Review" for 6 months with a follow up report to be presented at the 2023 4<sup>th</sup> Quarter SCC meeting. During the Reviews in March, the following issues and required actions that the program should implement were noted:

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

- Documentation of property ownership was not retained in all project files and written landowner consent was not obtained when the financially responsible party and landowner differed.
  - Documentation of land ownership such as a property deed should be retained in each project file. Except for certain utility construction, if the FRP and landowner differ, a landowner-builder agreement should be obtained and retained in the project file.
- The City was not tracking when a complete erosion control plan package was received and could not demonstrate that plans were being reviewed and the review decision sent to the applicant within the statutory timeframes.
  - Once a complete application is received, plans are to be reviewed and the applicant notified that it has been approved, approved with modifications or disapproved within 30 days for new plans and 15 days for revised plans. Staff should document when a complete package is received and ensure that plans are reviewed within the statutory timeframes. If plans are not found to be adequate within the statutory timeframes the plans should be disapproved. Once a complete package has been received, the review timeframe begins, and additional requirements related to stormwater or other city departments cannot delay or pause the review.
- Not all plans included all areas to be disturbed within the approved limits of disturbance.
   When disturbed limits needed to be revised for the significant deviation of measures from the approved plan, a revised plan was not required by the City. Specific maintenance notes were not included for all proposed measures.
  - Plans should delineate the limits of disturbance which encompass all areas where proposed disturbances may occur. Once construction has begun, if it is determined that the approved limits of disturbance are inadequate or new areas need to be disturbed, a revised plan shall be required and approved by the City.
- The Certificate of Approval was missing language conditioning the approval upon compliance with State and Federal Water Quality Laws and did not include notice of the program's right to inspect.
  - Certificates of approval should be updated to include all required language.
- Though staff stated that they maintain a weekly and often daily presence on site, inspections were not being adequately documented.

 The City shall document inspections in writing, including electronic documents, and reports shall include, at a minimum, all information in the model sedimentation inspection report developed by the Commission.

#### Follow up:

During the Continued Review period from May through September of 2023, the City received, reviewed, and approved 1 plan. During this same period the City Conducted 19 inspections. No NOVs or CPAs were issued. The City currently reports 5 open projects. During the Continued Review period, DEMLR staff have coordinated with City staff to ensure all appropriate language is included within the Certificate of Approval that is sent to the applicant once a plan is approved. The City is now requiring that documentation of property ownership is retained in each project file and is ensuring that a landowner-builder agreement is obtained when the Financially Responsible Party (FRP) and the landowner differ. The date that a complete package is received by the City is now being tracked to ensure that plans are being reviewed and a decision is being sent within the statutory timeframe. During the review period, monthly inspections were conducted on active sites and the City has utilized the standard Sedimentation Inspection Report template to document inspection findings. These reports are being distributed through the City's electronic inspection portal.

The following is a summary of projects based on the initial review, and continued review period.

#### 1. Axium Plastics:

This project consists of 22.0 acres disturbed for industrial development. The City received the complete application for this project on May 25, 2023. The file for this project contained the approved plan, design calculations, a copy of the property deed and the FRO form and the certificate of approval. The City now requires that documentation of property ownership is now included before a package is deemed complete. This plan was reviewed and approved within the statutory timeframe. The Certificate of Approval for this project included all required language. The approved plan appeared to be adequate.

#### 2. Project Red Oak:

This project consists of 17.5 acres disturbed for industrial development. During our initial review, this site was out of compliance due to minor sediment being deposited beyond the limits of disturbance during silt fence installation. During the continued review period, the City conducted an inspection of this site on 4/10/2023, 5/8/2023, 6/5/2023, 7/12/2023, 8/7/2023 and 9/6/2023. This site was found to be in compliance during all inspections. City staff stated that while official inspections are conducted at least monthly, staff are frequently onsite to provide additional monitoring and guidance. Inspection reports are now being documented using the inspection report template and are then uploaded to the City's electronic system. These inspections appeared to be adequately documented.

#### 3. Royal Pines Ph. 5:

This project consists of 25.2 acres disturbed for residential development. During our initial review, this site was out of compliance due to the skimmer basin not functioning properly and

areas being disturbed that were not included within the approved limits of disturbance. Following our initial review, the corrective actions were completed, and the site brought back into compliance. During the continued review period, the City conducted an inspection of this site on 4/10/2023, 5/8/2023, 6/5/2023, 7/12/2023, 8/7/2023 and 9/6/2023. This site was found to be in compliance during all inspections. These inspections appeared to be adequately documented.

#### **Conclusion:**

During the continued review period, the City provided proof of inspection reports being documented and provided documentation of a recently approved plan. The City has made the necessary adjustments to their plan review process to ensure that all necessary documents are included in the complete package and that plans are reviewed within the statutory timeframe. Staff have added the required language to the certificate of approval and inspections are now being adequately documented. The City has also made the recommended changes to the local ordinance. During the continued review period, the City has worked to address all deficiencies noted during our initial review and demonstrated their ability adequately implement their delegated program.

Based on the formal review conducted on March 9<sup>th</sup> and 29<sup>th</sup>, 2023, and the continued review period, DEMLR staff recommends "Continue Delegation" of the City of Archdale Erosion and Sedimentation Control Program. This report will be presented to the Sedimentation Control Commission during their 2023 Q4 meeting on November 16, 2023.

#### Local Program Report to the SCC Town of Lake Lure Follow Up, November 16, 2023

On May 23, 2023, a report was presented to the Sedimentation Control Commission (SCC) based on the formal review of the Town of Lake Lure Erosion and Sediment Control Program conducted on April 5, 2023. The Commission voted to "Continue Delegation with Review" for 6 months with a follow up report to be presented at the 2023 4<sup>th</sup> Quarter SCC meeting. During the initial review in April, the following issues and required actions that the program should implement were noted:

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

- Once a complete application was received, the Town reviewed the plans and then issued an official review decision. However, this official review decision was not always sent within the statutory timeframes.
  - Once a complete application is received, plans are to be reviewed and the applicant notified that it has been approved, approved with modifications or disapproved within 30 days for new plans and 15 days for revised plans.
- Documentation of property ownership was not retained in all project files and written landowner consent was not obtained when the financially responsible party and landowner differed.
  - Documentation of landownership such as a property deed should be retained in each project file. Except for certain utility construction, if the FRP and landowner differ, a landowner-builder agreement should be obtained and retained in the project file.
- Approved plans did not all adequately represent the existing and proposed site conditions. Proposed measures nor plan notes appeared to be adequate to control erosion and sedimentation on all approved plans.
  - Staff should ensure that plans include all the necessary details and specifications. Staff should also ensure that all areas potentially being disturbed are within the limits of disturbance. Plans should include access to the site and provide adequate measures or practices to control erosion and sedimentation.
- The Town's reported activity indicates a low inspection frequency. Staff also stated that inspections were previously not being documented through an official inspection report but were being noted in an internal log.
  - The Town will need to increase their inspection frequency to ensure active projects are in compliance with the SPCA. Staff should adequately document inspections and issue reports to the FRP.
- Certain sections of the local ordinance are devoid or no longer adhere to the most recent state statutes and administrative code.
  - The Local Ordinance should be updated to adhere to the most recent state statutes and administrative code.

#### Follow up:

During the Continued Review period from May through September 2023, the Town approved 17 plans, disapproved 2 plans, and conducted 121 inspections. During this period, the Town also issued 17 NOVs, 2 Penalties and used 1 SWO. At the end of September, the Town reported that they had 36 open projects, all of which have approved disturbances of less than 1 acre. During the Continued Review period, DEMLR staff coordinated with Town staff to provide additional oversight and training regarding both plan reviews and site inspections. Regional office staff met with Town staff on 8/31/23 and 10/18/23 to provide oversight and offer additional guidance regarding plan reviews. Staff also met on 10/27/23 to conduct oversight inspections. The Town has adjusted their inspection procedures and is now utilizing a standard template inspection report to document each inspection conducted. The Town is sending these reports to the financially responsible parties and the onsite contactor. The Town has also increased the inspection frequency over the continued review period. The Town has adjusted their plan review process to ensure that plans are reviewed, and the review decision is sent to the applicant within the statutory timeframes.

The following is a summary of projects based on the initial review and the continued review period.

#### 1. **0** Memorial Hwy:

This project consists of 0.62 acres disturbed for residential development and is located within the Upper Broad subbasin of the Broad River basin. On the day of our initial review the project did not have an adequate construction entrance and one section of silt fence needed to be maintained. The Town conducted inspections of this site on 4/24/23, 6/7/23, 8/17/23 and 9/27/23. Inspection reports were adequately documented for each inspection. The need to extend silt fence surrounding the stockpile onsite, provide groundcover and maintain perimeter silt fence was noted during the most recent inspection conducted on 9/27/23.

#### 2. **355 Tryon Bay:**

This project consists of 1,634 square feet disturbed for a retaining wall and staircase replacement and is located within the Upper Broad subbasin of the Broad River basin. On the day of our initial review, construction on this project had not yet begun. The Town has conducted inspections of this site on 4/24/23, 8/21/23, 10/25/23 and 10/26/23. During the inspection on 10/25/23, the town noted construction of this project was complete and the disturbed areas needed to be stabilized. The Town re-inspected the site on the following day once seed and straw mulch had been spread. Town staff stated they were waiting until the vegetation was established before closing this project out.

#### 3. 145 Eagles Court:

This project consists of 0.12 acres disturbed for residential development and is located within the Upper Broad subbasin of the Broad River basin. On the day of our initial review, the project was completed and establishing permanent ground cover. Additional mulch was needed in landscaped areas to provide sufficient permanent groundcover. The Town conducted an

inspection on 4/24/23 and noted that sufficient mulch had been installed in remaining landscaped areas and the project was complete and stabilized. The Town closed out this project at the time.

#### **Conclusion:**

During the continued review period, the Town provided follow-up on implementation of required corrective actions. The Town is now reviewing plans once a complete package has been received and notifying the applicant of the review decision within the statutory timeframes. When plans are found to be inadequate, a disapproval letter is sent. These letters include the appropriate language and are being sent with the ability to track receipt by the applicant. DEMLR staff noted improvement regarding their understanding of the plan review process and ability to conduct adequate reviews. The Town previously would conduct inspections and keep notes in an internal log but was not issuing an official inspection report to the FRP. The Town is now utilizing the inspection report template provided by DEMLR and issues an inspection report to the FRP when an inspection is conducted. Town staff have taken steps to increase inspection frequency. Staff stated they have begun working on updating the local ordinance in accordance with the current model ordinance. DEMLR staff noted the improvement in plan reviews, documentation of inspections, and overall program administration. During the continued review period, the Town has worked to address the deficiencies noted during our initial review and demonstrated their ability to adequately implement their delegated program.

DEMLR staff recommend to "Continue Delegation" of the Town of Lake Lure Erosion and Sedimentation Control Program.

This report is based on the formal review conducted on April 5, 2023, and the continued review period and will be presented to the Sedimentation Control Commission during its 2023 Q4 meeting on November 16, 2023.

#### Local Program Report to the SCC Town of Cary Follow Up, November 16, 2023

On May 23, 2023, a report was presented to the Sedimentation Control Commission (SCC) based on the formal review of the Town of Cary Erosion and Sediment Control Program conducted on March 28, 2023. The Commission voted to "Continue Delegation with Review" for 6 months with a follow up report to be presented at the 2023 Fourth Quarter SCC meeting. During the initial review in March, the following programmatic issues and corresponding corrective actions were noted:

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

- Documentation of property ownership was not retained in project files. Staff stated that
  they were verifying property ownership during the stormwater application, which occurs
  before the certificate of occupancy is issued, but that they were not verifying the deed
  information or retaining a copy in the file during the erosion and sediment control plan
  review.
  - A copy of the property deed should be retained in each project file.
- Written landowner consent was not obtained when the financially responsible party (FRP) and landowner differed.
  - Except for certain utility construction, if the applicant is not the owner of the land to be disturbed, the Town should obtain a letter of consent from the owner and retain this in the project file.
- The FRO form did not include landowner information and in one instance was missing the business's registered agent information.
  - The Town's FRO form should be updated to include landowner information and Town staff should ensure that the form is filled out completely.
- Once a complete application is received, plans were being reviewed, and either approved
  or review comments sent back to the applicant. Official notification of the plan review
  decision was not always being sent within the required statutory timeframes. The
  approval and disapproval notifications were missing necessary language, and
  notifications of disapproval were not being sent with the ability to track receipt.
  - Staff should ensure that plans are being reviewed and notice of the official review decision is being sent within the statutory timeframes. The applicant has the right to appeal a disapproval or modification if written demand for a hearing is made within 15 days after receipt of written notice of the disapproval or modification. G.S. 113A-61(c). Notice of Disapproval and modifications should be sent with the ability to track when the applicant has received the notice to ensure any request for appeal has been made in accordance with the statutory timeframe.
- Maintenance notes for all proposed measures were not included in all approved plans.
  - The Town should ensure that specific maintenance notes for each proposed measure are included somewhere within the plans.

#### Follow up:

During the Continued Review period, DEMLR staff coordinated with Town staff to provide additional oversight and training regarding both plan reviews and site inspections. DEMLR Regional Office staff conducted two days of cross training with Town staff to provide oversight and offer additional guidance regarding inspections. Additionally, Town inspection staff obtained the NCDOT Level II Erosion and Sediment Control Certification. The Town now requires a property deed with the FRO form and revised the FRO form to include landowner information. The Town has adjusted their plan review process to ensure that plans are reviewed, and the review decision is sent to the applicant within the statutory timeframes. The Town updated its standard E&SC details to include maintenance notes for all measures and made them available online. During the Continued review period from May through September the Town reviewed and approved 10 plans, conducted 736 inspections, and issued 29 NOVs. The Town reported 68 open projects as of the end of September. During the continued review period, the Town provided a few plans and project files once approved for DEMLR staff's review.

DEMLR staff met with Town staff on October 17, 2023, to conduct a follow up review. The following is a summary of projects based on the initial review and follow up review.

#### 1. North Harrison Hotels:

This project consists of 6.44 acres disturbed for commercial development and is located within the Upper Neuse sub-basin of the Neuse River basin. On the day of our initial review diversion ditches throughout the site had been driven over and needed to be reinstalled or revised to ensure flow diverts to the basin. Some stockpiles had silt fencing installed along the toe of the slope while others did not. The sediment basin did not appear to be functioning; the basin outlet pipe had been installed near the top of riser and above skimmer attachment elevation such that the skimmer was not dewatering the basin. The baffles were underwater due to excavation to the permanent stormwater design and the skimmer not functioning. Minor sediment loss and staining were noted beyond the limits of disturbance at a silt fence outlet into a wooded area. The Town conducted recent inspections of this site on 7/19/2023, 7/26/23, 8/23/2023, 9/20/2023. Inspection reports were adequately documented for each inspection. During the follow up review, Town staff noted minor tracking leaving the site, the construction entrance needed to be extended, newly installed inlet boxes needed inlet protection measures, and silt fence around stockpiles needed to be repaired.

#### 2. Young Farm Property:

This project consists of 68.73 acres disturbed for residential development and is located within the Haw sub-basin of the Neuse River basin. On the day of our initial review, silt fence and silt fence outlet had been undermined at both the stream and wetland crossing resulting in sediment loss into the stream and wetland area. Drop inlet protection measures had been installed and maintained in some areas but others needed to be replaced or repaired. Soil stockpiles needed to be stabilized and silt fence installed around the toe of the piles. Slope drains needed to be staked down and extended to the toe of the slope. Outlet and inlet protection measures were also needed on slope drains. Town staff issued an NOV for the sediment loss and other violations. The Town conducted recent inspections on 8/3/2023, 8/11/2023, and 8/24/2023. During the follow up review, Town staff noted that the construction entrance for individual lots needed to be maintained, inlet protection throughout the site needed to be

maintained, drainage swales between some lots needed to be stabilized, and silt fence needed to be maintained. The areas of sediment loss noted in the original NOV had been removed and repaired.

#### 3. Massey Condominiums:

This project was received, reviewed, and approved by the Town during the continued review period. The approved plan and project file was provided to DEMLR staff. This project consists of 1.47 acres disturbed for residential development and is located within the Neuse River basin. The complete package was received by the Town on 8/10/23 and was approved on 8/14/23. The Town completed the review of this plan and issued official notice of the review decision within the statutory timeframe. The Letter of Approval included all required language. The project file contained all necessary documentation and the approved plan appeared to be adequate.

#### **Conclusion:**

During the continued review period, the Town implemented required corrective actions listed above. The Town is now reviewing plans once a complete package has been received and notifying the applicant of the review decision within the statutory timeframes. When plans are found to be inadequate, a disapproval letter will be sent. These letters include the appropriate language and will be sent with the ability to track receipt by the applicant. DEMLR staff noted improvement in the Town's understanding of the plan review process. Recently approved plans included specific maintenance notes for each proposed measure and appeared to be adequate. Additionally, DEMLR staff observed an improvement in the Town's ability to conduct thorough inspections. Town staff have benefited from further internal training as well as joint inspections conducted with DEMLR staff. Staff have also obtained the NCDOT Level II Erosion and Sedimentation Control Certification. During the continued review period, the Town has worked to address the deficiencies noted during our initial review and demonstrated their ability to adequately implement their delegated program. DEMLR staff recommend to "Continue Delegation" of the Town of Cary Erosion and Sedimentation Control Program.

This report is based on the formal review conducted on March 28, 2023, follow-up review conducted on October 17, 2023, and oversight during the continued review period. This report will be presented to the Sedimentation Control Commission during its 2023 Q4 meeting on November 16, 2023.

### Local Program Report to the SCC Lincoln County, November 16, 2023

On October 10, 2023, personnel from NCDEQ, DEMLR conducted a formal review of the Lincoln County Erosion and Sedimentation Control Program. The County was last reviewed and presented to the Sediment Control Commission in April 2019. The County requires an erosion and sediment control plan for residential projects disturbing greater than 1 acre and any nonresidential building projects disturbing greater than 20,000 sq ft. The jurisdiction of the program covers all areas of Lincoln County including within all city/town corporate limits. The County has 4 staff who contribute approximately 3 full time equivalent (FTE) positions to the program. From September 2022 through August 2023, the County conducted 124 plan reviews or re-reviews, issued 54 approvals and 34 disapprovals. During this period, the County conducted 1054 inspections and issued 12 Notices of Violation, 8 Civil Penalties, and 10 Stop Work Orders. The County also has the authority to issue building permits and inspection holds and, over the past year, had issued 10. When plans are submitted to the County, they are reviewed and either approved or, if found to be inadequate, disapproved, with notification of the decision being sent to the applicant. The Letters of Disapproval were being sent via certified mail; however, the letters were missing necessary language informing the applicant of their right to appeal the decision within 15 days of receipt. Applicants must be notified of their right to appeal. Review of new plans submitted to the County were being conducted within 30 days, however, revised plans were not always reviewed within the 15-day deadline. Plans must be reviewed, and notification of the review decision sent to the applicant within the statutory timeframe. At the time of DEMLR's audit, the County had 148 open projects. DEMLR staff looked at project files and conducted site inspections for four projects.

The following is a summary of projects reviewed:

#### 1. Forest Park at Lincolnton Phase 1

This project consists of 5.0 acres disturbed for residential development and is located within the South Fork Catawba Subbasin of the Catawba River Basin. The project file contained the approved plan, revised plan, letters of approval, design calculations, previous inspection reports, and the FRO form. An updated FRO form had not been obtained showing the increase in acreage approved on the revised plan. The property deed was missing from the file; however, staff was able to print a copy from online. The County received the complete application for this project on September 22, 2021, and approved it on October 4, 2021. A revised plan was submitted November 10, 2021, and was approved the same day. The County conducted the plan review and rendered a decision within the appropriate timeframe. The approved plan appeared to be adequate. Construction on this project began on November 8, 2021, and the County had conducted 17 inspections prior to our review. No NOV or Civil Penalties had been issued for this project. At the time of the audit, vertical construction had been completed, sediment basins had been removed and much of the site had been permanently stabilized. Some slopes and ditches throughout the site required overseeding to ensure sufficient stabilization. The perimeter edge of some lots needed to be regraded and stabilized. Overall, this site was in good condition but

was out of compliance due to some minor maintenance and stabilization needs. On October 20, 2023, the County reinspected the site and noted that all required corrective actions noted in the previous inspection report had been completed.

#### 2. Combine Academy Soccer Field #1

This project consists of 4.69 acres disturbed for institutional development and is located within the South Fork Catawba Subbasin of the Catawba River Basin. The project file contained the approved plan, letter of approval, design calculations, previous inspection reports, property deed, and the FRO form. The FRO form was missing the Registered Agent information for the company listed as the Financially Responsible Person (FRP). The County received the complete application for this project on April 26, 2023, and after two review cycles, approved it on May 19, 2023. The County conducted the plan review and rendered a decision within the appropriate timeframe. The approved plan appeared to be adequate. Construction on this project began on June 20, 2023, and the County had conducted 4 inspections prior to our review. No NOV or Civil Penalties had been issued for this project. At the time of the audit, grading of the soccer field had been completed and E&SC measures had been installed. Construction traffic along the dirt/gravel road was creating dust and County staff noted the need for adequate dust control. In several areas, the perimeter silt fence had been undermined and at one location this had resulted in a minor amount of offsite sediment. A few Silt fence outlets needed to be maintained and stone needed to be refreshed. Sediment had overtopped an area of silt fence resulting in minor offsite sedimentation. Basin slopes had been stabilized and the basin appeared to be functioning as designed. The diversion ditch leading to the basin had been vegetated but needed to be maintained; wattle check dams needed to be maintained and accumulated sediment removed. Sediment blocking the slope drain into the basin needed to be removed and a rock inlet protection measure needed to be added. The clean water diversion ditch had been matted and stabilized. Overall, this site was out of compliance. On October 20, 2023, the County reinspected the site and found that the required corrective actions noted in the previous inspection report had been completed.

#### 3. Huber Technology

This project consists of 10.94 acres disturbed for industrial development and is located within the Upper Catawba Subbasin of the Catawba River Basin. The project file contained the approved plan, letter of approval, design calculations, previous inspection reports, property deed, and FRO form. The County received the complete application for this project on August 22, 2022, and after three review cycles, approved it on November 3, 2022. A review cycle starts when the package is deemed complete and ends when a plan has been approved or disapproved. Not all review cycles for this project were completed within the statutory timeframe. The approved plan appeared to be adequate. Construction on this project began on November 9, 2022, and the County had conducted 5 inspections prior to our review. No NOV or Civil Penalties had been issued for this project. At the time of the audit, vertical construction was nearly complete, and the roads and parking areas had been paved. Curb inlet protection measures needed to be maintained. The sediment basin had recently been converted to stormwater configuration and the slopes had been hydroseeded. Vegetation had been established throughout most of the site, however some areas required reseeding. A small amount of gravel and fines had been washed

offsite onto the road (Airlie Parkway) and needed to be removed. Overall, this site was in good condition but was out of compliance due to maintenance needs. On October 20, 2023, the County reinspected the site and found that all required corrective actions noted in the previous inspection report had been completed.

#### 4. Carrington Subdivision Phase 2 (paperwork review and partial inspection):

This project consists of 25 acres disturbed for residential development and is located within the Upper Catawba Subbasin of the Catawba River Basin. The project file contained the approved plan, revised plan, letters of approval, design calculations, previous inspection reports, property deed, and FRO form. The County received the complete application for this project on October 19, 2020, and after two review cycles, approved it on March 10, 2022. A revised plan was submitted March 24, 2023, and was approved the same day. Not all review cycles for this project were completed within the statutory timeframe. The approved plan appeared to be adequate. Construction on this project began on May 17, 2023, and the County had conducted 3 inspections prior to our review. No NOV or Civil Penalties had been issued for this project. During the audit, a partial inspection of this site was conducted due to time constraints. The site had been graded and E&SC measures had been installed. Sediment basins had been installed, however the baffles in two basins were not properly spaced as per the plan. Additional baffles needed to be installed to achieve 25% spacing of the basin floor. Basin slopes had been seeded and matted, however in some locations, rills had formed, and slopes lacked vegetative cover. Some inlet protection measures required additional stone. Rock inlet protection was needed at the slope drain going into the basin. Soil stockpiles needed to be stabilized and silt fence needed to be added. Diversion ditches had been seeded and strawed, however in one area rills had begun to form and needed to be repaired. Overall, this site was in good condition but was out of compliance due to maintenance needs. On October 20, 2023, the County reinspected the site and found that all required corrective actions noted in the previous inspection report had been completed.

#### **Positive Findings:**

During the review DEMLR staff noted positive aspects about the Lincoln County Local Erosion and Sedimentation Control Program including:

- The County has a more restrictive criterion than the State as to when an Erosion and Sediment Control Plan is required. Plans are required for residential projects disturbing greater than 1 acre and any non-residential building projects disturbing greater than 20,000 sq ft.
- The Program requires a preconstruction meeting for all projects.
- County staff utilize the ability to place holds on various permits and construction inspections as additional tools to bring sites into compliance.
- Approval by the County is required prior to any sediment basin removal.

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

During the review DEMLR Staff found that the Lincoln County Erosion and Sedimentation Control Program had deficiencies including:

• The information on the FRO forms was not always complete, correct, and up to date. For one project the Financially Responsible Person was listed as the individual and the

Registered Agent was listed as the company who owned the property. Additionally, the FRO form was not updated to reflect an increase in approved disturbed acreage. For another project the Registered Agent information for the corporation listed as the FRP was left blank.

- Staff appeared to be verifying property ownership during plan review, however, a copy of the property deeds were not always being retained in the project file.
- When plans are submitted to the County, they are reviewed and either approved or, if found to be inadequate, disapproved, with notification of the decision being sent to the applicant. The Letters of Disapproval were being sent via certified mail; however, the letters were missing necessary language informing the applicant of their right to appeal the decision within 15 days of receipt.
- Review of new plans submitted to the County were being conducted within 30 days, however, revised plans were not always reviewed, and the applicant notified of the decision within the 15-day statutory deadline.

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

- Staff should verify that the information on the FRO is complete, correct, and updated if there are any changes.
- Documentation of land ownership must be obtained prior to approval of a plan. 15A NCAC 04B.018(c).
- Letters of Disapproval should include language notifying applicants of their right to appeal the decision. § 113A-61 (C). Template letters with references to the NCAC and state statute can be found on our Local Program SharePoint Reporting site.
- Once a complete application is received, plans are to be reviewed and the person submitting the plan notified that it has been approved, approved with modifications, or disapproved within 30 days of receipt of a new plan and within 15 days of receipt of a revised plan. G.S. 113A-61(b) and MOA Part III.C.1 & 3. Staff should ensure that plans are being reviewed and notice of the official review decision is being sent within the statutory timeframes.

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

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

- It is recommended that the Program continue to monitor and provide guidance for NPDES violations including operating without a permit, improper concrete washout, and fuel containment onsite during inspections. Note possible NPDES violations and refer to the NCDEQ Mooresville Regional Office when necessary.
- DEMLR and County staff discussed the increase in development throughout the County over the past few years. The County appears to be capable of handling the recent increase in workload, although this could place a considerable strain on each employee if workload continues to trend up. It is highly recommended to consider future increases or sustained levels of development and evaluate staffing workloads. Additional staffing may be

necessary to ensure that the program employs a sufficient number of qualified personnel and provides adequate resources for plan review and compliance inspections as agreed upon in Part III.A.3 &4 of the MOA.

#### **Conclusion:**

Overall, DEMLR found the Lincoln County Locally Delegated Erosion and Sedimentation Control Program to be robust but had a few minor deficiencies. The County will need to verify information on the FRO form for completeness and accuracy and ensure the information is updated should any changes occur. Property ownership will need to be verified documentation retained in each project file. When plans are submitted to the County, they are reviewed and either approved or, if found to be inadequate, disapproved, with notification of the decision being sent to the applicant. This process will need to occur within the statutory timeframes for new and revised plans. The County is sending letters of disapproval with the ability to track receipt by the applicant. The County will need to ensure that letters of disapproval include language notifying the applicant of their right to appeal the decision. The County has a more restrictive criterion than the State as to when an E&SC plan is required, and the County requires a preconstruction meeting prior to the commencement of any grading activity onsite. The County is in the process of updating their local ordinance to reflect the most recent Model Ordinance. During the review, the County demonstrated a thorough understanding of the enforcement processes and tools which are delegated to them. The County will take additional action such as placing a hold on various construction inspections, building permits and final plat approval, when necessary, as incentives to bring sites into compliance. County staff noted all areas seen by DEMLR staff on site and demonstrated their ability to conduct adequate inspections. The County provided follow-up on all projects once corrective actions were completed. Current staffing levels appear to be adequate; however, with the recent increase in construction projects, the addition of staff would aid in the distribution of workload and ensure any future increase in workload would be sustainable. The County demonstrated their ability to effectively implement the local program's delegated authority. DEMLR staff recommend to "Continue Delegation" of the Lincoln County locally delegated program.

This report has been prepared based on the formal review of the Lincoln County Erosion and Sedimentation Control Program conducted on October 10, 2023, and will be presented to the Sedimentation Control Commission during its 2023 Q4 meeting on November 16, 2023.

#### Local Program Review Recommendation Levels

Local Program reviews consist of a one-day visit to the local government. The review focuses on both in-office administration and in-the-field site inspections. During the in-office portion of the review, DEMLR staff review project files for appropriate documentation and discusses typical practices and procedures of the program administration. During the field portion of the review, DEMLR staff observe program staff while they conduct a typical site inspection. Projects to be reviewed are selected by DEMLR staff on the day of the review. Project selection is made with the goal of selecting a representative sample that varies in project purpose, disturbed acreage, current construction phase and site location. Program reviews are meant to determine the ability of program staff to adequately monitor and enforce the provisions of the Sedimentation Pollution Control Act of 1973 (SPCA). While these levels of recommendation provide guidance as to the expectations of Local Programs, recommendations made by DEMLR staff seek to appropriately reflect the findings of the review but may not necessarily be sequential from one review period to the next. Furthermore, examples are provided which list some of the program requirement deficiencies noted during a review. The finding of one or more deficiencies does not necessitate this specific recommendation level nor does the absence of one or more examples guarantee a higher recommendation level.

**Level 1 – Continue Delegation:** No oversight is needed; overall, the program is successfully implementing their requirements.

**Level 2 – Continue Delegation with Review:** At this level, the program may need clarification on certain provisions of the SPCA or limited guidance on their ordinance and practices. The program needs clarifications or guidance in one or more areas:

- Procedures and Records This includes the handling of paperwork or submittal requirements for applicants, application review response and notification requirements, on-site records review, or the development of their local ordinance. Staff may need guidance on reporting their program-related activities to the DEQ-DEMLR regularly and accurately with few omissions. The program may not be aware of the latest laws and rules regarding erosion and sedimentation control.
- Staffing The program typically employs a sufficient number of qualified personnel to administer their program requirements expediently and effectively. This is based in part on the size of the jurisdiction or the number of acres the program has to monitor.
- Plan Reviews Program staff demonstrate adequate knowledge of erosion and sedimentation control designs and plan requirements, but may be lacking in some areas. Plan approvals are generally being conditioned upon compliance with state and federal water quality laws or

- rules, but staff may need assistance with permit coordination. Staff may need reminding that once a complete application is received, plan reviews are to be conducted and a decision sent to the applicant within the time period specified under Part III.C of their Memorandum of Agreement and General Statute 113A-61 (b).
- Site Monitoring Program staff demonstrate adequate knowledge of plan reading and the ability to determine if erosion control measures are functioning as designed under the approved plan while in the field, but may be lacking in some areas. Staff also demonstrate the ability to detect significant deviations from an approved plan, and the ability to clearly articulate the appropriate corrective actions needed to gain compliance with the SPCA, but may be lacking in some areas. Inspection reports may be missing the minimum information in which to properly evaluate a land disturbing activity. Site inspections may not always be conducted periodically and regularly with sufficient frequency to effectively monitor compliance with the SPCA, its code, or the local ordinance. Selfinspection records may not be frequently available nor properly documented, and staff have not informed the responsible part(ies) of this deficiency. Notices of Violation may be inconsistently or infrequently issued when the Financially Responsible Party has failed to comply with the SPCA, its code, or the local ordinance; such notices shall consist of and be delivered in accordance with General Statute 113A-61.1(c) and its amendments.

Of the above program requirements, few to some adjustments are needed to the program's administration to correct deficiencies or the adjustments needed are minor to moderate in scope. The program is generally adhering to the responsibilities found in their memorandum of agreement, the SPCA or its code, but is in need of clarifications or guidance to fulfill those requirements. The review period is recommended based on the number or scope of adjustments needed.

Examples of program requirements that are not being met or that require clarification or limited guidance beyond the initial review period include:

- Documentation of land ownership was not obtained prior to approval of the plan and retained in the project file.
- Once a complete application is received, the plan was reviewed, but the
  person submitting the plan is not notified that it has been approved,
  approved with modifications, or disapproved within 30 days of receipt of a
  new plan. An official Notice of Disapproval must be sent within 30 days of
  receiving the complete application when plans are found to be inadequate.
- Self-inspection records are not being reviewed when onsite, or a review of those records shows them to be incomplete, and the program is not notifying those responsible for the self-inspections of the deficiency.

 Inspection staff are unaware that a second construction entrance with no protection against sedimentation is being used and failed to include it on the inspection report.

The list above is not a comprehensive list of program requirement deficiencies which may be noted during a review. The finding of one or more of the above deficiencies does not necessitate this specific recommendation level nor does the absence of one or more of the above examples guarantee a higher recommendation level.

Periodic oversight and follow-up from our review is needed; DEQ, DEMLR staff will communicate more frequently with the local program on its requirements or may request documentation of program actions to review for adherence to the SPCA. This may include submittals of inspection reports, decision letters, or enforcement documents. The DEMLR may choose to conduct a second inperson review based on recommendations given from the first review.

**Level 3 – Place on Probation:** At this level, the program has little understanding of the SPCA or their ordinance, or may be unwilling to assume responsibility for administration and enforcement of its program. The program needs significant guidance on their ordinance or practices. The program needs significant guidance in one or more areas:

- Procedures and Records This includes the handling of paperwork or submittal requirements for applicants, application review response and notification requirements, on-site records review, or the development of their local ordinance. Staff may need guidance on reporting their program-related activities to the DEQ-DEMLR regularly and accurately with few omissions. The program is not aware of the latest laws and rules regarding erosion and sedimentation control.
- **Staffing** The program may be employing an insufficient number of qualified personnel to administer their program requirements expediently and effectively. This is based in part on the size of the jurisdiction or the number of acres the program has to monitor.
- Plan Reviews Program staff may be lacking adequate knowledge of
  erosion and sedimentation control designs and plan requirements. Plan
  approvals may be infrequently conditioned upon compliance with state
  and federal water quality laws or rules, and staff may need assistance with
  permit coordination. Once a complete application is received, plan
  reviews are infrequently or not at all being conducted and a decision sent
  to the applicant within the time period specified under Part III.C of their
  Memorandum of Agreement.
- **Site Monitoring** Program staff may be lacking adequate knowledge of plan reading and the ability to determine if erosion control measures are functioning as designed under the approved plan while in the field. Staff may also be lacking in the ability to detect significant deviations from an

approved plan, and the ability to clearly articulate the appropriate corrective actions needed to gain compliance with the SPCA. Inspection reports may be missing the minimum information in which to properly evaluate a land disturbing activity. Site inspections may not always be conducted periodically and regularly with sufficient frequency to effectively monitor compliance with the SPCA, its code, or the local ordinance. Self-inspection records may not be frequently available nor properly documented, and staff have not informed the responsible part(ies) of this deficiency. Notices of Violation may be inconsistently, infrequently, or not at all being issued when the Financially Responsible Party has failed to comply with the SPCA, its code, or the local ordinance; such notices shall consist of and be delivered in accordance with General Statute 113A-61.1(c) and its amendments.

Of the above program requirements, many adjustments are needed to the program's administration to correct deficiencies, or the adjustments needed are major in scope. The program is generally not adhering to the responsibilities found in their memorandum of agreement, the SPCA or its code, and is in need of significant guidance to fulfill those requirements. The review period is recommended based on the number or scope of adjustments needed.

Examples of program requirements that are not being met or that require significant guidance beyond the initial review period include:

- Program staff are unresponsive to requests made by auditors as a result of investigations made into their program responsibilities.
- The Program may demonstrate an unwillingness to administer their delegated authority in a manner to ensure adherence to the Local Ordinance, the SPCA and its code.
- Plans are being approved without regard to work requirements within a
  jurisdictional stream or riparian buffer and/or without including the required
  timelines for ground cover as necessary to satisfy requirements under
  their delegation authority.
- Approved plans are missing a construction sequence.
- Plans are not being reviewed and applicants are not being properly notified of the review decision within the required timeframes, as mentioned above.
- Inspections are not being conducted periodically and with sufficient frequency to ensure compliance with the SPCA and its code.
- Violations and their corresponding corrective actions are not being presented to the Financially Responsible Party in the form of inspection reports, or inspection reports do not accurately reflect the conditions and violations found onsite during inspections.

 When violations are not being addressed, or when land is being disturbed without measures or without a plan that would otherwise be required, Notices of Violations are not being sent or there is no follow-up to the notices.

The list above is not a comprehensive list of program requirement deficiencies which may be noted during a review. The finding of one or more of the above deficiencies does not necessitate this specific recommendation level nor does the absence of one or more of the above examples guarantee a higher recommendation level.

Frequent oversight and follow-up from our review is needed; DEMLR staff will communicate more frequently with the local program on its requirements and may request documentation of program actions to review for adherence to the SPCA. DEMLR staff will notify the local government's council or board of commissioners of their status while on probation. Plan reviews or inspections may be required to be conducted with assistance from DEMLR regional staff. Enforcement documents may be required to be reviewed by DEMLR central office staff prior to (or subsequent to, if time is of the essence) their delivery to the financially responsible party or their designee. The DEMLR will conduct a second in-person review based on recommendations given from the first review.

**Level 4 – Revoke Delegation:** This recommendation would remove the authority of a local program to implement the requirements of the SPCA. DEMLR staff will notify the local government's council or board of commissioners of the recommendation to revoke the program. At this level, the program has failed to administer and enforce the program requirements per the SPCA, its code, or the memorandum of agreement as outlined above. Further guidance from DEMLR staff would prove ineffective. Implementation, including enforcement, of the SPCA would fall under the jurisdiction of the DEQ or another local program.

# Chapter 18 - SOIL EROSION AND SEDIMENTATION<sup>[1]</sup>

#### **ARTICLE I. - IN GENERAL**

## Sec. 18-1. - Authority and purpose.

This chapter may be known and cited as the Soil Erosion and Sedimentation Control Ordinance for Rowan County, NC and may be commonly referred to as the "erosion control ordinance". This chapter is adopted pursuant to the authority granted in G.S. 113A Article 4 for the purposes of:

- (1) Regulating certain land-disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses and other public and private property by sedimentation; and
- (2) Establishing procedures through which these purposes can be fulfilled.

## Sec. 18-2. - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Accelerated erosion means any increase over the rate of natural erosion as a result of land-disturbing activity.

Act means the North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it.

Adequate erosion control measure, structure or device means one which controls the soil material within the land area under responsible control of the Person conducting the land-disturbing activity.

Administrative Decision means a decision made in the implementation, administration, or enforcement of development regulations that involve the determination of facts or the application of objective standards set forth in this chapter. These are sometimes referred to as "ministerial" decisions or "administrative determination".

Affiliate means a Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control of another Person.

Appeal means a request for a review by the board of commissions of an administrative decision regarding any provision of this article.

Approving Authority means the Department or other State or a local government agency that has been delegated erosion and sedimentation plan review responsibilities in accordance with the provisions of the Act.

Being conducted means a land-disturbing activity has been initiated and permanent stabilization of the site has not been completed.

Best management practice (BMP) means a structural device, measure, facility, or activity which helps to achieve soil erosion and stormwater management control objectives at a designated site as recognized in the most recent version of the North Carolina Division of Water Resources, Stormwater Best Management Practices Manual.

Board of adjustment means the Rowan County Board of Adjustment.

Board of commissioners means the Rowan County, North Carolina Board of Commissioners.

Borrow means fill material which is required for on-site construction and is obtained from other locations.

Buffer zone means the strip of land adjacent to a lake or natural watercourse.

Clearing means the removal of existing ground cover of a site prior to development that may include but not be limited to removal of structures, deforestation, etc.

Commission means the North Carolina State Sedimentation Control Commission.

Completion of construction or development means that no further land-disturbing activity is required on a phase of a project except that which is necessary for establishing a permanent ground cover.

Department means the North Carolina Department of Environmental Quality (NCDEQ).

Determination means a written, final and binding order, requirement, or determination regarding an administrative decision.

Development means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filing, grading, paving, excavation or drilling operations or storage of equipment or materials.

Developmental Approval means an administrative approval made pursuant to this chapter that is written and required prior to commencing development or undertaking a specific activity, project, or development proposal.

Director means the Director of the Division of Energy Mineral and Land Resources of the Department of Environmental Quality.

Discharge point means that point at which runoff leaves a tract of land.

District means the Rowan County Soil and Water Conservation District created pursuant to G.S. Ch. 139.

Energy dissipator means a structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

Erosion means the wearing away of land surface by the action of wind, water, gravity or any combination thereof.

Financial responsible owner (FRO) means the Person financially responsible for the land disturbing activity being conducted.

Ground cover means any natural vegetative growth or other material which renders the soil surface against accelerated erosion.

Ground level improvements means ground level loading areas, parking areas, patios and other similar ground level uses that will not occupy additional volume of the floodplain area during times of flooding.

High quality waters means those classified as such in 15A NCAC 2B.0224, which is incorporated herein by reference to include subsequent amendments and additions.

High quality water (HQW) zones means areas that are within one (1) mile and drain to HQWs.

Impervious surface. Any material that significantly reduces and prevents natural infiltration of water into the soil. Impervious surfaces include but are not limited to roofs, patios, balconies, decks, streets, parking areas, driveways, sidewalks, and any concrete, stone, brick, asphalt, or compacted gravel surface. For purposes of this chapter, the effective impervious coverage of certain surfaces listed below are:

- (1) Asphalt, concrete, crush and run gravel, masonry, marl, wood, and other impermeable surfaces which prevent land area from infiltrating stormwater are one hundred (100) percent impervious.
- (2) Porous surfaces which permit direct infiltration of unconcentrated stormwater into ground areas so that the first one-half (½) inch of stormwater infiltrates into the ground are seventy (70) percent impervious.
- (3) Slatted wood decks that allow the drainage of water through the slats to an unpaved surface below are fifty (50) percent impervious.

(4) Ungraveled natural footpaths, water surfaces of swimming pools, and drain fields are zero (0) percent impervious.

All other necessary determinations about impervious surfaces will be based on hydrological tests considering existing subgrade soils, slope, rainfall intensity and rainfall duration.

Lake or natural watercourse means any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

Land-disturbing activity means any use of the land by any Person in residential, industrial, educational, institutional or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

Local government means any county, incorporated village, town or city, or any combination of counties, incorporated villages, towns and cities, acting through a joint program pursuant to the provisions of the Act.

Natural erosion means the wearing away of the earth's surface by water, wind or other natural agents under natural environmental conditions undisturbed by man.

North Carolina Administrative Code (NCAC) is the compilation of the administrative rules of approximately 26 state agencies and over 50 occupational licensing boards. Compilation and publication of the NCAC is mandated by G.S. 150B-21.18.

Parent means an affiliate that directly, or indirectly through one or more intermediaries, controls another Person.

Person means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body or other legal entity.

Person conducting land-disturbing activity means any Person who may be held responsible for a violation unless expressly provided otherwise by this chapter, the Act or any order adopted pursuant to this chapter or the Act.

Person responsible for the violation, as used in this chapter and G.S. 113A-64, means:

- The developer or other Person who has or holds himself as having financial or operational control over the land-disturbing activity; or
- (2) The landowner or Person in possession or control of the land when he has directly or indirectly allowed the land-disturbing activity or has benefited from it or he has failed to comply with a duty imposed by any provision of this chapter, the Act or any order adopted pursuant to this chapter or the Act.

Phase of grading means one (1) of two (2) types of grading, rough or fine.

Plan means erosion and sedimentation control plan.

Planning board means County Planning Board of Rowan County, North Carolina.

Post-development conditions means predevelopment conditions together with the land use, drainage and impervious conditions that would exist on the site if all proposed development plans for the site are fully completed.

Predevelopment conditions means the land use, drainage, and impervious surface conditions existing on the site at the time plans are submitted for approval, including any previously approved development plans for the site which has not expired, and projects which have an outstanding valid building permit or an established vested right in compliance with all applicable General Statutes, and/or Rowan County Ordinances.

Rowan County means the staff members of the Rowan County Planning and Development Department or any agents, officials or other qualified personnel of the County who are authorized to enforce the provisions of this chapter.

Sediment means solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity or ice from its site of origin.

Sedimentation means the process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land-disturbing activity or into a lake or natural watercourse.

Siltation means sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed and maintained control measures; and which has been transported from its point of origin within the site of a land-disturbing activity; and which has been deposited, or is in suspension in water.

Storm drainage facilities means the system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey stormwater through and from a given drainage area.

Stormwater runoff means the surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

Subsidiary means an affiliate that is directly or indirectly, through one or more intermediaries, controlled by another Person.

Ten-year storm means the stormwater runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in ten (10) years, and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

Top-of-bank. The point on a stream's cross-section defined by the bankfull elevation or the highest point in elevation immediately adjacent to the stream channel, whichever is greater.

Tract means all contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

Twenty-five-year storm means the stormwater runoff from precipitation of an intensity expected to be equaled or exceeded on the average once in twenty-five (25) years, and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

Two-year storm means the stormwater runoff resulting from a rainfall of an intensity expected to be equaled or exceeded, on the average, once in two (2) years, and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

Uncovered means the removal of ground cover from, on or above the soil surface.

Undertaken means the initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

USACE means the United States Army Corps of Engineers.

Velocity means the average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel shall be that area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not to be included for the purpose of computing velocity of flow.

Waste means the surplus materials resulting from on-site land-disturbing activities and disposed of at other locations.

Water-dependent structure. A structure, excluding habitable structures used for water access including, but not limited to, docks, marinas, and boat ramps.

Working days means days exclusive of Saturday and Sunday and State and Federal holidays during which weather conditions or soil conditions permit land-disturbing activity to be undertaken.

"Written" or "in-writing" means written communication, including by electronic email, executed by a staff member to document a determination, order, interpretation, notification, or other purpose identified by this chapter. Unless specified otherwise, in the absence of evidence to the contrary, delivery by first class mail shall be deemed received on the third business day following deposit of the item with the United States Postal Service and delivery by electronic mail shall be deemed received on the date sent.

## Sec. 18-3. - Scope and exclusions.

- (a) Geographical scope of regulated land-disturbing activity. This chapter shall apply to land-disturbing activities within the territorial jurisdiction of Rowan County and as allowed by agreement between local governments, the extent of annexation or other appropriate legal instrument or law.
- (b) Exclusions from regulated land-disturbing activity. Notwithstanding the general applicability of this ordinance to all land-disturbing activity, this chapter shall not apply to the following types of landdisturbing activity:
  - (1) Those activities undertaken on agricultural land for the production of plants and animals useful to man, including but not limited to:
    - (i) Forage and sod crops, grain and feed crops, tobacco, cotton, and peanuts;
    - (ii) Dairy animals and dairy products;
    - (iii) Poultry and poultry products; livestock, including beef cattle, llamas, sheep, swine, horses, ponies, mules or goats;
    - (iv) Bees and apiary products;
    - (v) Fur-producing animals.
    - (vi) Mulch, ornamental plants, and other horticultural products. For the purposes of this section, "mulch" means substances composed primarily of plant remains or mixtures of such substances.
  - (2) Those activities undertaken on forestland for the production and harvesting of timber and timber products and which are conducted in accordance with Best Management Practices set out in Forest Practice Guidelines Related to Water Quality as adopted by the North Carolina Department of Agricultural and Consumer Services. If land-disturbing activity undertaken on forestland for the production and harvesting of timber and timber products is not conducted in accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this ordinance shall apply to such activity and any related land-disturbing activity on the tract;
  - (3) Activity for which a permit is required under the Mining Act of 1971, Article 7 of Chapter 74 of the North Carolina General Statutes;
  - (4) Land-disturbing activity over which the state has exclusive regulatory jurisdiction as provided in G.S. 113A-56(a).
  - (5) For the duration of an emergency, activities essential to protect human life.
  - (6) Activities undertaken to restore the wetland functions of converted wetlands to provide compensatory mitigation to offset impacts permitted under Section 404 of the Clean Water Act.
  - (7) Activities undertaken pursuant to Natural Resources Conservation Service standards to restore the wetlands functions of converted wetlands as defined in Title 7 Code of Federal Regulations § 12.2

## Sec. 18-4. - Conflict of Interest.

No Rowan County staff member or contracted agent shall make a final administrative decision concerning this ordinance if the applicable landowner or applicant of the petition is a Person with whom the member or agent has a close familial relationship defined as immediate family by Chapter 21 of the Rowan County

Code of Ordinances including spouse, or business or other associational relationship. If a staff member or agent has a conflict of interest, the decision shall be assigned to another member or agent.

#### Sec. 18-5—18-20. - Reserved.

#### **ARTICLE II. - GENERAL REGULATIONS**

## Sec. 18-21. - Requirements.

- (a) Plans required. No Person shall initiate any land-disturbing activity subject to this chapter without first obtaining a plan approval therefore from Rowan County.
- (b) Protection of property. Persons conducting land-disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity.
- (c) More restrictive rules shall apply. Whenever conflicts exist between federal, state or local laws, ordinances or rules, the more restrictive provision shall apply.
- (d) Plan approval; exceptions. Notwithstanding the general requirement to obtain a plan approval prior to undertaking land-disturbing activity, a plan approval shall not be required for land-disturbing activity that does not exceed forty-three thousand, five hundred, sixty (43,560) square feet in surface area. In determining the area, lands under one or diverse ownership being developed as a unit will be aggregated.

## Sec. 18-22. - Basic control objectives.

An erosion and sedimentation control plan may be disapproved if the plan fails to address the following control objectives:

- (1) Identify critical areas. On-site areas which are subject to severe erosion, and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation, are to be identified and receive special attention.
- (2) Limit time of exposure. All land-disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time specified in G.S. 113A-57, the rules of this Chapter, or as directed by the Approving Authority.
- (3) Limit exposed areas. All land-disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one (1) time.
- (4) Control surface water. Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure.
- (5) Control sedimentation. All land-disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage.
- (6) Manage stormwater runoff. When the increase in the velocity of stormwater runoff resulting from a land-disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, a plan is to include measures to control the velocity to the point of discharge so as to minimize accelerated erosion of the site and increased sedimentation of the stream.

## Sec. 18-23. - Mandatory standards for land-disturbing activity.

No land-disturbing activity subject to the control of this chapter shall be undertaken except in accordance with the following mandatory standards:

- Buffer zone.
  - a. Standard buffer. No land-disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a 30-foot buffer zone is provided along the margin of the watercourse.

- b. Projects on, over or under water. This subsection shall not apply to a land-disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse.
- c. Buffer measurement. Unless otherwise provided, the width of a buffer zone is measured horizontally from the top of stream bank to the nearest edge of the disturbed area, containing natural or artificial means of confining visible siltation.
- (2) Graded slopes and fills. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. In any event, slopes left exposed will, within twenty-one (21) calendar days of completion of any phase of grading, be planted or otherwise be provided with temporary or permanent ground cover, devices or structures sufficient to restrain erosion. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints.
- (3) Fill material. Unless a permit from the Department's division of waste management to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding twelve (12) inches, and other materials which would cause the site to be regulated as a landfill by the State of North Carolina. Not all materials described in Section .0562 of 15A NCAC 13B are suitable to meet geotechnical considerations of the fill activity and should be evaluated accordingly.
- (4) Ground cover. Whenever land-disturbing activity that will disturb more than one (1) acre is undertaken on a tract, or associated tracts, the Person conducting the land-disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to retain the sediment generated by the land-disturbing activity within the boundaries of the tract(s) during construction upon and development of such tract(s), and shall plant or otherwise provide permanent ground cover sufficient to restrain erosion after completion of construction or development. Except as provided in subsection 18-24(b)(5) of this chapter, provisions for a ground cover sufficient to restrain erosion must be accomplished within ninety (90) calendar days following completion of construction or development.
- (5) Prior plan approval. No Person shall initiate any land-disturbing activity that will disturb more than one (1) acre on a tract unless, thirty (30) or more days prior to initiating the activity, a plan for the activity is filed with and approved by Rowan County. Rowan County shall forward to the director of the Division of Water Resources a copy of each plan for a land-disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table of the tract.
- (6) The land-disturbing activity shall be conducted in accordance with the approved erosion and sedimentation control plan.

### Sec. 18-24. - Design and performance standards.

- (a) Except as provided in subsection (b)(2) of this section, erosion and sedimentation control measures, structures and devices shall be planned, designed and constructed to provide protection from the calculated maximum peak rate of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the U.S.D.A. Soil Conservation Service's "National Engineering Field Manual for Conservation Practices," or the North Carolina Erosion and Sediment Control Planning and Design Manual or other acceptable calculation procedures.
- (b) HQW zones. In high quality water (HQW) zones, the following design standards shall apply:
  - (1) Limit on uncovered area. Uncovered areas in HQW zones shall be limited at any time to a maximum total area, within the boundaries of the tract, of twenty (20) acres. Only the portion of the land-disturbing activity within a HQW zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director upon providing engineering justification with a construction sequence that considers phasing and limiting exposure.

- (2) Maximum peak rate of runoff protection. Erosion and sedimentation control measures, structures and devices within HQW zones shall be so planned, designed and constructed to provide protection from the runoff of the 25-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the U.S.D.A. Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of this state or the United States or any generally recognized organization or association.
- (3) Sediment Basin Design. Sediment basins within HQW zones shall be designed and constructed according to the following criteria:
  - use a surface withdrawal mechanism, except when the basin drainage area is less than 1.0 acre;
  - (ii) have a minimum of 1800 cubic feet of storage area per acre of disturbed area;
  - (iii) have a minimum surface area of 325 square feet per cfs of the Twenty-five Year
     Storm (Q25) peak flow;
  - (iv) have a minimum dewatering time of 48 hours;
  - (v) incorporate 3 baffles, unless the basin is less than 20 feet in length, in which case 2 baffles shall be sufficient.

Upon written request of the applicant, the Director may allow alternative design and control measures in lieu of meeting the conditions required in subparagraphs (3)(ii) through (3)(v) of this sub-section if the applicant demonstrates that meeting all of those conditions will result in design or operational hardships and that the alternative measures will provide an equal or more effective level of erosion and sediment control on the site. Alternative measures may include quicker application of ground cover, use of sediment flocculants, and use of enhanced ground cover practices.

(4) Grade. Newly constructed open channels in HQW zones shall be designed and constructed with side slopes no steeper than two (2) horizontal to one (1) vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.

## Sec. 18-25. - Stormwater outlet protection.

- (a) Intent. Stream banks and channels downstream from any land-disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land-disturbing activity.
- (b) Performance standard. Persons shall conduct land-disturbing activity so that the post-construction velocity of the ten-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:
  - (1) The velocity established by the maximum permissible velocities table set out in subsection (e) of this section; or
  - (2) The velocity of the ten-year storm runoff in the receiving watercourse prior to development.

If conditions (1) or (2) of this subsection cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the "prior to development" velocity by ten (10) percent.

(c) Acceptable management measures. Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. Rowan County recognizes that the management of stormwater runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives, while not exhaustive, are to:

- Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious;
- (2) Avoid increases in stormwater discharge velocities by using vegetated or roughened swales and waterways in place of closed drains and high velocity paved sections;
- (3) Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge. These may range from simple riprapped sections to complex structures;
- (4) Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining;
- (5) Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.
- (d) Exceptions. This rule shall not apply where it can be demonstrated to Rowan County that stormwater discharge velocities will not create an erosion problem in the receiving watercourse.
- (e) Maximum permissible velocities table. The following is a table for maximum permissible velocity for stormwater discharges in feet per second (F.P.S.) and meters per second (M.P.S.):

Material	F.P.S.	M.P.S.
Fine sand (noncolloidal)	2.5	.8
Sandy loam (noncolloidal)	2.5	.8
Silt loam (noncolloidal)	3.0	.9
Ordinary firm loam	3.5	1.1
Fine gravel	5.0	1.5
Stiff clay (very colloidal)	5.0	1.5
Graded, loam to cobbles (noncolloidal)	5.0	1.5
Graded, silt to cobbles (colloidal)	5.5	1.7
Alluvial silts (noncolloidal)	3.5	1.1
Alluvial silts (colloidal)	5.0	1.5
Coarse gravel (noncolloidal)	6.0	1.8

Cobbles and shingles	5.5	1.7
Shales and hard pans	6.0	1.8

Source: Adapted from recommendations by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels multiply allowable velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

#### Sec. 18-26. - Borrow and waste areas.

When the Person conducting the land-disturbing activity is also the Person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the Mining Act of 1971, G.S. 74, Article 7, and waste areas for surplus materials other than landfills regulated by the Department's division of solid waste management, shall be considered as part of the land-disturbing activity where the borrow material is being used or from which the waste material originated. When the Person conducting the land-disturbing activity is not the Person obtaining the borrow and/or disposing of the waste, these areas shall be considered a separate land-disturbing activity.

#### Sec. 18-27. - Access and haul roads.

Temporary access and haul roads, other than public roads, constructed or used in connection with any land-disturbing activity shall be considered a part of such activity.

### Sec. 18-28. - Operations in lakes or natural watercourses.

Land-disturbing activity in connection with construction in, on, over or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disruption of the stream channel. Where the relocation or crossing of a stream is an essential part of the proposed activity, the relocation or crossing activity shall be planned and executed so as to minimize unnecessary changes in the stream flow characteristics. All stream relocation or crossing activities must be conducted in accordance with Rowan County Flood Damage Prevention Ordinance, if applicable, NCDEQ, Division of Water Resources and USACE Standards.

### Sec. 18-29. - Responsibility for maintenance.

During the development of a site, the Person conducting the land-disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this chapter, the Act or any order adopted pursuant to this chapter or the Act. After site development, the landowner or Person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a government agency.

### Sec. 18-30. - Additional measures.

Whenever Rowan County determines that significant erosion and sedimentation is occurring as a result of land-disturbing activity, despite application and maintenance of protective practices, the Person conducting the land-disturbing activity will be required to and shall take additional protective action.

#### Sec. 18-31. - Reserved

Sec. 18-32-18-50. - Reserved.

## **ARTICLE III. - PERMIT; PLANS; INSPECTIONS**

Sec. 18-51. - Fees.

(a) Rowan County has established a fee schedule for the review and processing of sedimentation and erosion control plans, site inspections, and related administrative costs. Fees are established by the fee schedule as adopted by the Rowan County Board of Commissioners.

## Sec. 18-52. - Erosion and sedimentation control plans.

- (a) Plan submission. An erosion and sedimentation control plan shall be prepared for all land-disturbing activities subject to this chapter whenever the proposed activity will disturb more than one (1) acre on a tract. Two (2) copies of the plan shall be filed with Rowan County, and a copy shall be simultaneously submitted to the Rowan Soil and Water Conservation District, at least thirty (30) days prior to commencement of the proposed activity. A copy of the plan shall be kept on file at the job site.
- (b) Required revisions. After approving the plan, if Rowan County, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, Rowan County shall require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the appropriate authority. If, following commencement of a land-disturbing activity pursuant to an approved plan, Rowan County determines that the plan is inadequate to meet the requirements of this chapter, Rowan County may require such revisions as are necessary to comply with this chapter.
- (c) Retention of consultant. Rowan County may elect to retain a consultant or professional services to review an erosion control plan and provide a determination(s) or recommendation(s) as to whether the plan complies with the standards of this chapter and applicable state and federal rules and regulations. Rowan County shall require any consultant(s) to disclose any potential conflicts of interest and to hold confidential any proprietary information supplied by the applicant.
- (d) Financial responsibility and ownership. Erosion and sedimentation control plans shall be disapproved unless accompanied by an authorized statement of financial responsibility and documentation of property ownership. This statement shall be signed by the Person financially responsible for the land-disturbing activity or his attorney in fact. The statement shall include the mailing and street addresses of the principal place of business of:
  - (1) The Person financially responsible;
  - (2) The owner of the land; and
  - (3) Any registered agents.

If the Person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the plan, the Act, this chapter or rules or orders adopted or issued pursuant to this chapter. Except as provided in Section 18-52(s) or in the case of constructing utility lines, if the applicant is not the owner of the land to be disturbed, the erosion and sedimentation control plan must include the owner's written consent for the applicant to submit an erosion and sedimentation control plan and to conduct the anticipated land-disturbing activity.

If the land-disturbing activity involves the construction of utility lines for the provision of water, sewer, gas, telecommunications, or electrical services, and the applicant is not the owner of the land, the draft erosion and sedimentation control plan may be submitted without the written consent of the owner of the land, so long as the owner of the property has been provided prior notice of the project.

(e) Soil and water conservation district comments. The district shall review the plan and submit any comments and recommendations to Rowan County within twenty (20) days after the district received

- the plan, or within any shorter period of time as may be agreed upon by the district and Rowan County. Failure of the district to submit its comments and recommendations within twenty (20) days or within any agreed-upon shorter period of time shall not delay final action on the plan.
- (f) Timeline for decisions on plans. Rowan County will review each complete plan submitted to it and within thirty (30) days of receipt thereof will notify the Person submitting the plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications or disapprove a complete erosion and sedimentation control plan within thirty (30) days of receipt shall be deemed approval. Rowan County will review each revised plan submitted to them and within fifteen (15) days of receipt thereof will notify the Person submitting the plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications, or disapprove a revised plan within fifteen (15) days of receipt shall be deemed approval.
- (g) Environmental Policy Act document. Any plan submitted for a land-disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (G.S. 113A-1 et seq.) shall be deemed incomplete until a complete environmental document is available for review. Rowan County shall promptly notify the Person submitting the plan that the 30-day time limit for review of the plan pursuant to this chapter shall not begin until a complete environmental document is available for review.
- (h) Content. The plan required by this section shall contain architectural or engineering drawings, maps, assumptions, calculations and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this chapter. Plan content may vary to meet the needs of specific site requirements. Detailed guidelines for plan preparation may be obtained from the Rowan County Planning Department on request.
- (i) Approval. Rowan County shall only approve a plan upon determining that it complies with all applicable state and local regulations for erosion and sedimentation control. Approval assumes the applicant's compliance with the federal and state water quality laws, regulations and rules. Rowan County shall condition approval of plans upon the applicant's compliance with federal and state water quality laws, regulations and rules.
- (j) Resubmittal required. If following the approval of an erosion and sedimentation control plan, land-disturbing activity does not commence for a period of two (2) years from approval date, a resubmittal of plan and fees will be required.
- (k) Disapproval for content. Rowan County shall disapprove a plan or draft plan based on its content. Disapproval of a plan must specifically state in writing the reasons for disapproval.
- (I) Other disapprovals. Rowan County may disapprove a plan or draft plans if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters. An erosion control plan or transfer of a plan may be disapproved upon a finding that an applicant, or any parent, subsidiary, or other affiliate of the applicant:
  - (1) Is conducting or has conducted land-disturbing activity without an approved plan or has received notice of violation of a plan previously approved by the commission or a local government pursuant to the Act and has not complied with the notice within the time specified in the notice;
  - (2) Has failed to pay a civil penalty assessed pursuant to the Act or a local ordinance adopted pursuant to the Act by the time the payment is due;
  - (3) Has been convicted of a misdemeanor pursuant to G.S. 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the Act;
  - (4) Has failed to substantially comply with state rules or local ordinances and regulations adopted pursuant to the Act; or
  - (5) Has failed to obtain the necessary zoning or subdivision approvals from the county, NCDOT or municipality having jurisdiction.

For purposes of this subsection, an applicant's record may be considered for only the two (2) years prior to the application date.

In the event that a plan is disapproved pursuant to this subsection, the Rowan County Planning Department shall notify the director of such disapproval within ten (10) days. The Rowan County Planning Department shall advise the applicant and the director in writing as to the specific reasons that the plan was disapproved.

- (m) Notice of activity initiation. No Person may initiate a land-disturbing activity before notifying the agency that issued the plan approval of the date that land-disturbing activity will begin.
- (n) Preconstruction conference. When deemed necessary by the approving authority, a preconstruction conference may be required and noted on the approved plan.
- (o) Display of plan approval. A plan approval issued under this article shall be prominently displayed until all construction is complete, all temporary measures have been removed, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. A copy of the approved plan shall be kept on file at the job site.
- (p) Amendment to a plan. Applications for amendment of an erosion and sedimentation control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as the amendment is approved by Rowan County, the land-disturbing activity shall not proceed except in accordance with the erosion and sedimentation control plan as originally approved.
- (q) Failure to file a plan. Any Person engaged in land-disturbing activity who fails to file a plan in accordance with this chapter or who conducts a land-disturbing activity except in accordance with provisions of an approved plan shall be deemed in violation of this chapter.
- (r) Self-Inspections. The landowner, the financially responsible party, or the landowner's or the financially responsible party's agent shall perform an inspection of the area covered by the plan after each phase of the plan has been completed and after establishment of temporary ground cover in accordance with G.S. 113A-57(2). In addition, weekly and rain-event self-inspections are required by federal regulations, that are implemented through the NPDES Construction General Permit No. NCG010000. The Person who performs the inspection shall maintain and make available a record of the inspection at the site of the land-disturbing activity. The record shall set out any significant deviation from the approved erosion control plan, identify any measures that may be required to correct the deviation, and document the completion of those measures. The record shall be maintained until permanent ground cover has been established as required by the approved erosion and sedimentation control plan. The inspections required by this subsection shall be in addition to inspections required by G.S. 113A-61.1.

Except as may be required under federal law, rule, or regulation, no periodic self-inspections or rain gauge installation is required on individual residential lots where less than one acre is being disturbed on each lot.

- (s) Transfer of Plans. Rowan County may transfer an erosion and sedimentation control plan approved pursuant to this section without the consent of the plan holder to a successor-owner of the property on which the permitted activity is occurring or will occur as provided in this subsection.
  - (1) Rowan County may transfer a plan if all the following conditions are met:
    - (i) The successor-owner of the property submits a written request to transfer the plan and an authorized statement of financial responsibility and documentation of property ownership.
    - (ii) Rowan County finds all of the following:
      - a. The plan holder is one of the following:
        - A natural person who is deceased.

- A partnership, limited liability corporation, corporation, or any other business association that has been dissolved.
- A Person who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur.
- 4. A Person who has sold the property on which the permitted activity is occurring or will occur.
- The successor-owner holds title to the property on which the permitted activity is occurring or will occur.
- The successor-owner is the sole claimant of the right to engage in the permitted activity.
- d. There will be no substantial change in the permitted activity.
- (2) The plan holder shall comply with all terms and conditions of the plan until such time as the plan is transferred.
- (3) The successor-owner shall comply with all terms and conditions of the plan once the plan has been transferred.
- (4) Notwithstanding changes to the law made after the original issuance of the plan, Rowan County may not impose new or different terms and conditions on the plan without the prior express consent of the successor-owner. Nothing in this subsection shall prevent Rowan County from requiring a revised plan pursuant to G.S. 113A-54.1(b).

## Sec. 18-53. - Inspections and investigations.

- (a) Inspection. Agents, officials or other qualified Persons authorized by Rowan County will periodically inspect the sites of land-disturbing activity to ensure compliance with the Act, this chapter or rules or orders adopted or issued pursuant to this chapter and to determine whether the activity is being conducted in accordance with an approved plan and whether the measures required in the plan are effective in controlling erosion and sedimentation resulting from land-disturbing activity. Notice of the right to inspect shall be included in the certificate of approval of each plan.
- Notice of violation. If Rowan County determines that a Person engaged in land-disturbing activity (b) has failed to comply with the Act, this chapter or rules or orders adopted or issued pursuant to this chapter, a notice of violation shall be served upon that Person. The notice may be served by any means authorized under G.S. 1A-1, Rule 4. The notice shall specify a date by which the Person must comply with the Act, or this chapter, or rules or orders adopted pursuant to this chapter, and inform the Person of the actions that need to be taken to comply with the Act, this chapter, or rules or orders adopted pursuant to this chapter. Any Person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this chapter. If the Person engaged in the land-disturbing activity has not received a previous notice of violation under this section, Rowan County shall offer assistance in developing corrective measures. Assistance may be provided by referral to a technical assistance program on behalf of the Approving Authority, referral to a cooperative extension program, or by the provision of written materials such as Department guidance documents. The notice of violation may be served in the manner prescribed for service of process by G.S. 1A-1, Rule 4, and shall include information on how to obtain assistance in developing corrective measures.
- (c) Investigation. Rowan County shall have the power to conduct such investigation as it may reasonably deem necessary to carry out its duties as prescribed in this chapter and, who presents appropriate credentials for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land-disturbing activity.
- (d) Willful resistance, delay or obstruction. No Person shall willfully resist, delay or obstruct an authorized representative, employee or agent of Rowan County while that Person is inspecting or attempting to inspect a land-disturbing activity under this section.

(e) Statements and reports. Rowan County shall also have the power to require written statements, or filing of reports under oath, with respect to pertinent questions relating to land-disturbing activity.

Sec. 18-54-18-70. - Reserved.

#### **ARTICLE IV. - PLAN APPEALS**

#### Sec. 18-71. - Procedure.

- (a) Except as provided in subsection (b) of this section, the appeal of a disapproval or approval with modifications of a plan shall be governed by the following provisions:
  - (1) The disapproval or modification of any proposed erosion and sedimentation control plan by Rowan County shall entitle the Person submitting the plan to a hearing if such Person submits written demand for a hearing within fifteen (15) days after receipt of written notice of disapproval or modifications.
  - (2) Hearings held pursuant to this section shall be conducted by the Rowan County Board of Adjustment within thirty (30) days after the date of the appeal or request for a hearing.
  - (3) The board of adjustment will render its final decision on any plan within sixty (60) days of the hearing.
  - (4) If the board of adjustments upholds the disapproval or modification of a proposed erosion and sedimentation control plan following the hearing, the Person submitting the plan shall then be entitled to appeal the decision to the North Carolina Sedimentation Control Commission as provided in G.S. 113A-61(c) and 15A NCAC 4B.0018(d).
- (b) In the event that a plan is disapproved pursuant to subsection 18-52(I) of this chapter, the applicant may appeal Rowan County's disapproval of the plan directly to the Commission.

Sec. 18-72—18-90. - Reserved.

### **ARTICLE V. - VIOLATIONS AND PENALTIES**

#### Sec. 18-91. - Penalties.

- (a) Civil penalties.
  - (1) Civil Penalty for a violation. Any Person who violates any of the provisions of this chapter or rule or order adopted or issued pursuant to this chapter, or who initiates or continues a land-disturbing activity for which an erosion and sedimentation control plan is required except in accordance with the terms, conditions and provisions of an approved plan, is subject to a maximum civil penalty assessment of five thousand dollars (\$5,000.00) per violation. A civil penalty may be assessed from the date of the violation. Each day of a continuing violation shall constitute a separate violation. When the Person has not been assessed any civil penalty under this subsection for any previous violation, and that Person abated continuing environmental damage resulting from the violation within one hundred and eighty (180) days from the date of the notice of violation, the maximum cumulative total civil penalty assessed under this subsection for all violations associated with the land-disturbing activity for which the erosion and sediment control plan is required is twenty-five thousand dollars (\$25,000).
  - (2) Civil penalty assessment factors. Personnel of the Rowan County Planning and Development Department shall determine the amount of the civil penalty based on the following factors:
    - (a) The degree and extent of harm caused by the violation,
    - (b) The cost of rectifying the damage,
    - (c) The amount of money the violator saved by noncompliance,

- (d) Whether the violation was committed willfully; and
- (e) The prior record of the violator in complying or failing to comply with this chapter.
- (3) Notice of civil penalty assessment. Rowan County shall provide written notice of the civil penalty amount and basis for assessment to the Person assessed. The notice shall be served by any means authorized under G.S. 1A-1, Rule 4 and shall direct the violator to either pay the assessment, contest the assessment within thirty (30) days after receipt of the notice by written petition for a hearing submitted to Rowan County within said 30-day period, or file a request with Rowan County for remission of the assessment within thirty (30) days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the North Carolina General Statutes and a stipulation of the facts on which the assessment was based.
- (4) Final decision. The board of adjustment shall conduct a hearing within thirty (30) days after written demand for the hearing and render the final decision concerning the contested civil penalty assessment(s) within sixty (60) days of the hearing.
- (5) Appeal of final decision. An appeal of the final decision rendered by the board of adjustment shall be to the Superior Court of Rowan County. Such appeals must be made within thirty (30) days of the final written decision filed with the clerk to the Board of Adjustment.
- (6) Remission of Civil Penalties. A request for remission of a civil penalty imposed under G.S. 113A-64 may be filed with the Rowan County within thirty (30) days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the General Statutes and a stipulation of the facts on which the assessment was based. The following factors shall be considered in determining whether a civil penalty remission request will be approved:
  - (i) Whether one or more of the civil penalty assessment factors in G.S. 113A-64(a)(3) were wrongly applied to the detriment of the petitioner.
  - (ii) Whether the petitioner promptly abated continuing environmental damage resulting from the violation.
  - (iii) Whether the violation was inadvertent or a result of an accident.
  - (iv) Whether the petitioner had been assessed civil penalties for any previous violations.
  - (v) Whether payment of the civil penalty will prevent payment for necessary remedial actions or would otherwise create a significant financial hardship.
  - (vi) The assessed property tax valuation of the petitioner's property upon which the violation occurred, excluding the value of the structures located on the property.
- (7) Collection. If payment is not received within thirty (30) days after it is due, Rowan County may institute a civil action to recover the amount of the assessment. The civil action may be brought in the Superior Court of Rowan County. Such civil actions must be filed within three (3) years of the date the assessment was due. An assessment that is not contested and a remission that is not requested is due when the violator is served with a notice of assessment. An assessment that is contested or a remission that is requested is due at the conclusion of the administrative and judicial review of the assessment.
- (8) Credit of civil penalties. Civil penalties collected pursuant to this chapter shall be credited to the Civil Penalty and Forfeiture Fund in accordance with G.S. 115C-457.2. Penalties collected by Rowan County may be diminished only by the actual costs of collection. The collection cost percentage to be used shall be established and approved by the North Carolina Office of State Budget and Management on an annual basis, based upon the computation of actual collection costs by Rowan County for the prior fiscal year. The cost percentage shall not exceed 20% of penalties collected.

(b) Criminal penalties. Any Person who knowingly or willfully violates any provision of this chapter, or rule or order adopted or issued pursuant to this ordinance, or who knowingly or willfully initiates or continues a land-disturbing activity for which an erosion and sedimentation control plan is required except in accordance with the terms, conditions and provisions of an approved plan shall be guilty of a Class 2 misdemeanor punishable by a fine not to exceed five thousand dollars (\$5,000.00) as provided in G.S. § 113A-64.

## Sec. 18-92. - Injunctive relief.

- (a) Violation of local program. Whenever Rowan County has reasonable cause to believe that any Person is violating or threatening to violate any ordinance or any rule or order adopted or issued by Rowan County or any term, condition or provision of any approved erosion control plan, it may, either before or after the institution of any other action or proceeding authorized by this chapter, institute a civil action in the name of Rowan County for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the superior court of the county in which the violation is occurring or is threatened.
- (b) Abatement of violation. Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation, to ensure that restoration is performed, or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this chapter.

## Sec. 18-93. - Restoration of areas affected by failure to comply.

Rowan County may require a Person who engaged in a land-disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57(3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this chapter.

## Sec. 18-94. - Severability.

If any section or sections of this chapter is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

## Sec. 18-95. - Effective date.

This chapter and its amendments are effective on October 2<sup>nd</sup>, 2023.

Gregory C Edds, Chairman,

Rowan County Board of Commissioners

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Rebecca Saleeby

Deputy Clerk to the Board

#### Chapter 18 - SOIL EROSION AND SEDIMENTATION 11

#### Footnotes:

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**Editor's note**— An amendment adopted July 7, 2008, amended ch. 18 in its entirety to read as herein set out. Former ch. 18 consisted of §§ 18-1—18-4; 18-21—18-31; 18-51—18-53, 18-71, 18-91, and 18-92, pertained to similar subject matter and derived from an ordinance adopted Nov. 5, 1990; and an ordinance adopted Jan. 4, 1993.

**Cross reference**— Mining; other extractive industries, § 7-201 et seq.; farmland preservation, Ch. 8.5; floodway; floodway fringe, Ch. 9; flood damage prevention, § 9-201 et seq.; planning and development, Ch. 17; zoning, Ch. 21.

State Law reference— Sedimentation Pollution Control Act of 1973, G.S. 113A-50 et seq.

#### ARTICLE I. - IN GENERAL

#### Sec. 18-1. - Authority and purpose.

This chapter may be known and cited as the Soil Erosion and Sedimentation Control Ordinance for Rowan County, NC and may be commonly referred to as the "erosion control ordinance". This chapter is adopted pursuant to the authority granted in G.S. 113A Article 4 for the purposes of:

- (1) Regulating certain land-disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses and other public and private property by sedimentation; and
- (2) Establishing procedures through which these purposes can be fulfilled.

(Amend. of 7-7-08)

Sec. 18-2. - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Accelerated erosion means any increase over the rate of natural erosion as a result of land-disturbing activity.

Act means the North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it.

Adequate erosion control measure, structure or device means one which controls the soil material within the land area under responsible control of the Person conducting the land-disturbing activity.

Administrative Decision means a decision made in the implementation, administration, or enforcement of development regulations that involve the determination of facts or the application of objective standards set forth in this chapter. These are sometimes referred to as "ministerial" decisions or "administrative determination".

Affiliate means a Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control of another Person.

Appeal means a request for a review by the board of commissions of an administrative decision regarding any provision of this article.

Approving Authority means the Department or other State or a local government agency that has been delegated erosion and sedimentation plan review responsibilities in accordance with the provisions of the Act.

Being conducted means a land-disturbing activity has been initiated and permanent stabilization of the site has not been completed.

Best management practice (BMP) means a structural device, measure, facility, or activity which helps to achieve soil erosion and stormwater management control objectives at a designated site as recognized in the most recent version of the North Carolina Division of Water Resources, Stormwater Best Management Practices Manual.

Board of adjustment means the Rowan County Board of Adjustment.

Board of commissioners means the Rowan County, North Carolina Board of Commissioners.

Borrow means fill material which is required for on-site construction and is obtained from other locations.

Buffer zone means the strip of land adjacent to a lake or natural watercourse.

Clearing means the removal of existing ground cover of a site prior to development that may include but not be limited to removal of structures, deforestation, etc.

Commission means the North Carolina State Sedimentation Control Commission.

Completion of construction or development means that no further land-disturbing activity is required on a phase of a project except that which is necessary for establishing a permanent ground cover.

Department means the North Carolina Department of Environmental Quality (NCDEQ).

Determination means a written, final and binding order, requirement, or determination regarding an administrative decision.

Development means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filing, grading, paving, excavation or drilling operations or storage of equipment or materials.

Developmental Approval means an administrative approval made pursuant to this chapter that is written and required prior to commencing development or undertaking a specific activity, project, or development proposal.

*Director* means the Director of the Division of Energy Mineral and Land Resources of the Department of Environmental Quality.

Discharge point means that point at which runoff leaves a tract of land.

*District* means the Rowan County Soil and Water Conservation District created pursuant to G.S. Ch. 139.

Energy dissipator means a structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

*Erosion* means the wearing away of land surface by the action of wind, water, gravity or any combination thereof.

Financial responsible owner (FRO) means the Person financially responsible for the land disturbing activity being conducted.

Ground cover means any natural vegetative growth or other material which renders the soil surface against accelerated erosion.

Ground level improvements means ground level loading areas, parking areas, patios and other similar ground level uses that will not occupy additional volume of the floodplain area during times of flooding.

High quality waters means those classified as such in 15A NCAC 2B.0224, which is incorporated herein by reference to include subsequent amendments and additions.

High quality water (HQW) zones means areas that are within one (1) mile and drain to HQWs.

Impervious surface. Any material that significantly reduces and prevents natural infiltration of water into the soil. Impervious surfaces include but are not limited to roofs, patios, balconies, decks, streets, parking areas, driveways, sidewalks, and any concrete, stone, brick, asphalt, or compacted gravel surface. For purposes of this chapter, the effective impervious coverage of certain surfaces listed below are:

- (1) Asphalt, concrete, crush and run gravel, masonry, marl, wood, and other impermeable surfaces which prevent land area from infiltrating stormwater are one hundred (100) percent impervious.
- (2) Porous surfaces which permit direct infiltration of unconcentrated stormwater into ground areas so that the first one-half (½) inch of stormwater infiltrates into the ground are seventy (70) percent impervious.
- (3) Slatted wood decks that allow the drainage of water through the slats to an unpaved surface below are fifty (50) percent impervious.
- (4) Ungraveled natural footpaths, water surfaces of swimming pools, and drain fields are zero (0) percent impervious.

All other necessary determinations about impervious surfaces will be based on hydrological tests considering existing subgrade soils, slope, rainfall intensity and rainfall duration.

Lake or natural watercourse means any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

Land-disturbing activity means any use of the land by any Person in residential, industrial, educational, institutional or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

Local government means any county, incorporated village, town or city, or any combination of counties, incorporated villages, towns and cities, acting through a joint program pursuant to the provisions of the Act.

*Natural erosion* means the wearing away of the earth's surface by water, wind or other natural agents under natural environmental conditions undisturbed by man.

North Carolina Administrative Code (NCAC) is the compilation of the administrative rules of approximately 26 state agencies and over 50 occupational licensing boards. Compilation and publication of the NCAC is mandated by G.S. 150B-21.18.

Parent means an affiliate that directly, or indirectly through one or more intermediaries, controls another Person.

*Person* means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body or other legal entity.

Person conducting land-disturbing activity means any Person who may be held responsible for a violation unless expressly provided otherwise by this chapter, the Act or any order adopted pursuant to this chapter or the Act.

Person responsible for the violation, as used in this chapter and G.S. 113A-64, means:

(1) The developer or other Person who has or holds himself as having financial or operational control over the land-disturbing activity; or

(2) The landowner or Person in possession or control of the land when he has directly or indirectly allowed the land-disturbing activity or has benefited from it or he has failed to comply with a duty imposed by any provision of this chapter, the Act or any order adopted pursuant to this chapter or the Act.

Phase of grading means one (1) of two (2) types of grading, rough or fine.

Plan means erosion and sedimentation control plan.

Planning board means County Planning Board of Rowan County, North Carolina.

Post-development conditions means predevelopment conditions together with the land use, drainage and impervious conditions that would exist on the site if all proposed development plans for the site are fully completed.

Predevelopment conditions means the land use, drainage, and impervious surface conditions existing on the site at the time plans are submitted for approval, including any previously approved development plans for the site which has not expired, and projects which have an outstanding valid building permit or an established vested right in compliance with all applicable General Statutes, and/or Rowan County Ordinances.

Rowan County means the staff members of the Rowan County Planning and Development Department or any agents, officials or other qualified personnel of the County who are authorized to enforce the provisions of this chapter.

Sediment means solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity or ice from its site of origin.

Sedimentation means the process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land-disturbing activity or into a lake or natural watercourse.

Siltation means sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed and maintained control measures; and which has been transported from its point of origin within the site of a land-disturbing activity; and which has been deposited, or is in suspension in water.

Storm drainage facilities means the system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey stormwater through and from a given drainage area.

Stormwater runoff means the surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

Subsidiary means an affiliate that is directly or indirectly, through one or more intermediaries, controlled by another Person.

Ten-year storm means the stormwater runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in ten (10) years, and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

*Top-of-bank.* The point on a stream's cross-section defined by the bankfull elevation or the highest point in elevation immediately adjacent to the stream channel, whichever is greater.

*Tract* means all contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

Twenty-five-year storm means the stormwater runoff from precipitation of an intensity expected to be equaled or exceeded on the average once in twenty-five (25) years, and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

Two-year storm means the stormwater runoff resulting from a rainfall of an intensity expected to be equaled or exceeded, on the average, once in two (2) years, and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

Uncovered means the removal of ground cover from, on or above the soil surface.

*Undertaken* means the initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

USACE means the United States Army Corps of Engineers.

Velocity means the average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel shall be that area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not to be included for the purpose of computing velocity of flow.

Waste means the surplus materials resulting from on-site land-disturbing activities and disposed of at other locations.

Water-dependent structure. A structure, excluding habitable structures used for water access including, but not limited to, docks, marinas, and boat ramps.

Working days means days exclusive of Saturday and Sunday and State and Federal holidays during which weather conditions or soil conditions permit land-disturbing activity to be undertaken.

"Written" or "in-writing" means written communication, including by electronic email, executed by a staff member to document a determination, order, interpretation, notification, or other purpose identified by this chapter. Unless specified otherwise, in the absence of evidence to the contrary, delivery by first class mail shall be deemed received on the third business day following deposit of the item with the United States Postal Service and delivery by electronic mail shall be deemed received on the date sent.

(Amend. of 7-7-08)

#### Sec. 18-3. - Scope and exclusions.

- (a) Geographical scope of regulated land-disturbing activity. This chapter shall apply to land-disturbing activities within the territorial jurisdiction of Rowan County and as allowed by agreement between local governments, the extent of annexation or other appropriate legal instrument or law.
- (b) Exclusions from regulated land-disturbing activity. Notwithstanding the general applicability of this ordinance to all land-disturbing activity, this chapter shall not apply to the following types of land-disturbing activity:
  - (1) Those activities undertaken on agricultural land for the production of plants and animals useful to man, including but not limited to:
    - (i) Forage and sod crops, grain and feed crops, tobacco, cotton, and peanuts;
    - (ii) Dairy animals and dairy products;
    - (iii) Poultry and poultry products; livestock, including beef cattle, llamas, sheep, swine, horses, ponies, mules or goats;
    - (iv) Bees and apiary products;
    - (v) Fur-producing animals.
    - (vi) Mulch, ornamental plants, and other horticultural products. For the purposes of this section, "mulch" means substances composed primarily of plant remains or mixtures of such substances.
  - (2) Those activities undertaken on forestland for the production and harvesting of timber and timber products and which are conducted in accordance with Best Management Practices set out in Forest Practice Guidelines Related to Water Quality as adopted by the North Carolina Department of Agricultural and Consumer Services. If land-disturbing activity undertaken on forestland for the production and harvesting of timber and timber products is not conducted in

- accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this ordinance shall apply to such activity and any related land-disturbing activity on the tract;
- (3) Activity for which a permit is required under the Mining Act of 1971, Article 7 of Chapter 74 of the North Carolina General Statutes;
- (4) Land-disturbing activity over which the state has exclusive regulatory jurisdiction as provided in G.S. 113A-56(a).
- (5) For the duration of an emergency, activities essential to protect human life.
- (6) Activities undertaken to restore the wetland functions of converted wetlands to provide compensatory mitigation to offset impacts permitted under Section 404 of the Clean Water Act.
- (7) Activities undertaken pursuant to Natural Resources Conservation Service standards to restore the wetlands functions of converted wetlands as defined in Title 7 Code of Federal Regulations § 12.2

(Amend. of 7-7-08)

Sec. 18-4. - Conflict of Interest.

No Rowan County staff member or contracted agent shall make a final administrative decision concerning this ordinance if the applicable landowner or applicant of the petition is a Person with whom the member or agent has a close familial relationship defined as immediate family by Chapter 21 of the Rowan County Code of Ordinances including spouse, or business or other associational relationship. If a staff member or agent has a conflict of interest, the decision shall be assigned to another member or agent.

Sec. 18-5—18-20. - Reserved.

ARTICLE II. - GENERAL REGULATIONS

Sec. 18-21. - Requirements.

- (a) Plans required. No Person shall initiate any land-disturbing activity subject to this chapter without first obtaining a plan approval therefore from Rowan County.
- (b) *Protection of property.* Persons conducting land-disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity.
- (c) More restrictive rules shall apply. Whenever conflicts exist between federal, state or local laws, ordinances or rules, the more restrictive provision shall apply.
- (d) Plan approval; exceptions. Notwithstanding the general requirement to obtain a plan approval prior to undertaking land-disturbing activity, a plan approval shall not be required for land-disturbing activity that does not exceed forty-three thousand, five hundred, sixty (43,560) square feet in surface area. In determining the area, lands under one or diverse ownership being developed as a unit will be aggregated.

(Amend. of 7-7-08)

Sec. 18-22. - Basic control objectives.

An erosion and sedimentation control plan may be disapproved if the plan fails to address the following control objectives:

- (1) *Identify critical areas.* On-site areas which are subject to severe erosion, and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation, are to be identified and receive special attention.
- (2) Limit time of exposure. All land-disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time specified in G.S. 113A-57, the rules of this Chapter, or as directed by the Approving Authority.
- (3) Limit exposed areas. All land-disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one (1) time.
- (4) Control surface water. Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure.
- (5) Control sedimentation. All land-disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage.
- (6) Manage stormwater runoff. When the increase in the velocity of stormwater runoff resulting from a land-disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, a plan is to include measures to control the velocity to the point of discharge so as to minimize accelerated erosion of the site and increased sed imentation of the stream.

(Amend. of 7-7-08)

Sec. 18-23. - Mandatory standards for land-disturbing activity.

No land-disturbing activity subject to the control of this chapter shall be undertaken except in accordance with the following mandatory standards:

- (1) Buffer zone.
  - a. Standard buffer. No land-disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a 30-foot buffer zone is provided along the margin of the watercourse.
  - b. *Projects on, over or under water.* This subsection shall not apply to a land-disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse.
  - c. Buffer measurement. Unless otherwise provided, the width of a buffer zone is measured horizontally from the top of stream bank to the nearest edge of the disturbed area, containing natural or artificial means of confining visible siltation.
- (2) Graded slopes and fills. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. In any event, slopes left exposed will, within twenty-one (21) calendar days of completion of any phase of grading, be planted or otherwise be provided with temporary or permanent ground cover, devices or structures sufficient to restrain erosion. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints.
- (3) Fill material. Unless a permit from the Department's division of waste management to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding twelve (12) inches, and other materials which would cause the site to be regulated as a landfill by the State of North Carolina. Not all materials described in Section .0562 of 15A NCAC 13B are suitable to meet geotechnical considerations of the fill activity and should be evaluated accordingly.
- (4) Ground cover. Whenever land-disturbing activity that will disturb more than one (1) acre is undertaken on a tract, or associated tracts, the Person conducting the land-disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to

retain the sediment generated by the land-disturbing activity within the boundaries of the tract(s) during construction upon and development of such tract(s), and shall plant or otherwise provide permanent ground cover sufficient to restrain erosion after completion of construction or development. Except as provided in subsection 18-24(b)(5) of this chapter, provisions for a ground cover sufficient to restrain erosion must be accomplished within ninety (90) calendar days following completion of construction or development.

- (5) Prior plan approval. No Person shall initiate any land-disturbing activity that will disturb more than one (1) acre on a tract unless, thirty (30) or more days prior to initiating the activity, a plan for the activity is filed with and approved by Rowan County. Rowan County shall forward to the director of the Division of Water Resources a copy of each plan for a land-disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table of the tract.
- (6) The land-disturbing activity shall be conducted in accordance with the approved erosion and sedimentation control plan.

(Amend. of 7-7-08)

Sec. 18-24. - Design and performance standards.

- (a) Except as provided in subsection (b)(2) of this section, erosion and sedimentation control measures, structures and devices shall be planned, designed and constructed to provide protection from the calculated maximum peak rate of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the U.S.D.A. Soil Conservation Service's "National Engineering Field Manual for Conservation Practices," or the North Carolina Erosion and Sediment Control Planning and Design Manual or other acceptable calculation procedures.
- (b) HQW zones. In high quality water (HQW) zones, the following design standards shall apply:
  - (1) Limit on uncovered area. Uncovered areas in HQW zones shall be limited at any time to a maximum total area, within the boundaries of the tract, of twenty (20) acres. Only the portion of the land-disturbing activity within a HQW zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director upon providing engineering justification with a construction sequence that considers phasing and limiting exposure.
  - (2) Maximum peak rate of runoff protection. Erosion and sedimentation control measures, structures and devices within HQW zones shall be so planned, designed and constructed to provide protection from the runoff of the 25-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the U.S.D.A. Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of this state or the United States or any generally recognized organization or association.
  - (3) Sediment Basin Design. Sediment basins within HQW zones shall be designed and constructed according to the following criteria:
    - (i) use a surface withdrawal mechanism, except when the basin drainage area is less than 1.0 acre:
    - (ii) have a minimum of 1800 cubic feet of storage area per acre of disturbed area;
    - (iii) have a minimum surface area of 325 square feet per cfs of the Twenty-five Year Storm (Q25) peak flow;
    - (iv) have a minimum dewatering time of 48 hours;
    - (v) incorporate 3 baffles, unless the basin is less than 20 feet in length, in which case 2 baffles shall be sufficient.

Upon written request of the applicant, the Director may allow alternative design and control measures in lieu of meeting the conditions required in subparagraphs (3)(ii) through (3)(v) of this sub-section if the applicant demonstrates that meeting all of those conditions will result in design or operational hardships and that the alternative measures will provide an equal or more effective level of erosion and sediment control on the site. Alternative measures may include quicker application of ground cover, use of sediment flocculants, and use of enhanced ground cover practices.

(4) Grade. Newly constructed open channels in HQW zones shall be designed and constructed with side slopes no steeper than two (2) horizontal to one (1) vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.

(Amend. of 7-7-08)

Sec. 18-25. - Stormwater outlet protection.

- (a) Intent. Stream banks and channels downstream from any land-disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land-disturbing activity.
- (b) Performance standard. Persons shall conduct land-disturbing activity so that the post-construction velocity of the ten-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:
  - (1) The velocity established by the maximum permissible velocities table set out in subsection (e) of this section; or
  - (2) The velocity of the ten-year storm runoff in the receiving watercourse prior to development.

If conditions (1) or (2) of this subsection cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the "prior to development" velocity by ten (10) percent.

- (c) Acceptable management measures. Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. Rowan County recognizes that the management of stormwater runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives, while not exhaustive, are to:
  - (1) Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious;
  - (2) Avoid increases in stormwater discharge velocities by using vegetated or roughened swales and waterways in place of closed drains and high velocity paved sections;
  - (3) Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge. These may range from simple riprapped sections to complex structures;
  - (4) Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining;
  - (5) Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.
- (d) *Exceptions.* This rule shall not apply where it can be demonstrated to Rowan County that stormwater discharge velocities will not create an erosion problem in the receiving watercourse.

(e) Maximum permissible velocities table. The following is a table for maximum permissible velocity for stormwater discharges in feet per second (F.P.S.) and meters per second (M.P.S.):

Material	F.P.S.	M.P.S.
Fine sand (noncolloidal)	2.5	.8
Sandy loam (noncolloidal)	2.5	.8
Silt loam (noncolloidal)	3.0	.9
Ordinary firm loam	3.5	1.1
Fine gravel	5.0	1.5
Stiff clay (very colloidal)	5.0	1.5
Graded, loam to cobbles (noncolloidal)	5.0	1.5
Graded, silt to cobbles (colloidal)	5.5	1.7
Alluvial silts (noncolloidal)	3.5	1.1
Alluvial silts (colloidal)	5.0	1.5
Coarse gravel (noncolloidal)	6.0	1.8
Cobbles and shingles	5.5	1.7
Shales and hard pans	6.0	1.8

Source: Adapted from recommendations by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels multiply allowable velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

(Amend. of 7-7-08)

Sec. 18-26. - Borrow and waste areas.

When the Person conducting the land-disturbing activity is also the Person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the Mining Act of 1971, G.S. 74, Article 7, and waste areas for surplus materials other than landfills regulated by the Department's division of solid waste management, shall be considered as part of the land-disturbing activity where the borrow material is being used or from which the waste material originated. When the Person conducting the land-disturbing activity is not the Person obtaining the borrow and/or disposing of the waste, these areas shall be considered a separate land-disturbing activity.

(Amend. of 7-7-08)

Sec. 18-27. - Access and haul roads.

Temporary access and haul roads, other than public roads, constructed or used in connection with any land-disturbing activity shall be considered a part of such activity.

(Amend. of 7-7-08)

Sec. 18-28. - Operations in lakes or natural watercourses.

Land-disturbing activity in connection with construction in, on, over or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disruption of the stream channel. Where the relocation or crossing of a stream is an essential part of the proposed activity, the relocation or crossing activity shall be planned and executed so as to minimize unnecessary changes in the stream flow characteristics. All stream relocation or crossing activities must be conducted in accordance with Rowan County Flood Damage Prevention Ordinance, if applicable, NCDEQ, Division of Water Resources and USACE Standards.

(Amend. of 7-7-08)

Sec. 18-29. - Responsibility for maintenance.

During the development of a site, the Person conducting the land-disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this chapter, the Act or any order adopted pursuant to this chapter or the Act. After site development, the landowner or Person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a government agency.

(Amend. of 7-7-08)

Sec. 18-30. - Additional measures.

Whenever Rowan County determines that significant erosion and sedimentation is occurring as a result of land-disturbing activity, despite application and maintenance of protective practices, the Person conducting the land-disturbing activity will be required to and shall take additional protective action.

(Amend. of 7-7-08)

Sec. 18-31. - Reserved

(Amend. of 7-7-08)

Sec. 18-32—18-50. - Reserved.

ARTICLE III. - PERMIT; PLANS; INSPECTIONS

Sec. 18-51. - Fees.

(a) Rowan County has established a fee schedule for the review and processing of sedimentation and erosion control plans, site inspections, and related administrative costs. Fees are established by the fee schedule as adopted by the Rowan County Board of Commissioners.

(Amend. of 7-7-08)

Sec. 18-52. - Erosion and sedimentation control plans.

- (a) Plan submission. An erosion and sedimentation control plan shall be prepared for all land-disturbing activities subject to this chapter whenever the proposed activity will disturb more than one (1) acre on a tract. Two (2) copies of the plan shall be filed with Rowan County, and a copy shall be simultaneously submitted to the Rowan Soil and Water Conservation District, at least thirty (30) days prior to commencement of the proposed activity. A copy of the plan shall be kept on file at the job site.
- (b) Required revisions. After approving the plan, if Rowan County, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, Rowan County shall require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the appropriate authority. If, following commencement of a land-disturbing activity pursuant to an approved plan, Rowan County determines that the plan is inadequate to meet the requirements of this chapter, Rowan County may require such revisions as are necessary to comply with this chapter.
- (c) Retention of consultant. Rowan County may elect to retain a consultant or professional services to review an erosion control plan and provide a determination(s) or recommendation(s) as to whether the plan complies with the standards of this chapter and applicable state and federal rules and regulations. Rowan County shall require any consultant(s) to disclose any potential conflicts of interest and to hold confidential any proprietary information supplied by the applicant.
- (d) Financial responsibility and ownership. Erosion and sedimentation control plans shall be disapproved unless accompanied by an authorized statement of financial responsibility and documentation of property ownership. This statement shall be signed by the Person financially responsible for the land-disturbing activity or his attorney in fact. The statement shall include the mailing and street addresses of the principal place of business of:
  - (1) The Person financially responsible;
  - (2) The owner of the land; and
  - (3) Any registered agents.

If the Person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the plan, the Act, this chapter or rules or orders adopted or issued pursuant to this chapter. Except as provided in Section 18-52(s) or in the case of constructing utility lines, if the applicant is not the owner of the land to be disturbed, the erosion and sedimentation control plan must include the owner's written consent for the applicant to submit an erosion and sedimentation control plan and to conduct the anticipated land-disturbing activity.

If the land-disturbing activity involves the construction of utility lines for the provision of water, sewer, gas, telecommunications, or electrical services, and the applicant is not the owner of the land, the draft erosion and sedimentation control plan may be submitted without the written consent of the owner of the land, so long as the owner of the property has been provided prior notice of the project.

- (e) Soil and water conservation district comments. The district shall review the plan and submit any comments and recommendations to Rowan County within twenty (20) days after the district received the plan, or within any shorter period of time as may be agreed upon by the district and Rowan County. Failure of the district to submit its comments and recommendations within twenty (20) days or within any agreed-upon shorter period of time shall not delay final action on the plan.
- (f) Timeline for decisions on plans. Rowan County will review each complete plan submitted to it and within thirty (30) days of receipt thereof will notify the Person submitting the plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications or disapprove a complete erosion and sedimentation control plan within thirty (30) days of receipt shall be deemed approval. Rowan County will review each revised plan submitted to them and within fifteen (15) days of receipt thereof will notify the Person submitting the plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications, or disapprove a revised plan within fifteen (15) days of receipt shall be deemed approval.
- (g) Environmental Policy Act document. Any plan submitted for a land-disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (G.S. 113A-1 et seq.) shall be deemed incomplete until a complete environmental document is available for review. Rowan County shall promptly notify the Person submitting the plan that the 30-day time limit for review of the plan pursuant to this chapter shall not begin until a complete environmental document is available for review.
- (h) Content. The plan required by this section shall contain architectural or engineering drawings, maps, assumptions, calculations and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this chapter. Plan content may vary to meet the needs of specific site requirements. Detailed guidelines for plan preparation may be obtained from the Rowan County Planning Department on request.
- (i) Approval. Rowan County shall only approve a plan upon determining that it complies with all applicable state and local regulations for erosion and sedimentation control. Approval assumes the applicant's compliance with the federal and state water quality laws, regulations and rules. Rowan County shall condition approval of plans upon the applicant's compliance with federal and state water quality laws, regulations and rules.
- (j) Resubmittal required. If following the approval of an erosion and sedimentation control plan, land-disturbing activity does not commence for a period of two (2) years from approval date, a resubmittal of plan and fees will be required.
- (k) Disapproval for content. Rowan County shall disapprove a plan or draft plan based on its content. Disapproval of a plan must specifically state in writing the reasons for disapproval.
- (I) Other disapprovals. Rowan County may disapprove a plan or draft plans if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters. An erosion control plan or transfer of a plan may be disapproved upon a finding that an applicant, or any parent, subsidiary, or other affiliate of the applicant:
  - (1) Is conducting or has conducted land-disturbing activity without an approved plan or has received notice of violation of a plan previously approved by the commission or a local government pursuant to the Act and has not complied with the notice within the time specified in the notice;
  - (2) Has failed to pay a civil penalty assessed pursuant to the Act or a local ordinance adopted pursuant to the Act by the time the payment is due;

- (3) Has been convicted of a misdemeanor pursuant to G.S. 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the Act:
- (4) Has failed to substantially comply with state rules or local ordinances and regulations adopted pursuant to the Act; or
- (5) Has failed to obtain the necessary zoning or subdivision approvals from the county, NCDOT or municipality having jurisdiction.

For purposes of this subsection, an applicant's record may be considered for only the two (2) years prior to the application date.

In the event that a plan is disapproved pursuant to this subsection, the Rowan County Planning Department shall notify the director of such disapproval within ten (10) days. The Rowan County Planning Department shall advise the applicant and the director in writing as to the specific reasons that the plan was disapproved.

- (m) Notice of activity initiation. No Person may initiate a land-disturbing activity before notifying the agency that issued the plan approval of the date that land-disturbing activity will begin.
- (n) *Preconstruction conference.* When deemed necessary by the approving authority, a preconstruction conference may be required and noted on the approved plan.
- (o) Display of plan approval. A plan approval issued under this article shall be prominently displayed until all construction is complete, all temporary measures have been removed, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. A copy of the approved plan shall be kept on file at the job site.
- (p) Amendment to a plan. Applications for amendment of an erosion and sedimentation control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as the amendment is approved by Rowan County, the land-disturbing activity shall not proceed except in accordance with the erosion and sedimentation control plan as originally approved.
- (q) Failure to file a plan. Any Person engaged in land-disturbing activity who fails to file a plan in accordance with this chapter or who conducts a land-disturbing activity except in accordance with provisions of an approved plan shall be deemed in violation of this chapter.
- (r) Self-Inspections. The landowner, the financially responsible party, or the landowner's or the financially responsible party's agent shall perform an inspection of the area covered by the plan after each phase of the plan has been completed and after establishment of temporary ground cover in accordance with G.S. 113A-57(2). In addition, weekly and rain-event self-inspections are required by federal regulations, that are implemented through the NPDES Construction General Permit No. NCG010000. The Person who performs the inspection shall maintain and make available a record of the inspection at the site of the land-disturbing activity. The record shall set out any significant deviation from the approved erosion control plan, identify any measures that may be required to correct the deviation, and document the completion of those measures. The record shall be maintained until permanent ground cover has been established as required by the approved erosion and sedimentation control plan. The inspections required by this subsection shall be in addition to inspections required by G.S. 113A-61.1.

Except as may be required under federal law, rule, or regulation, no periodic self-inspections or rain gauge installation is required on individual residential lots where less than one acre is being disturbed on each lot.

- (s) *Transfer of Plans*. Rowan County may transfer an erosion and sedimentation control plan approved pursuant to this section without the consent of the plan holder to a successor-owner of the property on which the permitted activity is occurring or will occur as provided in this subsection.
  - (1) Rowan County may transfer a plan if all the following conditions are met:

- (i) The successor-owner of the property submits a written request to transfer the plan and an authorized statement of financial responsibility and documentation of property ownership.
- (ii) Rowan County finds all of the following:
  - a. The plan holder is one of the following:
    - 1. A natural person who is deceased.
    - 2. A partnership, limited liability corporation, corporation, or any other business association that has been dissolved.
    - 3. A Person who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur.
    - 4. A Person who has sold the property on which the permitted activity is occurring or will occur.
  - b. The successor-owner holds title to the property on which the permitted activity is occurring or will occur.
  - c. The successor-owner is the sole claimant of the right to engage in the permitted activity.
  - d. There will be no substantial change in the permitted activity.
- (2) The plan holder shall comply with all terms and conditions of the plan until such time as the plan is transferred.
- (3) The successor-owner shall comply with all terms and conditions of the plan once the plan has been transferred.
- (4) Notwithstanding changes to the law made after the original issuance of the plan, Rowan County may not impose new or different terms and conditions on the plan without the prior express consent of the successor-owner. Nothing in this subsection shall prevent Rowan County from requiring a revised plan pursuant to G.S. 113A-54.1(b).

(Amend. of 7-7-08)

State Law reference—Similar provisions, G.S. 113A-61.

Sec. 18-53. - Inspections and investigations.

- (a) Inspection. Agents, officials or other qualified Persons authorized by Rowan County will periodically inspect the sites of land-disturbing activity to ensure compliance with the Act, this chapter or rules or orders adopted or issued pursuant to this chapter and to determine whether the activity is being conducted in accordance with an approved plan and whether the measures required in the plan are effective in controlling erosion and sedimentation resulting from land-disturbing activity. Notice of the right to inspect shall be included in the certificate of approval of each plan.
- (b) Notice of violation. If Rowan County determines that a Person engaged in land-disturbing activity has failed to comply with the Act, this chapter or rules or orders adopted or issued pursuant to this chapter, a notice of violation shall be served upon that Person. The notice may be served by any means authorized under G.S. 1A-1, Rule 4. The notice shall specify a date by which the Person must comply with the Act, or this chapter, or rules or orders adopted pursuant to this chapter, and inform the Person of the actions that need to be taken to comply with the Act, this chapter, or rules or orders adopted pursuant to this chapter. Any Person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and

this chapter. If the Person engaged in the land-disturbing activity has not received a previous notice of violation under this section, Rowan County shall offer assistance in developing corrective measures. Assistance may be provided by referral to a technical assistance program on behalf of the Approving Authority, referral to a cooperative extension program, or by the provision of written materials such as Department guidance documents. The notice of violation may be served in the manner prescribed for service of process by G.S. 1A-1, Rule 4, and shall include information on how to obtain assistance in developing corrective measures.

- (c) Investigation. Rowan County shall have the power to conduct such investigation as it may reasonably deem necessary to carry out its duties as prescribed in this chapter and, who presents appropriate credentials for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land-disturbing activity.
- (d) Willful resistance, delay or obstruction. No Person shall willfully resist, delay or obstruct an authorized representative, employee or agent of Rowan County while that Person is inspecting or attempting to inspect a land-disturbing activity under this section.
- (e) Statements and reports. Rowan County shall also have the power to require written statements, or filing of reports under oath, with respect to pertinent questions relating to land-disturbing activity.

(Amend. of 7-7-08)

Sec. 18-54—18-70. - Reserved.

ARTICLE IV. - PLAN APPEALS

Sec. 18-71. - Procedure.

- (a) Except as provided in subsection (b) of this section, the appeal of a disapproval or approval with modifications of a plan shall be governed by the following provisions:
  - (1) The disapproval or modification of any proposed erosion and sedimentation control plan by Rowan County shall entitle the Person submitting the plan to a hearing if such Person submits written demand for a hearing within fifteen (15) days after receipt of written notice of disapproval or modifications.
  - (2) Hearings held pursuant to this section shall be conducted by the Rowan County Board of Adjustment within thirty (30) days after the date of the appeal or request for a hearing.
  - (3) The board of adjustment will render its final decision on any plan within sixty (60) days of the hearing.
  - (4) If the board of adjustments upholds the disapproval or modification of a proposed erosion and sedimentation control plan following the hearing, the Person submitting the plan shall then be entitled to appeal the decision to the North Carolina Sedimentation Control Commission as provided in G.S. 113A-61(c) and 15A NCAC 4B.0018(d).
- (b) In the event that a plan is disapproved pursuant to subsection 18-52(l) of this chapter, the applicant may appeal Rowan County's disapproval of the plan directly to the Commission.

(Amend. of 7-7-08)

State Law reference—Similar provisions, G.S. 113A-61(c).

Sec. 18-72-18-90. - Reserved.

**ARTICLE V. - VIOLATIONS AND PENALTIES** 

#### Sec. 18-91. - Penalties.

- (a) Civil penalties.
  - (1) Civil Penalty for a violation. Any Person who violates any of the provisions of this chapter or rule or order adopted or issued pursuant to this chapter, or who initiates or continues a land-disturbing activity for which an erosion and sedimentation control plan is required except in accordance with the terms, conditions and provisions of an approved plan, is subject to a maximum civil penalty assessment of five thousand dollars (\$5,000.00) per violation. A civil penalty may be assessed from the date of the violation. Each day of a continuing violation shall constitute a separate violation. When the Person has not been assessed any civil penalty under this subsection for any previous violation, and that Person abated continuing environmental damage resulting from the violation within one hundred and eighty (180) days from the date of the notice of violation, the maximum cumulative total civil penalty assessed under this subsection for all violations associated with the land-disturbing activity for which the erosion and sediment control plan is required is twenty-five thousand dollars (\$25,000).
  - (2) Civil penalty assessment factors. Personnel of the Rowan County Planning and Development Department shall determine the amount of the civil penalty based on the following factors:
    - (a) The degree and extent of harm caused by the violation,
    - (b) The cost of rectifying the damage,
    - (c) The amount of money the violator saved by noncompliance,
    - (d) Whether the violation was committed willfully; and
    - (e) The prior record of the violator in complying or failing to comply with this chapter.
  - (3) Notice of civil penalty assessment. Rowan County shall provide written notice of the civil penalty amount and basis for assessment to the Person assessed. The notice shall be served by any means authorized under G.S. 1A-1, Rule 4 and shall direct the violator to either pay the assessment, contest the assessment within thirty (30) days after receipt of the notice by written petition for a hearing submitted to Rowan County within said 30-day period, or file a request with Rowan County for remission of the assessment within thirty (30) days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the North Carolina General Statutes and a stipulation of the facts on which the assessment was based.
  - (4) Final decision. The board of adjustment shall conduct a hearing within thirty (30) days after written demand for the hearing and render the final decision concerning the contested civil penalty assessment(s) within sixty (60) days of the hearing.
  - (5) Appeal of final decision. An appeal of the final decision rendered by the board of adjustment shall be to the Superior Court of Rowan County. Such appeals must be made within thirty (30) days of the final written decision filed with the clerk to the Board of Adjustment.
  - (6) Remission of Civil Penalties. A request for remission of a civil penalty imposed under G.S. 113A-64 may be filed with the Rowan County within thirty (30) days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the General Statutes and a stipulation of the facts on which the assessment was based. The following factors shall be considered in determining whether a civil penalty remission request will be approved:
    - (i) Whether one or more of the civil penalty assessment factors in G.S. 113A-64(a)(3) were wrongly applied to the detriment of the petitioner.
    - (ii) Whether the petitioner promptly abated continuing environmental damage resulting from the violation.
    - (iii) Whether the violation was inadvertent or a result of an accident.

- (iv) Whether the petitioner had been assessed civil penalties for any previous violations.
- (v) Whether payment of the civil penalty will prevent payment for necessary remedial actions or would otherwise create a significant financial hardship.
- (vi) The assessed property tax valuation of the petitioner's property upon which the violation occurred, excluding the value of the structures located on the property.
- (7) Collection. If payment is not received within thirty (30) days after it is due, Rowan County may institute a civil action to recover the amount of the assessment. The civil action may be brought in the Superior Court of Rowan County. Such civil actions must be filed within three (3) years of the date the assessment was due. An assessment that is not contested and a remission that is not requested is due when the violator is served with a notice of assessment. An assessment that is contested or a remission that is requested is due at the conclusion of the administrative and judicial review of the assessment.
- (8) Credit of civil penalties. Civil penalties collected pursuant to this chapter shall be credited to the Civil Penalty and Forfeiture Fund in accordance with G.S. 115C-457.2. Penalties collected by Rowan County may be diminished only by the actual costs of collection. The collection cost percentage to be used shall be established and approved by the North Carolina Office of State Budget and Management on an annual basis, based upon the computation of actual collection costs by Rowan County for the prior fiscal year. The cost percentage shall not exceed 20% of penalties collected.
- (b) Criminal penalties. Any Person who knowingly or willfully violates any provision of this chapter, or rule or order adopted or issued pursuant to this ordinance, or who knowingly or willfully initiates or continues a land-disturbing activity for which an erosion and sedimentation control plan is required except in accordance with the terms, conditions and provisions of an approved plan shall be guilty of a Class 2 misdemeanor punishable by a fine not to exceed five thousand dollars (\$5,000.00) as provided in G.S. § 113A-64.

(Amend. of 7-7-08)

**State Law reference**— Similar provisions, G.S. 113A-64.

Sec. 18-92. - Injunctive relief.

- (a) Violation of local program. Whenever Rowan County has reasonable cause to believe that any Person is violating or threatening to violate any ordinance or any rule or order adopted or issued by Rowan County or any term, condition or provision of any approved erosion control plan, it may, either before or after the institution of any other action or proceeding authorized by this chapter, institute a civil action in the name of Rowan County for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the superior court of the county in which the violation is occurring or is threatened.
- (b) Abatement of violation. Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation, to ensure that restoration is performed, or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this chapter.

(Amend. of 7-7-08)

Sec. 18-93. - Restoration of areas affected by failure to comply.

Rowan County may require a Person who engaged in a land-disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57(3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this chapter.

(Amend. of 7-7-08)

Sec. 18-94. - Severability.

If any section or sections of this chapter is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

(Amend. of 7-7-08)

Sec. 18-95. - Effective date.

This chapter becomes effective on xx,xx July 7, 2008 2023.

# Annual Review of the Erosion and Sedimentation Control Program Delegation to the North Carolina Department of Transportation, Division of Highways

November 16, 2023

### Performed By:

North Carolina Department of Environmental Quality
Division of Energy, Mineral and Land Resources
Land Quality Section

#### Report By:

Julie Coco, PE, State Sediment Specialist Graham Parrish, EI, Assistant State Sediment Specialist Davy Conners, Environmental Program Consultant



#### **INTRODUCTION**

The North Carolina Department of Environmental Quality, Division of Energy, Mineral, and Land Resources, Land Quality Section (DEMLR-LQS) conducted a review of the delegated North Carolina Department of Transportation Erosion and Sedimentation Control Program between May 15, 2023, and October 3, 2023. This review and the results reported here are in accordance with requirements of the Sedimentation Control Commission (SCC) delegation to the North Carolina Department of Transportation (NCDOT), §113A-54(d)(2) and §113A-56(b).

#### §113A-54. POWERS AND DUTIES OF THE COMMISSION

(d) In implementing the erosion and sedimentation control program, the [Sedimentation Control] Commission shall:... (2) Assist and encourage other State agencies in developing erosion and sedimentation control programs to be administered in their jurisdictions. The Commission shall approve, approve as modified, or disapprove programs submitted pursuant to G.S. 113A-56 and from time to time shall review these programs for compliance with rules adopted by the Commission and for adequate enforcement.

#### §113A-56. JURISDICTION OF THE COMMISSION

(b) The [Sedimentation Control] Commission may delegate the jurisdiction conferred by G.S. 113A-56(a), in whole or in part, to any State Agency that has submitted an erosion and sedimentation control program to be administered by it, if the program has been approved by the Commission as being in conformity with the general State program.

#### **GENERAL CONDITIONS OF THE PROGRAM**

The NCDOT Division of Highways Sediment and Erosion Control Program was originally delegated by the Sedimentation Control Commission in 1974 with an updated delegation agreement being approved in 1991. General conditions of the delegated program include but are not limited to the following statements. The NCDOT's Standard Specifications for Roads and Structures shall provide the basic erosion and sedimentation control requirements to be implemented by the NCDOT. The NCDOT will utilize designs and design criteria for application of its erosion and sediment control program that are consistent with minimum standards promulgated by the Sedimentation Control Commission. The NCDOT shall provide adequate rights of way or easements to accommodate installation and maintenance of appropriate sediment and erosion control measures. The NCDOT will take all reasonable measures to protect all public and private property from siltation damage caused by any Departmental activities. The NCDOT will prepare, or have prepared, erosion and sediment control plans consistent with the Sedimentation Control Commission standards governing all land disturbing activity it undertakes which uncovers one or more contiguous acres of erodible surface. Erosion and Sediment Control plans prepared by and for the NCDOT shall address the following basic control objectives:

- 1. Identification of Critical Areas,
- 2. Limited Time of Exposure,
- 3. Limit Exposed Areas,
- 4. Control Surface Water and Control Sedimentation, and
- 5. Manage Stormwater Runoff.

The NCDOT is responsible for two types of inspections on each project: weekly NPDES/SPCA self-monitoring inspections (self-inspections) and monthly Roadside Environmental Unit (REU) inspections. Self-inspections are conducted by a project inspector from the office of the Resident Engineer or their designee for active Contract Construction projects, or from the office of the County or District Engineer for State Force projects. The REU inspections are conducted by one of 7 REU Field Operation Engineers (FOEs) or their staff. Generally, each FOE has one or two additional Field Operation Staff Engineers who assist with the project inspections and plan reviews. Each FOE and their staff cover 2 of the 14 DOT Highway Divisions across the state. All projects are to be inspected monthly by the REU. Each project is given a score from 0-10 for the following: installation of measures, maintenance of measures, effectiveness of measures, plan implementation and overall project evaluation. An overall project evaluation score of 0-6 results in the issuance of an "Immediate Corrective Action" report (ICA). An ICA alerts NCDOT Management of an issue that needs immediate attention. The project personnel are then charged with correcting the situation as directed by the Chief Engineer. Notification and subsequent reports on projects that have received an ICA are distributed to the Chief Engineer, Division Engineer, State Roadside Environmental Engineer, DEMLR Regional Engineer, and the DEMLR State Sediment Engineer. ICAs issued during each quarter are reported to the Sedimentation Control Commission during the subsequent quarterly meeting.

During the past fiscal year from July 2022 through June 2023, the NCDOT reports that the REU has reviewed and approved 434 erosion and sedimentation control plans for Contract Construction, NC Turnpike Authority and Division Construction/Bridge/Maintenance Projects. The NCDOT reports that the REU conducted a total of 4,134 compliance inspections on projects of various types across all 14 NCDOT Highway Divisions. During this same period the REU has issued 5 ICAs and 1 ICA extension on 5 different projects respectively.

#### **PROJECT REVIEWS**

Sixteen Contract Construction projects were chosen across the state, at random, with varying stages of construction, size, budget, and significance of the project. Selected projects consist of new roadway construction, various roadway improvements and bridge replacements. Projects reviewed were between approximately 20% complete and transitioning into the final vegetation establishment phase after construction was completed.

Contract Construction projects may contain traditional Bid-Build projects and Design-Build projects. Traditional Bid-Build projects are awarded to contractors and completed according to a set of pre-designed and approved plans. Design-Build projects are awarded to a designer and contractor team based on a proposed scope of work. The Designer/Contractor team then completes the design and after approval, begins work on the project in accordance with said approved plans. Contract Construction projects are let for bidding out of the Central and Division

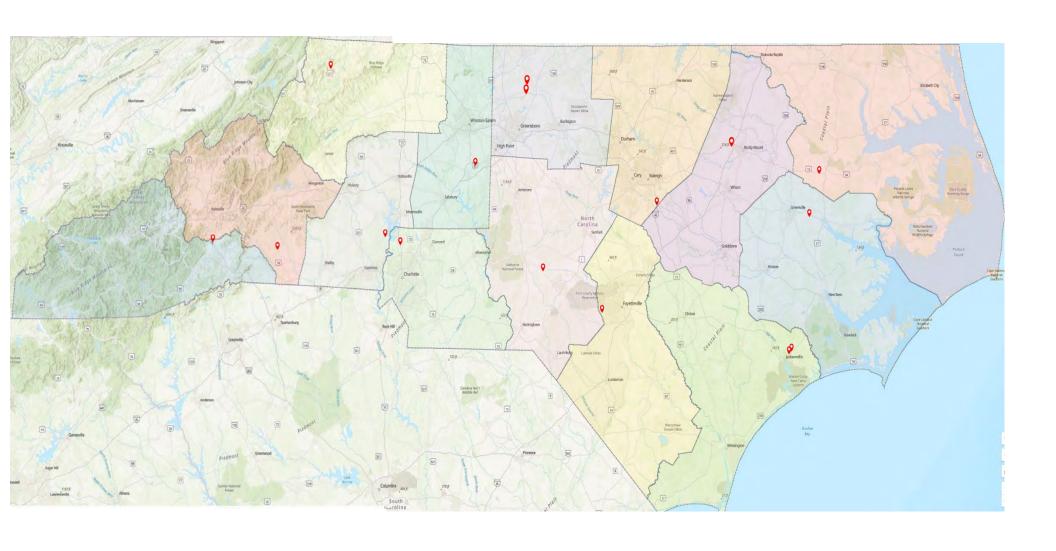
offices. Generally, projects with a total budget of less than \$5,000,000 are let out of the respective Division Offices. State Force projects consist of construction work the Department performs on secondary and primary roadways, including bridge management projects, which are completed using department forces and resources unless the project is contracted. State Force projects are also sometimes referred to as Operations Projects. No State Force projects were reviewed during this audit due to delays to the start of construction of selected projects.

NCDOT personnel from the REU, Division Offices, District Offices, Resident Offices and Contractor representatives accompanied Land Quality Section personnel from the Central and Regional Offices on the 16 projects reviewed. Each project review consisted of reviewing the erosion control plan for adequacy, examining the project files, and an onsite inspection. Field data was collected on erosion and sediment control measure installation, maintenance, and effectiveness. Timely provision of ground cover, phasing of grading, field revisions and sedimentation damage were also evaluated. A summary of the projects reviewed follows.

## **PROJECTS SELECTED**

Div.	DEMLR-Region	County	TIP#	Description	Contract Amount	Length (miles)
1	Washington	Martin	R-4705	SR-1142 (Prison Camp Rd) from NC-903 to SR-1182 (East College Rd.)	\$41,866,866.00	9.60
2	Washington	Pitt	B-5301	Bridge #87 over Norfolk Southern Railroad on NC-33	\$9,574,442.00	0.60
3	Wilmington	Onslow	B-5652	Bridge #33 over Wolf Swamp on US-17 NBL	\$3,470,216.60	0.35
3	Wilmington	Onslow	U-5878	Extension of Commerce Rd. from Fairway Rd. to Piney Green Rd.	\$3,346,670.95	0.38
4	Raleigh	Nash	U-5996	Widen SR-1603 (N Carriage Rd) from North of SR-1770 (Eastern Ave/Sunset Ave) to SR-1601 (Reges Store Rd.)/SR 1609 (Green Hills Rd.)	\$20,329,828.19	1.19
5	Raleigh	Johnston, Wake	R-2828	NC-540 Triangle Expressway Southeast Extension from east of US-401 (Fayetteville Rd) to east of I-40	\$403,200,000.00	8.61
6	Fayetteville	Cumberland	U-5798A	SR-1102 (Gillis Hill Rd) from north of SR-1112 to US-401 and replace bridge over Little Rockfish Creek	\$4,999,975.00	1.20
7	Winston-Salem	Rockingham	B-4807	Replace Bridge #6 on Cunningham Rd. over Haw River	\$1,939,501.70	0.19
7	Winston-Salem	Rockingham		Bridge #9 on Ironworks Rd. over Prong of Troublesome Creek	\$727,260.50	0.06
8	Fayetteville	Moore	R-5726A	NC-211 from south of NC-73 in West End to north of SR-1241 (Holly Grove School Rd.)	\$4,698,961.00	4.81
9	Winston-Salem	Davidson	R-5737	US-29/70 & I-85 Business at SR- 1798 (Old Greensboro Rd.)	\$25,893,075.90	1.36
10	Mooresville	Mecklenburg	I-5714/ U- 5114	US-21 and Gilead Rd. at I-77 Interchange	\$27,409,543.90	1.30
11	Winston-Salem	Ashe	R-2915E	US-221 from US-221 Bypass to US- 221 Business/NC-58 in Jefferson	\$27,409,543.90	3.54
12	Mooresville	Lincoln	W-5601Q	NC-16 Bus. at SR 1394 (N. Pilot Knob Rd.) and SR-1393 (Hagers Ferry Rd.)	\$1,076,777.90	0.17
13	Asheville	Rutherford	R-2233BB	US-221 South of US-74 Bus. (Charlotte Rd.) to north of SR- 1366 (Roper Loop Rd.)	\$109,237,300.02	5.0
14	Asheville	Buncombe, Henderson	I-4400BB, I- 4400C	I-26 from 0.05 miles north of US- 64 to NC-280 (Exit 40)	\$271,226,964.96	8.55

## **Reviewed Project Locations**



## **PROJECT REVIEW SUMMARIES**

TIP R-4705: SR-1142 (Prison Camp Rd.) from NC-903 to SR-1182 (East College Rd.)

**NCDOT Division:** 1, Martin County

Type of Project: Contract, Central Office Let

**Length:** 9.60 miles

Contract Amount: \$41,866,866.00

**Date of Review:** 10/3/2023

Subbasin and River Basin: Lower Roanoke Subbasin of the Roanoke River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: 2.5" (9/23/23), 2.0" (9/22/23), 0.6" (9/11/23), 2.4" (9/1/23) DOT Inspection Score: 9 (9/15/23), 9 (8/9/23), 9 (7/12/23), 9 (6/12/23)

#### **Comments/Summary**

Construction on this project began in September of 2022 and was approximately 40% complete at the time of our review. This project had received no ICAs prior to our review. Selfinspection records and monthly REU inspection reports were available onsite for our review. DEMLR staff recommended that 0" be indicated on days when no rainfall was recorded to ensure that it is clear the self-inspection report had been fully completed each week. Self-inspection records otherwise appeared to be adequate and consistent with monthly REU reports. No revisions had been made to this plan. This project consisted of roadway widening and some realignment for safety. This project also contained a laydown yard/stockpile area. A reclamation plan for the laydown yard/stockpile area had been approved by the REU and appeared to be adequate. These areas were included in both the self-inspection and monthly REU reports. This project contained Environmentally Sensitive Areas (ESA) which had been delineated on the plans and in the field in accordance with NCDOT Policy. During our review sections of this project were in various phases ranging from just beginning with utilities being installed by others to final vegetation establishment. In sections where utilities were being installed by others, NCDOT staff stated that wattles and inlet protection measures would be installed as utilities were completed. The silt fence along the banks of one stream had been removed to install utilities and needed to be reinstalled immediately and the area stabilized. Additional wattles had been installed along the inside of the curve of a completed road realignment section. These wattles were added to help prevent runoff from the road eroding the slope above a wetlands area. These additional measures were approved by the REU Field Operations Engineer ahead of an anticipated heavy rain event. The skimmer device in one basin needed to be reattached and the impervious liner of the emergency spillway needed to be repaired. Basins throughout the remainder of the project appeared to be maintained. Sections of the project which had been completed appeared to be well vegetated. Seed and straw mulch or matting had been installed on recently graded areas. Stone and construction debris had been stockpiled in a small area adjacent to the project in a vacant lot. This area appeared to be outside of the right of way and easements as shown on the

plan. NCDOT staff stated that they had received verbal permission from the landowner to utilize this area. No signs of offsite Sediment loss were noted.



Stone and debris stockpiled outside of ROW and Easements



**Utilities by Others being installed** 



Recently graded area with straw mulch



Skimmer device detached and spillway liner damaged



Roadside ditch with vegetation establishing



Skimmer basin maintained



Roadway realignment complete and area stabilized



Wattles that were added in preparation for rain event as slope was being stabilized

#### TIP B-5301: Bridge #87 over Norfolk Southern Railroad on NC-33

**NCDOT Division:** 2, Pitt County

Type of Project: Bridge Replacement, Contract, Central Office Let

Length: 0.60 miles

Contract Amount: \$9,574,442.00

**Date of Review:** 6/8/2023

Subbasin and River Basin: Lower Tar Subbasin of the Tar-Pamlico River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: **0.25**" (6/8/23), **1**" (5/29/23), **2.5**" (5/27/23), **0.1**" (5/24/23) **DOT Inspection Scores: 9** (5/18/23), **9** (4/20/23), **9** (3/8/23), **9** (2/6/23)

#### **Comments/Summary:**

Construction on this project began in October of 2022 and was approximately 20% complete at the time of our review. DOT staff stated that some clearing, and delineation of sensitive areas were completed when work began but grading was delayed and did not begin until April of 2023. This project had received no ICAs prior to our review. No revisions had been made to the plan. This project consisted of construction of a new bridge and a new road alignment. This project also contained two borrow pits. The borrow pit reclamation plans had been reviewed and approved by the REU staff. Self-inspection records and monthly REU inspection reports were reviewed. DOT staff stated that the borrow pits were being inspected during self-inspections, however the borrow pits were not recorded on the self-inspection reports. A reminder to document all areas inspected was given by DEMLR staff. This project contained ESAs which had been delineated on the plans and marked in the field in accordance with NCDOT policy. During our review of the project grading and installation of the bridge pilings were underway. One basin had been excavated but the skimmer had not been installed and the diversion ditch had not been tied into the basin yet. Staff stated that during grading they encountered groundwater and were pumping into and out of the basin as needed. The pumped water was discharged through a rock check into the existing drainage ditch at the perimeter of the project. DEMLR staff recommended fully installing the basin and diversions as soon as possible but to also utilize a floating intake on the pump used to discharge from the basin. The silt fence surrounding the borrow site appeared to be installed properly and maintained. The baffles in the basin at the borrow site were underwater and needed to be raised to reach the elevation of the riser overflow. The perimeter berm around the borrow site had also been installed, seeded, and mulched with straw and asphalt tackifier. The silt fence along one section of the project was being pushed over as material was compacted by equipment driving adjacent to the fence and needed to be reinstalled. No signs of offsite sediment loss were noted.



Silt fence being pushed over



Area being dewatered and pumped into basin





Skimmer device not installed, and diversion ditch not yet tied into basin





Basin and stabilized outlet on Borrow site

#### TIP B-5652: Bridge #33 over Wolf Swamp on NC-17

**NCDOT Division:** 3, Onslow County

Type of Project: Bridge Replacement, Contract, Central Office Let

Length: 0.35 miles

**Contract Amount:** \$ 3,470,216.60 **Date of Review:** 9/19/2023

Subbasin and River Basin: New River Subbasin of the White Oak River Basin

**Sedimentation Damage:** Minor losses noted into stream

#### **Recent Project History:**

Rainfall: **0.1"** (9/14/23), **5"** (8/31/23), **0.25"** (8/28/23), **1.75"** (8/27/23) **DOT Inspection Scores: 9** (8/8/23), **9** (7/11/23), **8** (6/7/23), **9** (5/9/23)

#### **Comments/Summary:**

Construction on this project began in April of 2023 and was approximately 40% complete at the time of our review. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Self-inspection records appeared to be complete and consistent with the REU monthly reports. No revisions had been made to this plan. This project consisted of a bridge replacement with an onsite detour. During our review, the onsite detour bridge had been completed and traffic had been shifted onto it. The existing bridge had been removed and the foundations were being installed for the replacement bridge. Silt fence along the top of the stream bank had been installed and the banks had been lined with riprap. The check dam at the end of the ditch adjacent to the detour bridge had been overwhelmed and a small amount of sediment accumulation was noted in the stream. The Division of Water Resources (DWR) had been notified of this loss and conducted an inspection of the area the week prior to our review. A revision to the Section 404/Section 401 permits were underway and awaiting review to address the ditch failure and sediment loss. NCDOT staff provided a follow up report on 9/25/2023 stating that the ditch and check dam had been repaired and restabilized with riprap and that the sediment loss within the stream had been retrieved.



Stream banks lined with riprap and new bridge foundations being installed



Stabilized ditch adjacent to detour bridge



Maintained and stabilized outlet



**Sediment loss into stream** 



Sediment loss retrieved and ditch with check dam repaired (9/25/2023)

#### TIP U-5878: Extension of Commerce Rd. from Fairway Rd. to Piney Green Rd.

**NCDOT Division:** 3, Onslow County

Type of Project: Contract, Division Office Let

Length: 0.38 miles

**Contract Amount:** \$3,346,670.95 **Date of Review:** 9/19/2023

Subbasin and River Basin: New Subbasin of the White Oak River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: **0.4"** (9/18/23), **3.50"** (8/30/23), **0.25"** (8/29/23), **2.75"** (8/28/23) **DOT Inspection Score: 9** (8/8/23), **9** (7/11/23), **9** (6/7/23), **9** (5/9/23)

#### **Comments/Summary:**

Construction on this project began in August of 2022 and was approximately 95% complete at the time of our review. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. The

"As-built" erosion control plans were marked up with the date of measure installations; however, the date that measures were removed had not been noted. Self-inspection records appeared to be adequate and consistent with monthly REU reports. No revisions had been made to this plan. This project consisted of new roadway construction. This project contained ESAs which had been delineated on the plans and in the field. During our review culverts had been installed, the adjacent areas were being stabilized and the roadway was nearing completion. Drop inlet protection measures had been removed in one section as the areas were recently brought to final grade. NCDOT staff stated that these would soon be reinstalled until the disturbed areas were stabilized. Drop inlet protection devices throughout the remainder of the site needed to be maintained. One short section of silt fence had been undermined and needed to be repaired. Permanent ditches throughout the site had been completed and stabilized with riprap. Silt fence outlets appeared to be maintained and functioning properly. Completed areas were being stabilized. No signs of offsite sediment loss were noted.



Culvert installed and areas being stabilized



Silt fence undermined





Silt fence outlets maintained



Drop inlet protection measures needing maintenance



Completed permanent ditch and slope being stabilized

# TIP U-5996: Widen SR-1603 (N Carriage Rd) from north of SR-1770 (Eastern Ave/ Sunset Ave) to SR-1601 (Regis Store Rd)/ SR-1609 (Green Hills Rd.)

**NCDOT Division:** 4, Nash County

Type of Project: Contract, Central Office Let

Length: 1.19 miles

**Contract Amount:** \$ 20,329,828.19

**Date of Review:** 5/15/2023

**Subbasin and River Basin:** Upper Tar Subbasin of the Tar-Pamlico River Basin

**Sedimentation Damage:** Minor offsite sedimentation noted.

#### **Recent Project History:**

Rainfall: 1.5" (5/9/2023), 2.5" (5/7/23, weekend total), 2.25" (4/30/2023), 1.25" (5/24/22)

**DOT Inspection Scores: 8** (5/5/23), **8** (3/30/23), **8** (2/15/23), **9** (1/13/23)

#### **Comments/Summary:**

Construction on this project began in July of 2022 and was approximately 23% complete at the time of our review. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Some inconsistencies were noted between the self-inspection records and monthly REU inspection reports. This project consisted of roadway and an overpass bridge widening. This project also contained a borrow pit. The reclamation plan for the borrow pit had been approved by the REU and appeared to be adequate. The borrow pit area was included on the self-inspection and REU monthly reports. No revisions had been made to this plan. During our review, widening and grading along one side of the road was underway while the other side of the road remained largely undisturbed. This project contained ESAs which had not been fully delineated in the field. No disturbance had been started in this section of the project at the time of our review. Perimeter measures had been installed and appeared maintained throughout the site. REU staff had previously noted the need to maintain and repair basins and silt fence outlets following a recent rain event. The basins had been recently mucked out. Baffles needed to be tied into the basin slopes. Slope drains needed to be staked down and inlet and outlet protection measures installed. Diversion ditches had been rough graded but needed to be fine graded and stabilized to ensure erosion of the ditch did not occur. Sediment was noted beyond the perimeter measures at one of the skimmer basins. This sediment loss appeared to be beyond the right of way and controlled access boundary of the project. REU Staff stated that the offsite sediment would be retrieved, and the areas disturbed by this clean up would be restabilized appropriately. Drop inlet protection measures had been installed and appeared well maintained. Recently graded slopes throughout the project had been tracked properly. Excessive dust was being produced from the access road to the borrow pit. DOT staff stated that the water truck was not operational the day of the review and REU staff asked that hauling was stopped until adequate dust control could be provided.



Slope drains needing to be staked down (both) and an outlet protection measure needed (left)



Recently graded slopes tracked properly





Skimmer basins





Sediment beyond perimeter measures and controlled access/right of way boundary



**Diversion Ditch at Borrow Pit** 



Skimmer basin at Borrow Pit

#### TIP R-2828: NC-540 Triangle Expressway Southeast Extension from east of US-401

(Fayetteville Rd.) to east of I-40

**NCDOT Division:** 5, Johnston, Wake County

Type of Project: Contract, Design-Build, Central Office Let

Length: 8.61 miles

**Contract Amount:** \$ 403,200,000.00

**Date of Review:** 9/26/2023

**Subbasin and River Basin:** Upper Neuse Subbasin of the Neuse River Basin

**Sedimentation Damage:** Multiple areas of sediment loss noted.

#### **Recent Project History:**

Rainfall: **3.4"** (9/23/23), **0.5"** (9/22/23). **0.1"** (9/17/23), **0.1"** (9/12/23) DOT Inspection Score: **7** (9/20/23), **7** (8/9/23), **7** (7/20/23), **7** (6/16/23)

#### **Comments/Summary**

Construction on this project began in November of 2019 and was approximately 75% complete at the time of our review. This project had received no ICAs prior to our review. NCDOT staff stated that multiple project wide shutdowns had been used when urgent repairs were needed and prior to the REU feeling the need to issue an ICA. Some of these shutdowns were directed by the NCDOT Resident Engineer on the project and one was enacted by the contractor voluntarily. During these shutdowns, construction progress is halted, and resources are rededicated to erosion and sedimentation control repairs and maintenance. Self-inspection records and monthly REU inspection reports were available onsite for review. Self-inspection records appeared to be adequate and consistent with monthly REU reports. As is a Design-Build project, a Vegetative Management Procedure (VMP) is to be created and maintained throughout the project in accordance with the provisions of the contract. The VMP for this project was available onsite for review and appeared to be adequate and properly maintained. The VMP "As-Built" plans showed the areas which had been stabilized and noted the type of stabilization used. The ESC plan for this project had been revised multiple times. In accordance with the provisions of the contract the Design-Build team coordinates with the REU FOE at least monthly to discuss any design changes or needs that should be considered. The Design team had developed an intermediate phase for some areas as it was necessary to address changing field conditions and the transition from the initial to final grading design. All revisions had been reviewed and approved by REU staff. This project consisted of development of a new roadway corridor, multiple areas of wetlands fill, bridges, and stream channel changes. This project contained ESAs which had been delineated on the plans and in the field. The morning of our review, NCDOT staff had notified DEMLR of multiple areas where sediment loss had been discovered following the recent rain from Tropical Storm Ophelia. During our review, various phases of construction were underway throughout the project. Paving was being completed in some sections while mass grading was still underway in others. The fill slopes along the sections which had been paved had been completed and vegetation had established. The channel changes in these areas also appeared to be complete and stable. Signs of previous sediment loss adjacent to a culvert were noted. The silt fence in this area had been repaired, the sediment loss retrieved, and the disturbed area reseeded and matted with coir fiber matting. The areas disturbed by these repairs

and the channel slopes adjacent to the silt fence still needed to be restabilized. Minor sediment was noted in the channel. These areas of loss were previously noted by the REU and within the self-inspection records. Silt fence outlets above this culvert still needed to be maintained. Significant sediment loss was noted along stream sections adjacent to where channel change construction was underway. Crews were onsite and sediment retrieval was underway during our review. The sediment basin west of the Swift Creek bridge needed to be mucked out and accumulated sediment along the basin outlet area needed to be removed and the area restabilized. No offsite sediment was noted in this area. A washout below the liner of the basin berm of the sediment basin on the east side of the Swift Creek Bridge had occurred and sediment had overwhelmed the silt fence and outlets. Repairs to the basin berm were underway during our review. While most measures appeared to be functioning properly, some general maintenance needs to inlet protection devices, silt fence, silt fence outlets and check dams throughout the site were noted. Completed slopes along the active grading sections had been matted and wattle breaks had been installed. Vegetation was beginning to establish along the median ditch through these sections and wattles had also been installed. An existing overpass bridge over a small stream had been removed and railroad ties had been installed in the area where sections of the bridge were cut and dropped onto them. The stream was being pumped around during this operation and remained being pumped around while the ties were being removed. The disturbed areas were being matted and staff stated that work in this ESA would be continuous. NCDOT staff provided follow up as repairs were completed and sediment losses were cleaned up. On 9/29/23 staff stated that the contractor had elected to shutdown construction progress and dedicate resources to ESC maintenance and cleanup operations. This shutdown was anticipated to be in effect until 9/30/23. NCDOT staff provided a status update on 9/29/23 and noted maintenance had begun on the basin and basin outlet area west of Swift Creek. Repairs on the basin east of Swift Creek had been completed and the sediment loss had been retrieved. The area disturbed by the overpass bridge demolition had been completed and the areas matted with coir fiber and excelsior matting. The channel slopes had been stabilized adjacent to the culvert and sediment retrieval in the channel had not yet begun. Recovery of sediment loss at the channel changes was still ongoing. A pump around had been set up around the entire area and the contactor was installing the channel change simultaneously with cleanup operations to ensure that there is minimal risk of future losses once cleanup is completed.



Sediment loss into stream adjacent to channel change



Slopes matted and wattle breaks installed



Stabilization of median and slope, with wattle checks installed



Completed slope and channel change



**Basin west of Swift Creek** 



**Basin berm east of Swift Creek** 



Basin west of Swift Creek repairs underway (9/29/23 follow up)



Basin berm east of Swift Creek repaired (9/29/23 follow up)



Stream where bridge demolition had occurred



Stabilization around stream where bridge demolition had occurred



Channel adjacent previously noted sediment loss



Channel repaired and stabilized (9/29/23 follow up)

# TIP U-5798A: SR-1102(Gillis Hill Rd.) from north of SR-1112 to US 401 and replace bridge over Little Rockfish Creek

**NCDOT Division:** 6, Cumberland County **Type of Project:** Contract, Central Office Let

Length: 1.20 miles

**Contract Amount:** \$ 22,639,926.77

**Date of Review:** 9/7/2023

Subbasin and River Basin: Lumber Subbasin of the Lumber River Basin

Sedimentation Damage: None

## **Recent Project History:**

Rainfall: 3.0" (8/31/23), 0.125" (8/30/23), 0.125" (8/29/23), 1.2" (8/28/23) DOT Inspection Score: 9 (8/28/23), 9 (7/25/23), 9 (5/23/23), 9 (4/26/23)

## **Comments/Summary**

Construction on this project began in September of 2022 and was approximately 30% complete at the time of our review. This project had received no ICAs prior to our review. Selfinspection records and monthly REU inspection reports were available onsite for review. Selfinspection records appeared to be adequate and consistent with monthly REU reports. No revisions had been made to this plan. This project consisted of roadway widening and contained a waste site. The waste site reclamation plan appeared to be adequate. The waste site area was included within the self-inspection and monthly REU reports. During our review active grading and bridge construction was underway. The construction entrances needed to be refreshed. The roadside ditch and completed slopes had recently been seeded and mulched with straw and asphalt tackifier. The channel change along the new bridge had been partially installed but flow had not yet been diverted as the existing bridge would need to be removed before the new channel could be completed. One section of silt fence had become overwhelmed adjacent to this channel change with some sediment being deposited on the downslope side. This sediment did not appear to have reached the stream. DEMLR staff recommended installing a silt fence outlet in this area to relieve pressure on the fence. Sediment beyond the silt fence needed to be retrieved. Slope drains throughout the project needed inlet and outlet protection measures to be installed. Basins throughout the site appeared to be maintained and functioning properly. Silt fence had been installed surrounding a small stockpile onsite. The basin on the waste site appeared to be functioning, but sediment was accumulating at the outlet of the slope drain. The first bay of the basin needed to be mucked out and rills which had formed in the basin slopes needed to be repaired and restabilized. No signs of offsite sediment loss were noted.



**Construction entrances needing maintenance** 



Skimmer Basin appeared to be functioning and maintained





Sediment noted beyond silt fence adjacent to channel change





Skimmer basin on waste site

#### TIP B-4807:Replace Bridge #6 on SR-2425 Cunningham Rd. over Haw River

**NCDOT Division:** 7, Rockingham County

**Type of Project:** Bridge Replacement, Contract, Division Office Let

Length: 0.19 miles

Contract Amount: \$1,939,501.70 Date of Review: 5/25/2023 Sedimentation Damage: None

**Subbasin and River Basin:** Haw Subbasin of the Cape Fear River Basin

#### **Recent Project History:**

Rainfall: **0.41**" (5/17/23), **0.56**" (4/30/23), **0.54**" (4/29/23), **0.8**" (4/28/23) **DOT Inspection Scores: 8** (5/15/23), **8** (4/5/23), **8** (3/7/23), **8** (2/3/23)

#### **Comments/Summary:**

Construction on this project began in July of 2021. At the time of our review, construction had been completed and the project was transitioning into the final vegetation establishment phase. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Some inconsistencies were noted between the self-inspection records and monthly REU inspection reports. Staff stated that borrow and waste sites used for this project were inspected during the self-inspections but were not noted on the self-inspection reports. This project consisted of bridge replacement and an onsite detour bridge. This project also contained a borrow pit, waste site, and staging area. A reclamation plan for all three areas had been reviewed and approved by REU staff. The erosion control plan for this project had been revised to remove the skimmer basins. These revisions were reviewed and approved by the REU and DOT Hydraulics section staff. This project contained ESAs which were properly delineated on the plans. At the time of our review, the borrow pit had been closed out and the waste site and laydown areas had been seeded and mulched with straw. The new bridge was complete, and the on-site detour bridge had been removed. Perimeter measures throughout the project appeared to be installed properly and maintained. Disturbed areas had been seeded and mulched with straw or matted. Wattles had been installed but had not been stapled down. No signs of offsite sediment loss were noted.



Areas being stabilized



Staging Area seeded and mulched with straw



Silt fence wattle break



Wattles along stream bank

#### Bridge #9 on Ironworks Rd. over Prong of Troublesome Creek

**NCDOT Division:** 7, Rockingham County

**Type of Project:** Bridge Replacement, Contract, Central Office Let

Length: 0.06 miles

**Contract Amount:** \$ 727,260.50 **Date of Review:** 5/25/2023

**Subbasin and River Basin:** Haw Subbasin of the Cape Fear River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: 1.0" (4/30/23), 1.25" (4/28/23), 0.38" (4/22/23), 0.25" (4/14/23) DOT Inspection Scores: 8 (5/10/23), 8 (4/11/23), 8 (3/8/23), 8 (2/9/23)

#### **Comments/Summary:**

Construction on this project began in January of 2023 and was approximately 99% complete at the time of our review. Construction of the new bridge was nearing completion, and the site was transitioning into the final vegetative establishment phase. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Previous REU inspections had noted the need to improve self-inspection records and more recent records appeared to be adequate. This project included ESAs which had been delineated properly within the plan and onsite. During our review, slopes had been matted and wattles along the stream bank below the bridge had been installed properly. Silt fence appeared to be maintained and signs of sections previously replaced were noted. No signs of offsite sedimentation were noted.



Perimeter wattles installed along stream bank





Recently completed areas being stabilized

# TIP R-5726A: NC-221 from south of NC-73 in West End to north of SR-1241 (Holly Grove School Rd.)

**NCDOT Division:** 8, Moore County

Type of Project: Contract, Central Office Let

Length: 4.81 miles

**Contract Amount:** \$ 4,698,961.00

**Date of Review: 8/9/2023** 

Subbasin and River Basin: Deep and Upper Cape Fear Subbasins of the Cape Fear River Basin

and the Lumber Subbasin of the Lumber River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: **0.25**" (7/31), **0.80**" (7/10), **1.75**" (7/3), **1.75**" (6/27), **0.50**" (6/23) **DOT Inspection Scores: 8** (8/3/23), **8** (7/12/23), **8** (5/18/23), **8** (4/18/23)

#### **Comments/Summary:**

Construction on this project began in October of 2022 and was approximately 90% complete at the time of our review. This project was let as an "early clearing plan". The contract for this proposal included clearing, grubbing, demolition of some existing buildings and the installation of erosion control measures. The overall grading and the roadway construction will not be conducted during this portion of this project. DOT staff stated that due to the potential impact to traffic during the upcoming U.S. Open this project will be let in two phases. Erosion control measures were to be installed and maintained until the second phase of the project began. Upon completion and stabilization of the early clearing plan, the site will enter an idle phase. While the project remains idle, the contractor will be responsible for maintaining measures and conducting self-inspections after rain events of 1 inch or greater and at least every 14 days. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Self-inspection records were complete but lacked detail on corrective actions that needed to be completed. This plan had been revised to move measures which were placed within the roadway and resize basins due to utilities conflicts. These revisions had been reviewed and approved by REU staff and had been marked up on the "As-Built" plans. This project contained ESAs which were delineated on the plans and in the field. During our review, the early clearing plan was nearing completion. Basins throughout the project appeared to be installed properly. Some wattles needed to be maintained or replaced. Check dams throughout the site appeared to be maintained. One basin had recently been installed and the slopes had been matted, the remaining disturbed areas around this basin still needed to be stabilized. The perimeter silt fence adjacent to a diversion ditch and basin had been removed during recent utilities work. This silt fence needed to be reinstalled to ensure no sediment loss occurred. No signs of offsite sediment loss were noted.



Tiered basin installed and cleared area stabilized



Recently installed basin



Silt fence removed and needing to be reinstalled



Area seeded and mulched with straw

# TIP R-5737: US-29/70 & I-85 Business at SR-1798 (Old Greensboro Rd.)

**NCDOT Division:** 9, Davidson County

**Type of Project:** Contract, Central Office Let

Length: 1.36 miles

**Contract Amount:** \$ 25,893,075.90

**Date of Review:** 9/20/2023

Subbasin and River Basin: Lower Yadkin Subbasin of the Yadkin Pee Dee River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: 0.25" (9/18/23), 1.25" (9/13/23), 0.75" (9/11/23), 0.5" (8/29/23) DOT Inspection Score: 8 (9/15/23), 8 (8/16/23), 8 (7/13/23), 8 (6/13/23)

#### **Comments/Summary**

Construction on this project began in January of 2022 and was approximately 47% complete at the time of our review. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Self-inspection records appeared to be adequate and consistent with monthly REU reports. A couple of sediment basins had not been installed due to the construction sequencing and difficulty accessing the area. Other basins size had been adjusted to fit the field conditions. These revisions were reviewed and approved by REU staff. This project contained a waste site and materials laydown yard. The waste site and laydown yard were noted on both the self-inspection and monthly REU reports. During our review, completed cut slopes had been matted and chemical stabilization in preparation for paving was underway. Rock doughnut inlet protection measures had been installed and appeared maintained throughout the site. A small channel change had been completed and the surrounding areas had been stabilized. Staff stated that the stockpiles in the waste site were scheduled to be stabilized once the contractor was able to get new equipment that would be able to access the site. The basin on the waste site appeared to be functioning, however, the slope drain was placed in the middle bay and sediment had accumulated at the slope drain outlet. No signs of offsite sediment loss were noted.



Slope drain in second bay of waste site basin





Matted slopes



Rock doughnut inlet protection



Completed channel change



Slope drains and inlet protection measures

# TIP I-5714/ U-5114: US-21 and Gilead Rd. at I-77 Interchange

**NCDOT Division:** 10, Mecklenburg County **Type of Project:** Contract, Central Office Let

Length: 1.30 miles

**Contract Amount:** \$ 30,854,850.00

**Date of Review:** 9/14/2023

Subbasin and River Basin: Upper Catawba Subbasin of the Catawba River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: **0.85**" (9/10/23), **0.13**" (9/8/23), **0.19**" (8/31/23), **0.33**" (8/30/23) **DOT Inspection Score: 8** (8/15/23), **8** (7/11/23), **8** (6/5/23), **8** (4/1/23)

#### **Comments/Summary**

Construction on this project began in September of 2022 and was approximately 60% complete at the time of our review. This project had received no ICAs prior to our review. Selfinspection records and monthly REU inspection reports were available onsite for review. Inconsistencies and incomplete self-inspection records were noted around February of 2023. REU monthly reports noted these inconsistencies at the time. Recent self-inspection records appeared to have corrected previously noted deficiencies. This project was let as two separate plans included in one project contract. The Contractor was maintaining a marked up "As-Built" plan for the TIP I-5714 plan set but did not have an "As-Built" plan for the TIP U-5114. No revisions had been made to this plan. A vacant lot adjacent to the project was being utilized as a laydown yard. NCDOT staff stated that this area did not have an approved reclamation plan but had obtained verbal agreement with the Town of Huntersville, who owned the property, to utilize this site. Perimeter silt fence had been installed in this area. During our review, work on the new overpass bridge and the grading for the roadway widening was underway. Check dams had been installed in the recently graded ditch adjacent to the offramp. The basin at the end of the project appeared to be functioning, however, the baffles were not properly spaced. Overall, inlet protection measures appeared to be maintained, however, a few measures needed additional rock. Recently completed areas had been stabilized with seed and straw mulch. Roadway widening, permanent ditch, and stormwater infrastructure at the beginning of the project had been completed and stabilized. NCDOT staff stated that there was a water leak in an adjacent parking lot that was draining onto one section of active grading. To keep this water from saturating the sub grade, a pipe had been placed in the diversion ditch to convey water into the stormwater system. This was a temporary solution until the water leak could be repaired. Additional check dams had been installed in the diversion ditch. No signs of offsite sediment loss were noted.



**Check dams installed** 



**Baffles not properly spaced** 



Inlet protection measures



Pipe placed to convey flow from water leak





Areas recently seeded and mulched with straw

# TIP R-2915E: US-221 from US-221 Bypass to US-221 Business/NC-58 in Jefferson

**NCDOT Division:** 11, Ashe County

Type of Project: Contract, Central Office Let

Length: 3.54 miles

**Contract Amount:** \$ 1,076,777.90 **Date of Review:** 8/15/2023

**Subbasin and River Basin:** Upper New Subbasin of the New River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: 0.3" (8/15/23), 0.5" (8/11/23), 0.2" (8/8/23), 1.5" (8/7/23), 1.0" (8/4/23)

**DOT Inspection Score: 9** (7/20/23), **9** (6/19/23), **8** (5/18/23), **9** (4/20/23),

#### **Comments/Summary**

Construction on this project began in February of 2021 and was approximately 80% complete at the time of our review. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Some inconsistencies were noted between the self-inspection records and monthly REU inspection reports. These inconsistencies were noted on multiple REU reports. This project consisted of new roadway construction to widen a two-lane highway to a four-lane split highway. This project contained ESAs and a Trout stream. A Trout Buffer Waiver for this project had been granted. The waiver had not been approved by the time the project was originally let but was distributed to the contractor along with additional project special provisions related to the requirements included in the waiver once issued. ESAs appeared to be properly delineated within the plan and onsite. Grading throughout the project was nearing completion and curb and gutter were being poured in one section. A recently completed section of median had been matted, drop inlet protection measures and wattles had been installed. Wattles had been stapled down properly. A skimmer basin was being converted to a permanent stormwater dry detention basin. A pump and special stilling basin (silt bag) for dewatering were installed in this location but the pump was not actively pumping while we were onsite. Slopes throughout the site appeared to be stabilized. Some rills had formed along recently worked slopes and around the basin. Perimeter measures remained in place throughout the site. One section of silt fence appeared to have been cut off at the ground rather than fully removed. This project included a waste site and the reclamation plan appeared adequate. DOT staff stated that this waste site was nearing completion. The majority of the site had been seeded and mulched with straw. The sediment basin for this waste site had been installed and appeared to be functioning and maintained. During our review, we noted the concrete washout needing to be repaired and a small diesel leak out of a tank truck. The Contractor immediately responded to the diesel leak. No signs of offsite sediment loss were noted.



Median matted with wattles and drop inlet protection measures installed



Special stilling basin (silt bag) for dewatering basin being converted



Basin being converted to permanent stormwater measure



Vegetation establishing on slope

#### TIP W-5601Q: NC-16 Business at SR-1394 (N. Pilot Knob Rd.) and SR-1393 (Hagers Ferry Rd.)

**NCDOT Division:** 12, Lincoln County

Type of Project: Contract, Division Office Let

Length: 0.17 miles

**Contact Amount:** \$1,076,777.90 **Date of Review:** 9/14/2023

Subbasin and River Basin: Upper Catawba Subbasin of the Catawba River Basin

Sedimentation Damage: None

# **Recent Project History:**

Rainfall: **0.2"** (9/12/23), **0.1"** (9/11/23), **0.6"** (9/10/23), **0.2"** (9/8/23) **DOT Inspection Score: 9** (9/6/23), **9** (8/8/23), **9** (7/6/23), **9** (6/8/23)

#### **Comments/Summary**

Construction on this project began in November of 2021 and was approximately 80% complete at the time of our review. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Self-inspection records appeared to be adequate and consistent with monthly REU reports. Minor revisions to ditch placement, the addition of measures and silt fence had been approved by REU staff. These revisions had been noted on the marked up "As-Built" plan set. During our review, the project was nearing completion and most disturbed areas were being stabilized. The project included an onsite laydown yard that appeared to extend beyond the right of way. NCDOT staff stated that areas being used were approximately 15-20 feet beyond the right of way and the landowner gave verbal permission for their property to be used. The construction entrance for this area appeared to be functioning and the area had recently been seeded and mulched with straw. the roadside ditches had been matted and vegetation was establishing throughout the majority of the site. Wattles had been installed throughout. No signs of offsite sediment loss were noted.



Recently matted area and wattles installed



Laydown yard area being stabilized



Permanent ditch completed and area being stabilized

# TIP R-2233BB: US-221 South of US-74 Business (Charlotte Rd.) to north of SR-1366 (Roper Loop Rd.)

**NCDOT Division:** 13, Rutherford County **Type of Project:** Contract, Central Office Let

Length: 5.0 miles

**Contract Amount:** \$ 109,237,300.92

**Date of Review:** 7/26/2023

Subbasin and River Basin: Upper Broad Subbasin of the Broad River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: **0.4**" (7/26/23), **0.5**" (7/23/23), **0.1**" (7/21/23), **0.15** (7/19/23)

DOT Inspection Score: 8 Permitted Areas/9 Remainder of Project (7/12/23), 9 Permitted

**Areas/8 Remainder of Project** (6/13/23), **8** (5/2/23), **9** (4/5/23)

## **Comments/Summary**

Construction of this project began in March of 2022 and was approximately 30% complete at the time of our review. This project had received no ICAs prior to our review. Self-inspection records and monthly REU inspection reports were available onsite for review. Self-inspection records appeared to be adequate and consistent with monthly REU reports. Revisions had been made to a couple of basins and additional checks had been installed in a few ditches. These revisions had been reviewed and approved by REU staff and were noted on the "As-Built" plans. This project consisted of roadway widening. During our review, active grading was underway throughout the project. The skimmer outlet pipe had been extended on multiple basins to stick out well past the basin berms. DEMLR staff recommended adding a dissipator pad below the skimmer outlet or cut the skimmer outlet pipe so that it would not extend past the spillway liner. Construction entrances throughout the project appeared to be maintained. Recently graded slopes had been hydroseeded or matted throughout the site. Multiple skimmer basins had slope drains placed in the first or second bay, bypassing some of the baffles. Other skimmer basins throughout the site appeared to be functioning properly. Wattles that had been installed in the ditches were staked down but had not been stapled to the ground. Some check dams needed to be reworked to ensure they were installed per the DOT construction details. Idle sections of the project had been stabilized or recently seeded and mulched with straw. No signs of offsite sediment loss were noted.



Skimmer basin and outlet pipe



Basin and drop inlet protection measure





Slope drains placed in the wrong bay of skimmer basins



Wattles with PAM installed



Sediment trap recently mucked out

#### TIP I-4400BB, I-4400C: I-26 from 0.05 miles north of US-64 to NC-280 (Exit 40)

NCDOT Division: 14, Buncombe/Henderson County

Type of Project: Contract, Central Office Let

Length: 8.55 miles

**Contract Amount:** \$ 271,226,964.96

**Date of Review:** 7/25/2023

Subbasin and River Basin: Upper French Broad Subbasin of the French Broad River Basin

Sedimentation Damage: None

#### **Recent Project History:**

Rainfall: Trace (7/22/23), **0.36"** (7/21/23), **0.55"** (7/19/23), **0.49"** (7/16/23) **DOT Inspection Score: 8** 7/17/23), **8** (6/26/23), **8** (5/23/23), **8** (4/17/23)

#### **Comments/Summary**

Construction on this project began in September of 2019 and was approximately 70% complete at the time of our review. This project had received no ICAs prior to our review. Selfinspection records appeared adequate and consistent with monthly REU inspections. This project consisted of roadway widening and building of two rest areas. This project also contained multiple waste sites. At the time of our review, one waste site was still active while the others were establishing permanent vegetation, had not yet started, or were closed out. Reclamation plans for all waste areas had been reviewed and approved by REU staff. The erosion control plan had been revised to move or resize some basins to fit the onsite conditions. Revisions to basin sizing and position were reviewed and approved by REU staff. Revisions had been noted on the "As-Built" plan set. At the time of our review, construction of the west-bound rest area was complete and establishing permanent vegetation. The east-bound rest area was complete and open to traffic. The permanent hazardous spill basins had been installed and an added temporary skimmer basin remained in place at the east-bound rest area. DOT staff stated that this basin had been added to address complaints from nearby landowners. The beams for the bridge over clear creek were being set, rock armor along the stream bank were being installed. Stockpiled material from the beam installation along the adjacent access road needed to be stabilized or removed. The disturbed areas around the noise wall installation had been seeded and mulched with straw. Silt fence and silt fence outlets throughout the site appeared to be maintained. Some drop inlet protection measures needed to be maintained. Completed slopes throughout the project had been vegetated. Vegetation was growing within some skimmer basins. DEMLR and DOT staff discussed the need to clear the vegetation enough to ensure that skimmer device could function, and baffles could be maintained. A new living retaining wall had been installed near the railroad crossing and appeared to be establishing well. Rills were forming throughout the slopes of the active waste site. These needed to be repaired and then stabilized. The temporary diversion ditch along the toe of the slope appeared to be filling with sediment. The skimmer basin appeared to be functioning properly and well maintained. No signs of offsite sediment loss were noted.



Living retaining wall installed and slopes stabilized



Rills formed on waste site slopes needing repair and stabilization



Drop inlet protection measure needing maintenance



Stream bank stabilization under new bridge



Vegetation growing in basin



Channel change completed and area stabilized

# **Summary of Findings**

### **Educational and Research Efforts**

NCDOT has contracted with N.C. State University to train and certify contractors, engineers and staff in the design, installation, management, and inspection of sedimentation and erosion control practices. There are three levels of certification: Level I and Level II certification for installers and supervisors, and Level III certification for designers. All ESC plans must be designed by someone who has a Level III Certification and project contracts require that at least Level I certified installer, and a Level II certified foreman are onsite to facilitate all ESC work. The NCDOT is also funding research on innovative sedimentation and turbidity control measures.

#### **DOT Internal Inspection Process**

The NCDOT is responsible for two types of inspections on each project: NPDES/SPCA Self-Monitoring Inspections (Self-inspections) and monthly REU inspections. Self-inspections for all active projects are conducted at least weekly and within 24 hours of a rain event of 1.0 inch or greater. Self-inspections are to be conducted by a project inspector from the office of the resident engineer or their designee on Contract Construction projects or from the county or district engineer for maintenance on State Force/Operations projects. Self-inspections are to be conducted by personnel who have received the Level II Erosion and Sediment Control/ Stormwater Certification. Field Operations staff of the REU conduct monthly inspections on all projects. Staff indicated that monthly inspections will be conducted with the personnel conducting the weekly inspections present. Records of both inspections were reviewed on all projects. Monthly REU inspections appeared consistent across all the divisions and were well maintained on all projects reviewed. Some inconsistencies on the self-inspections were noted, such as missing the date corrective actions were completed, incomplete rainfall data, or lack of detail regarding corrective actions that were needed at the time. It was also noted in some cases that conditions and corrective actions noted in the monthly reports were not reflected in the selfinspection records conducted around the same time. Some of these inconsistencies were noted within the REU monthly inspection reports and in most cases the inconsistencies had been addressed in subsequent self-inspection records.

The NCDOT is also responsible for maintaining a set of marked up "As-Built" erosion and sediment control plans. These "As-Builts" are to include the date that measures are installed and removed along with any "redline" changes or revisions that are made to the plan. These plans were available for most projects reviewed. One project which consisted of two sections and two separate plan sets, was only maintaining an "As-Built" for one of the two plan sets. Another project was missing the dates that measures had been removed.

#### Communication and Project Progression

Pre-construction meetings between the contractors and NCDOT staff are held prior to construction for all projects. DEMLR and other environmental agency staff are invited to attend these meetings as well. During preconstruction meetings, REU staff discuss critical areas of

concern and review the ESC requirements. In addition to pre-construction meetings, monthly meetings are held between NCDOT staff and the contractor's workforce to discuss erosion control and other items that may need attention throughout the life of the project. Thorough discussions between contractors, NCDOT and REU staff, frequent meetings, and coordination beyond the monthly REU inspections are often held. NCDOT retains operational control over all projects and REU staff coordinate with the NCDOT Resident and Division Engineers to ensure that any erosion control concerns, and corrective actions are addressed in a timely manner. The FOE may recommend that the Resident or Division Engineer shutdown work on the project if ESC corrective actions are needed. This is also part of the process when an ICA is issued in order to facilitate an immediate response. Contactors may also elect to shut down a project voluntarily and rededicate resources to address erosion control issues with guidance from the Resident Engineer and the FOE. On Desing-Build projects, monthly and sometimes more frequent meetings between the design team and the FOE occur to discuss design considerations and plan revisions that may be needed. These frequent and open channels of communication help to take a proactive approach to addressing potential erosion control concerns and facilitate quick responses to corrective actions and repairs that are needed.

#### **NCDOT Procedures and Policies**

The NCDOT has developed a set of standard requirements used for construction contracts. These standards are compiled in the Standard Specifications for Roads and Structures. Standards related to all aspects of the construction project, such as concrete and asphalt pavements, earthwork, structures, erosion and sediment control, etc. are included. These standards must be met on all construction projects and are referenced within the project proposal and contracts. As new standard practices emerge, the NCDOT has also developed numerous Special Provisions which can also be added to the contract. Accompanying these standards and special provisions are a set of Roadway Standard Drawings or construction details. These standard drawings are incorporated into plan sets by reference while construction details for Special Provisions are to be included within each plan set as necessary. The NCDOT has reviewed and updated both the Standard Specifications for Roads and Structures and the Roadway Standard Drawings documents. These updates included the addition of Wattle Check, Wattle Barrier, Silt Fence with Wattle Break, Earthen Dam with Skimmer, Rock Silt Check Type-A with Flocculants, Skimmer Basins, and Tiered Skimmer Basins which were all previously Special Provisions. The updates also included various revisions to other erosion control measures. These updates will go into effect on all newly let projects from January 1, 2024.

The NCDOT has created and maintains a list of approved products which are to be used for various aspects of projects including erosion and sedimentation control. The products on this list undergo a review process and may be approved for provisional or field use to be evaluated on certain projects for effectiveness and adequacy. This list, along with Special Provisions within project contracts help to ensure that products and constructed measures used meet the requirements outlined in the NCDOT Standard Specifications and Construction Details and adhere to the regulations and General Statutes. The NCDOT has developed its own *Erosion and Sediment Control Design and Construction Manual* which references the design considerations and requirements within the *DEMLR Erosion and Sediment Control Planning and Design Manual*.

Both manuals are referenced throughout the scope of work proposals for contracted projects and the design procedures specified within must be adhered to. This ensures that plans meet the requirements and basic objectives to control erosion and sedimentation. With the updates that have been made to the Standard Specifications and Construction Details, as mentioned above, updates to the NCDOT Erosion and Sediment Control Design and Construction Manual and other guidance documents may also be needed.

The use of small areas that were not within easements or the right of way of the project were noted on multiple projects reviewed this year. In each case, a reclamation plan was not submitted and approved for these areas. NCDOT staff stated that it is common procedure for small areas, such as these, to be used upon a verbal agreement with the property owner. If a reclamation plan is not required for areas such as these, it is recommended that some type of documentation stating what these areas are to be used for and how the area should be remediated after use, be obtained.

#### **Concrete Washout and Matting Specification**

In accordance with the National Pollution Discharge Elimination System requirements and the NCG01000 general permit, the NCDOT requires any project involving concrete (including those with sidewalks or curb and gutter) to install and utilize a designated concrete washout. No construction detail for a concrete washout is provided within the plans, rather, a link to an example construction detail can be found within a contract special provision. It is recommended that a construction detail for concrete washouts be included in the ESC plan set.

Matting for erosion control is included in a Soil Stabilization Summary Sheet within the ESC plan set. This table includes the location for placement and the estimated quantity of matting needed. Two types of matting to be used for erosion control have been approved (straw and excelsior) and are listed in the 2018 Standard Specifications for Roads and Structures book. Which one of these two matting types is not specified in the Soil Stabilization Summary Sheet within the ESC plan set. It is recommended that the type of matting to be used or reference to the standard specification for matting for erosion control be included in the Soil Stabilization Summary Sheet table.

These recommendations were made during the 2022 audit as well. This recommendation has been implemented on a handful of recently let projects; however, it does not appear that it has been widely implemented across all divisions.

#### **Conclusion**

Some maintenance or repair needs were noted on most projects; however, overall, the projects reviewed were in good condition and measures appeared to be installed and functioning properly. The REU staff appeared to conduct adequate inspections and noted the same areas seen by DEMLR staff. Completed or inactive areas appeared to be stabilized or had recently been seeded and mulched with straw and tackifier or matted. Self-inspection and monthly REU inspection records were available onsite for all projects reviewed. Overall, self-inspection records appeared to be adequate. On a few projects, some inconsistencies or incomplete records were noted. In most cases, REU staff had previously noted these inconsistencies. REU monthly inspection reports were comprehensive and appeared to capture the corrective actions needed onsite. REU staff should continue to monitor self-inspection records and ensure that they are properly filled out and accurately reflect on-site conditions. Instances of sediment losses were noted on multiple projects. In most cases, these sediment losses had been reported to the appropriate environmental agencies and REU staff or the environmental agency had provided guidance to the contractors for cleanup and repairs. NCDOT staff stated that notification was sent to DWR when sediment losses were noted into wetlands or streams. NCDOT staff should continue to notify DEMLR when sediment losses occur and DWR when losses impact jurisdictional features. Implementation of NCDOT policies and procedures, such as delineation of ESAs in the field, appeared to be consistently implemented throughout all divisions. Inconsistencies in these procedure implementations were noted in previous reviews. The NCDOT continues to provide three certification levels and fund research into the improvement and innovation of practices. The NCDOT has reviewed and updated both the Standard Specifications for Roads and Structures and the Roadway Standard Drawings documents. These revisions and updates will go into effect on all new projects let beginning January 1, 2024. With these updates, updates to the NCDOT Erosion and Sediment Control Design and Construction Manual and other guidance documents may also be needed. It is encouraged that NCDOT staff consider widely implementing the recommendations to specify the matting type used for erosion control and include a construction detail for concrete washouts within the ESC plans.

DEMLR staff recommend continuing delegation of the Erosion and Sedimentation Control Program to the NCDOT Division of Highways, pursuant to §113A-56. This report will be presented to the Sedimentation Control Commission on November 16, 2023.

This report is based on the 2023 Annual Review of the Erosion and Sedimentation Control Program Delegation to the North Carolina Department of Transportation, Division of Highways conducted between May 15 and October 3, 2023.



## 2023

# NCDOT

Erosion and Sedimentation Control Program
Annual Report



#### NCDOT EROSION AND SEDIMENTATION CONTROL PROGRAM

In 1991 the NC Sedimentation Control Commission reviewed the NC Department of Transportation's efforts to comply with the Sedimentation Pollution Control Act of 1973 and the subsequent 1974 NCDOT Delegated Erosion and Sedimentation Agreement.

Based on the review, the 1974 agreement was updated. The revised agreement was submitted to, and approved by the Sedimentation Control Commission on February 25, 1991 and functions as the core of the current NCDOT program.

Within NCDOT, the Roadside Environmental Unit (REU) monitors the delegated authorities. This includes design, review, monitoring and training for all aspects of the Erosion and Sedimentation Control Program. Improvements in technology and NCDOT research have in turn improved design standards and techniques for erosion and sedimentation control.

This annual report outlines and highlights the work implemented and accomplished in 2022-2023. It is important to note that this is an overview of the NCDOT Erosion and Sedimentation Control Program and provides a summarization of the programs overall content.

#### **EXECUTIVE SUMMARY**

The executive summary reflects the work accomplished over the past year from July 1, 2022 to June 30, 2023. Project information is based on the total number of projects that were awarded for construction plus the number of projects that were actively under construction during this time period.

#### EROSION CONTROL PLAN DESIGN / REVIEW JULY 2022 - JUNE 2023

NCDOT is delegated the authority to review and approve erosion and sedimentation control plans for its land disturbing activities. The following is a summary of the projects that required an approved erosion and sedimentation control plan.

Project Type	Erosion Control Plans Design / Review	
Contract Construction Projects	271	
NC Turnpike Authority Projects	3	
Division Construction/Bridge/Maintenance Projects	160	
Total Plans Designed/Reviewed	434	

#### **COMPLIANCE REVIEWS**

JULY 2022 - JUNE 2023

The following is a summary of the compliance reviews that were performed for active land disturbing projects during the period of July 1, 2022 to June 30, 2023. The compliance reviews were conducted by the Roadside Environmental Unit's Field Operations Section across fourteen Highway Divisions.

Project Type	Compliance Reviews	ICAs Issued	Projects Receiving ICA	Projects receiving ICA-Ex	Projects Receiving CICA	NOV Issued By Land Quality
Contract Construction	3,580	5	5	1	0	0
NC Turnpike Authority	40	0	0	0	0	0
Maintenance	107	0	0	0	0	0
Vertical Construction	12	0	0	0	0	0
Rail Division	2	0	0	0	0	0
Bridge Maintenance	336	0	0	0	0	0
Resurfacing	57	0	0	0	0	0
Total	4,134	5	5	1	0	0

- Contract Construction Projects: Defined as a project that has been let to a private contractor for any land disturbing
  activity that exceeds one acre. Contract construction projects are advertised and awarded either from Raleigh or
  from the local Division.
- NC Turnpike Projects: The North Carolina Turnpike Authority is now part of NCDOT Division of Highways. Since it was
  originally added to the Department's delegation, it's projects have been tracked separately from Contract
  Construction projects.
- Maintenance Projects: Projects include all land disturbing activities associated with the construction or maintenance
  of the secondary road system of North Carolina. Work is conducted by state forces or small business contracts.
- Vertical Construction Projects: Projects include the construction of facilities associated with the NC Department of Transportation. The contracts are developed by the General Services Section of NCDOT
- Rail Division Projects: Projects include the construction of railway corridors and bridges associated with NC DOT Rail Division.
- Bridge Maintenance Projects: Projects include small bridge replacement and pipe culvert replacement. Work is conducted by state forces or small business contracts.
- Resurfacing Projects: Projects include the resurfacing of existing roadways which require shoulder reconstruction.

### 2023 ANNUAL REVIEW

Based on a random selection by DEMLR, the following projects were chosen for review. Projects are reviewed jointly by NCDOT and DEMLR staff to determine the overall program performance.

Division	County	TIP#	Route	Length
1	Martin	R-4705	SR-1142 (Prison Camp Rd) from NC-	9.60
			903 to SR-1182 (East College Rd	
2	Pitt	B-5301	Bridge 87 over Norfolk Southern	0.60
			Railroad on NC 33	
3	Onslow	B-5652	Bridge 33 over Wolf Swamp on US-	0.35
			17 NBL	
3	Onslow	U-5878	Extension of Commerce Rd. from	0.38
			Fairway Rd. to Piney Green Rd.	
4	Nash	U-5996	Widen SR 1603(N. Old Carriage	1.19
			Rd.) from North of SR 1770(Eastern	
			Ave./Sunset Ave.) to SR 1601(Reges	
	) A / 1	D 0000	Store Rd.)/ SR 1609(Green Hills Rd.)	0 (1
5	Wake	R-2828	NC 540 Triangle Expressway	8.61
6	Cumberland	U-5798A	SR-1102 (Gillis Hill Road) from north	1.20
			of SR-1112 to US-401 and replace	
			bridge over little rockfish Creek	
7	Rockingham	B-4807	Bridge #6 on Cunningham Road	0.19
			over the Haw River	
7	Rockingham		Bridge #9 on Ironworks Road over	0.06
			Prong of Troublesome Creek	
8	Moore	R-5726A	NC-211 from south of NC-73 in	4.81
			West End to north of SR-1241 (Holly	
			Grove School Rd.	
9	Davidson	R-5737	US 29/70 & I-85 Business at SR 1798	1.36
			(Old Greensboro Rd)	
10	Mecklen-	I-5714/	US 21 and Gilead Rd. at I-77 Inter-	1.30
	burg	U-5114	change	
11	Ashe	R-2915E	US-221 from US-221 Bypass to US-	3.54
			221 Business/NC-88 in Jefferson	
12	Lincoln	W-5601Q	NC 16 Business at SR 1394 (N. Pilot	0.17
			Knob Rd.) and SR 1393 (Hagers Fer-	
			ry Rd.)	
13	Rutherford	R-2233BB	US -221 South of US-74 Bus.	5.0
			(Charlotte Rd.) to north of SR-1366	
	<u> </u>		(Roper Loop Rd)	
14	Buncombe/	I-4400BB/C	I-26 from 0.05 miles north of US-64	8.55
	Henderson		to NC-280 (Exit 40)	

#### NON COMPLIANT POLICIES AND PROCEDURES

The Department's delegation agreement with the Sedimentation Control Commission allows for the Department to review sediment and erosion control plans, and to perform compliance inspections for projects under the operational control of the Department. Although the SCC delegates compliance inspection to the Department, it did not grant enforcement authority. Since the Department can not issue a fine to itself, a series of policies and procedures were developed to correct compliance issues with highway and maintenance construction projects. The following summarizes the processes involved to ensure the Department's projects are in compliance.

#### Daily Project Inspection:

Project personnel inspect and monitor the construction of a project on a daily basis and record daily activities and rainfall amounts. In the event that a compliance issue develops, the project personnel in conjunction with the contractor will address the issue and corrective actions are made. If the corrections are deemed severe by the project engineer then operations on the project are ceased until all the compliance issue is rectified.

#### Monthly Project Inspection:

Roadside Environmental Field Operations performs a secondary level of compliance inspections on land disturbing projects to determine if the sediment and erosion control plans are implemented accordingly and that the necessary maintenance is occurring. Permit conditions are evaluated and jurisdictional areas inspected for compliance. NPDES documentation is reviewed and noted if any deficiencies are identified. If the compliance inspection identifies a situation that is not being corrected or can be corrected in a timely manner then an ICA (Immediate Correction Action) notice is issued. The ICA alerts NCDOT Management of an issue that needs immediate attention. The project personnel is then charged with correcting the situation as directed by the Chief Engineer. A follow up inspection is then made to determine that the situation was corrected and the steps that were take to prevent a reoccurrence.

The ICA notice is supported by the policies and procedures outlined by the Chief Engineer. The policy outlines the steps that will be taken and the consequences associated with failing to comply. Notification and subsequent reports on projects that have received and ICA are distributed to the Chief Engineer, Division Engineer, Regional DEMLR Engineer, State Sediment Engineer, and the State Roadside Environmental Engineer. A final report is prepared and delivered to the Chief Engineer describing what happened to cause the ICA and what steps were taken by the Division to ensure future compliance.

#### CERTIFICATION

The Biological & Agricultural Engineering and Soil Science Departments at N.C. State University are partnering with NCDOT to offer an Erosion and Sediment Control/Storm water Certification Program. The certification program provides the required personnel training to ensure compliance with erosion and sediment control/storm water provisions on NCDOT projects.

NCDOT requires all contractors and consultants to have a certified supervisor and foreman to oversee operations on NCDOT projects to ensure compliance with the Sedimentation Pollution Control Act as well as other environmental regulations.

Certification must be renewed every three years.

#### **CERTIFICATION LEVELS**

- Level I: Erosion & Sediment Control/Storm water Inspector /Installer
  - Active Certifications 1,077
- Level II: Erosion & Sediment Control/
   Storm water Site Management.
  - Active Certifications 4,451
- Level III: Design of Erosion and Sediment Control Plans

Active Certifications - 669

#### **III.** Information Items

- A. NCDOT, DOH-NCDEQ, DEMLR Memorandum of Agreement Ms. Julie Coco
- B. Lincoln County Ordinance Review Ms. Julie Coco
- C. Commission Technical Committee Update Mr. Mark Taylor
- D. Land Quality Section Active Sediment Cases and Enforcement Ms. Julie Coco
- E. Education Program Status Report Ms. Rebecca Coppa
- F. Sediment Program Status Report Ms. Julie Coco
- G. Land Quality Section Report Mr. Toby Vinson
- H. Legislative Updates Mr. Toby Vinson



#### North Carolina Department of Transportation

## Erosion and Sedimentation Control Program Delegation

2023

#### Statutory Authorities:

Whereas North Carolina General Statutes (G.S.) Section 113A-54(a) provides that the North Carolina Sedimentation Control Commission (Commission) "shall in cooperation with the Secretary of Transportation and other appropriate State and Federal agencies, develop, promulgate, publicize, and administer a comprehensive State erosion and Sedimentation control program"; and

Whereas G.S. 113A-54(d) (2) provides that the "Commission shall assist and encourage other State agencies in developing erosion and sedimentation control programs to be administered in their jurisdictions, and to approve, approve as modified, or disapprove such programs submitted pursuant to G.S. 113A-56 and from time to time review such programs for compliance with regulations issued by the Commission and for adequate enforcement"; and

Whereas G.S. 113A-56(b) provides that the "Commission may delegate the jurisdiction conferred by G.S. 113A-56(a), in whole or in part, to any other State agency that has submitted an erosion control program to be administered by it, if such program has been approved by the Commission as being in conformity with the general State program"; and

Whereas the Commission intends to delegate to the Department of Transportation, Division of Highways (Department of Transportation), the authority to administer an erosion and sediment control program within the Department of Transportation's jurisdiction which consists of the responsibility for preparation, review, and approval prior to construction of erosion and sediment control plans for all land-disturbing activities that will disturb one or more acres on a project and conducted within rights-of-way, easements and reclamation sites or property owned or under the operational control of the Department of Transportation for highway and other construction, maintenance, and land development; and

Whereas the Commission does not intend to delegate to the Department of Transportation the responsibility for external monitoring of the program and any necessary legal actions.

Therefore, in accordance with the statutory requirements of the Sedimentation Pollution Control Act of 1973, G.S. 113A-50, et seq., as may be amended and pursuant to the statutory authority in G.S. 143B-348, as may be amended, the Department of Transportation submits the following sediment and erosion control program to the Commission for approval and delegation.

#### **General Conditions of Program**

- A. The Department of Transportation's Standard Specifications for Roads and Structures and Roadway Standard Drawings as may be amended, shall provide the basic erosion and sedimentation control requirements to be implemented by the Department of Transportation.
- B. The Department of Transportation will prepare, or have prepared, erosion and sediment control plan consistent with Commission standards governing all land disturbing activity it undertakes that will disturb one or more acres of erodible surface on a project.
- C. Consistent with its plan requirements, the Department of Transportation shall provide adequate rights of way or easements to accommodate installation and maintenance of appropriate sediment and erosion control measures.
- D. The Department of Transportation will take all reasonable measures to protect all public and private property from siltation damage caused by any Departmental activity consistent with its policies and procedures developed pursuant to its statutory authorities and responsibilities. In the event damage does occur, satisfactory restoration of property shall be made.
- E. The Department of Transportation will utilize designs and design criteria for application of its erosion and sediment control program that are consistent with minimum standards promulgated by the Sedimentation Control Commission.
- F. The Department of Transportation will develop appropriate training manuals, courses, etc., that will provide sufficient technical administrative guidance to its employees or agents such that the objectives of the program are fulfilled.
- G. The Department of Transportation will be allowed to utilize its delegated authority on any project that the Department maintains, Operational Control throughout the entirety of the land disturbing activity. Operational Control is defined as any project that is administered by the Department of Transportation and is under the authority of the Secretary of Transportation of the Department of Transportation. Land disturbing projects that are funded by the Department of Transportation, but the Department does not retain Operational Control of the project will not be covered by the delegated authority outlined in this agreement.

#### H. Basic Objectives of Program

Erosion and sedimentation control plans prepared by and for the Department of Transportation will address the following control objectives:

- Identification of Critical Areas On-site areas which are subject to severe
  erosion, and off-site areas which are especially vulnerable to damage from
  erosion and/or sedimentation, will be identified and receive special attention.
- 2. **Limited Time of Exposure** All land-disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time consistent with good construction and maintenance practices.
- 3. **Limit Exposed Areas** All land-disturbing activity is to be planned and conducted to minimize the size of the areas to be exposed at any one time.
- 4. **Control Surface Water** Surface water runoff originating upgrade of exposed areas will, to the extent practical, be controlled to reduce erosion and sediment loss during the period of exposure.
- 5. **Control Sedimentation** All land-disturbing activity is to be planned and conducted to prevent off-site sedimentation damage.
- 6. Manage Stormwater Runoff Plans will be designed so that any increase in velocity of stormwater runoff resulting from a land-disturbing activity will not result in accelerated erosion of the receiving stormwater conveyance or at the point of discharge. Plans shall include measures to prevent accelerated erosion within the project boundary and at the point of discharge. When the increase in the velocity of storm water runoff resulting from a land disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans will include measures to control the velocity up to and including the discharge point to control accelerated erosion of the site and increased sedimentation of watercourse.
- I. The Department of Transportation acknowledges its obligation to implement its program consistent with the standards for land-disturbing activities promulgated by the Sedimentation Control Commission. Please refer to the DEQ, Division of Energy, Mineral and Land Resources web page to view the referenced and incorporated herein by reference <a href="Sedimentation Pollution Control Act of 1973">Sedimentation Pollution Control Act of 1973</a>, as amended, and the administrative rules codified at Title 15A of the NC Administrative Code, Chapter 4, 15A NCAC, 4(a), <a href="extended-sed-en-sed-

Commented [GJA1]: These are all codified in 15A NCAC 04B .0106 with slightly different language. #6 is not clear as to what the intent is. I replaced it with the language from the Admin Code. Julie may want to update all of them with that language as well. All of the language is below:

15A NCAC 04B .0106 BASIC EROSION AND SEDIMENTATION CONTROL PLAN OBJECTIVES An erosion and sedimentation control plan developed pursuant to this Chapter shall be designed to address the following: (1) Identify Critical Areas. Identify site areas subject to accelerated erosion, and off-site areas vulnerable to damage from erosion and sedimentation. (2) Limit Exposed Areas Limit the size of the area exposed at any one time. (3) Limit Time of Exposure. Limit exposure to the shortest time specified in G.S. 113A-57, the rules of this Chapter, or as directed by the approving authority. (4) Control Surface Water. Control surface water originating upgrade of exposed areas in order to reduce erosion and sediment loss during exposure. (5) Control Sedimentation. All land-disturbing activity shall be planned to prevent off-site sedimentation damage. (6) Manage Stormwater Runoff. Plans shall be designed so that any increase in velocity of stormwater runoff resulting from a land-disturbing activity will not result in accelerated erosion of the receiving stormwater conveyance or at the point of discharge. Plans shall include measures to prevent accelerated erosion within the project boundary and at the point of discharge.

Commented [HDB2R1]: Should it just state that "Plans will be designed to be compliant with 15A NCAC 04B .0106 BASIC EROSION AND SEDIMENTATION CONTRO PLAN OBJECTIVES"

**Commented** [JC3R1]: These rules were updated in 2020. You should be OK addressing the new rules either way.

**Commented [JC4]:** Is this in reference exclusively to G.S. 113A-52.01(4) and G.S. 116A-19.30(a)(5)?

#### **Specific Conditions of Program**

#### A. Borrow Sources:

The administration of borrow sources obtained by the Department of Transportation or its agents will be in accordance with the requirements of the North Carolina Mining Act of 1971.

#### B. Waste Areas:

Waste areas furnished as a part of the Department of Transportation's construction activities will have erosion and sediment control planning and measures addressed as part of the stabilization and maintenance plans developed under the contract requirements.

#### C. Erosion and Sediment Control Plan Design:

Erosion and sediment control plans prepared by agents for the Department of Transportation will be prepared consistent with the Department of Transportation's program requirements and the Department of Transportation will review such plans to assure compliance before acceptance of them. When projects involve clearing and grubbing operations then a clearing and grubbing phase erosion control plan will be developed as well as a final grading phase erosion control plan.

#### D. Erosion and Sediment Control Plan Review:

Roadside Environmental Unit erosion and sediment control plans and waste areas stabilization and maintenance plans prepared in the field divisions will be prepared consistent with the Commission's standards and with the objectives of this program. Routine review by the staff of the Roadside Environmental Unit will be made to assure that program objectives and requirements are satisfied. Approximately 25% of the plans will be reviewed on a quarterly basis to assure compliance with the program delegation.

#### E. Modifications to Erosion Control Plans:

The following devices will require consultation with the Roadside Environmental Unit prior to being modified or altered on a project.

- 1) Riser Basin
- 2) Skimmer Basin
- 3) Temporary Rock Sediment Dam, Type A
- 4) Temporary Rock Sediment Dam, Type B (Located at Stream Crossings and stormwater discharge outlets)
- 5) Temporary Rock Silt Check, Type A (Located at Stream Crossings and stormwater discharge outlets)

- 6) Culvert Construction Sequence
- 7) Channel Changes
- 8) Construction operations that warrants changes to the erosion control
- F. The Department of Transportation will furnish, if requested by the Commission or its authorized staff, a copy of any erosion control plans prepared under this program. The Commission and NCDEQ agrees to waive any fee charges, etc., associated with the review of these plans and of the Department of Transportation's program.

#### Program Monitoring and Enforcement Procedure

The Department of Transportation places responsibility for the monitoring and enforcement of its erosion and sediment control program through a system outlined below.

#### Contract Construction - State Transportation Improvement Program (STIP)

Contract Construction projects utilize erosion and sediment control plans as part of the construction plans when the project is let to contract. The Resident Engineer or Engineer responsible for the project is responsible for ensuring that the contractor constructs the project in accordance with contract requirements and plan details/specificationsthe latest version of the NCDOT Standard Specifications for Roads and Bridges. The NCDOT holds pre-construction conferences with their contractors for these projects in accordance with Section 108 of these specifications. Project personnel manage the project to assist the Resident Engineer with this responsibility. The project staff along with the contractor's staff are the first line effort of maintaining correct and proper erosion and sediment control implementation. The Engineer reports directly to the Division Construction Engineer who is responsible for all contract construction projects within a Division. Both positions answer directly to the Division Engineer who reports to the Chief Engineer. The implementation of effective erosion and sediment control on projects is a major responsibility of these two positions (Resident Engineer and Division Construction Engineer) and they are accountable to the Division Engineer and the Chief Engineer.

In addition, there are two separate functional areas that are not within the Divisions' chain of authority but rather report to a separate Central Unit responsible to the Chief Engineer and who have major responsibilities associated with the erosion and sedimentation control efforts on projects.

The Roadside Environmental Unit's Field Operations Engineer (F.O.E.) is charged with the direct responsibility to monitor land disturbing activities on projects for compliance with the Department's Erosion and Sediment Control Program requirements. The FOE brings

Commented [JC5]: New

Commented [JC6]: I don't know that we need the extent of notifications to LQS personnel that we had in the previous MOA, but I think it still prudent to at least notify our Regional Engineers when construction on a project involving significant land-disturbances in their region has begun.

Commented [HB7R6]: Julie, We find that there are Regional Offices that call if they have any questions and others are silent. Some may want to know and others have confidence if they have a problem then they call us. Check with your Regional Engineers and find out what they want. We do not want to overload their plate with more stuff if there is a better way.

management's attention to problem areas, attitudes, unique situations, etc., that prohibit proper and effective erosion and sediment control efforts. This position issues a report resulting from its monitoring and evaluation of contract construction project review and has the authority to issue an Immediate Corrective Action (ICA) and monitor follow up efforts on the part of Division Personnel. Placing a project in the Immediate Corrective Action (ICA) status triggers a series of actions that are designed to bring the project back into compliance as soon as practicable. Although the Roadside Environmental Field Operations Engineer is not designated with the authority to immediately suspend all operations on a project for failure to maintain satisfactory erosion and sediment control, this position can cause the same result by direct and immediate communication with the Resident Engineer or Division management staff. If for some reason a proper response is not received from the Resident Engineer or Division Engineer, then direct and immediate contact will be made with the appropriate Area Construction Engineer who is vested with the authority to suspend operations on a project for any reason deemed appropriate in their judgement. The Area Construction Engineer is an expert in construction assigned out of the Central Unit in Raleigh. The position is staffed to the State Construction Engineer who is at the same level as a Division Engineer and who reports to the Chief Engineer in a functional area of responsibility separate and apart from a Division Engineer.

The Area Construction Engineer's main function is to assure contract construction procedures are consistent with the intent of the Department. This position accepts the project from the Contractor on behalf of the Department and has certain approval authorities in contract administration matters not delegated to the Divisions. This position operates under the authority of the Chief Engineer in Construction matters and is assigned special investigative and troubleshooting roles as appropriate.

Both the Area Construction Engineer and the Field Operations Engineer as well as these engineers' subordinances are assigned to the Chief Engineer and do not fall in any way under the supervision and control of the Division Staff. Both sets of positions have been vested with certain responsibilities and authorities associated with implementing an effective Erosion and Sediment Control Program and constantly review project activities to assure the program is working as intended.

#### **Division Construction/Maintenance Projects**

Division Construction/Maintenance Projects are construction projects usually less complex in nature and type and in general would have less risk of sedimentation damage to adjacent properties and are directly administered from the Divisions. Erosion and Sediment Control plans for Division Construction/Maintenance Activities are designed to comply with current standards and practices compliant with the Standard Specifications for Roads and Structures and Roadway Standard Drawings.

The Division Engineer is responsible for either letting these smaller projects to contract through the purchase order process or constructing the project with their own forces and equipment. The Division Engineer has a staff of Project/Construction Engineers,

Bridge Engineers, Highway Maintenance Engineers, and Maintenance Technicians, which assist with these projects.

The Roadside Environmental Unit's Field Operations Engineer (FOE) also reviews and monitors these Division construction/maintenance projects and have certain authorities delegated by the Chief Engineer to maintain compliance with the Department's Erosion and Sediment Control Program responsibilities. The FOE is delegated the authority to suspend grading activities on these types of projects subject to appropriate remedial actions being taken to bring the project into compliance. If a FOE does not get a proper response from the project staff, they will make immediate contact with Division Engineer and advise them of the situation on the project that if Immediate Corrective Actions are not undertaken, they will suspend the land disturbing activities of the project subject to proper actions being taken. If no action is taken within a reasonable time depending upon the severity of the situation, they will issue a written directive to the Division Engineer advising that the land disturbing activities on the project are being suspended under the authority of the Chief Engineer until further notice. He will immediately advise the State Roadside Environmental Engineer of their action who in turn will advise the Chief Engineer. The decision as to when activities will resume will be made in the office of the Chief Engineer.

This would be a unique situation as every effort is made to resolve issues at the lowest level and to operate in compliance with the Department's program and objectives.

#### Immediate Corrective Action Status (ICA)

The Roadside Environmental Unit with the Department of Transportation will be responsible for monitoring and evaluating the Department, and its compliance with the Commission's standards and with the objectives of this program. The Roadside Environmental Unit is responsible for issuance of the following:

Immediate Corrective Action (ICA) - An ICA will be issued when an erosion control inspection reveals that a project is in violation of the Sedimentation pollution Control Act and/or the NPDES permit, and the project is given an overall report grade of 6 (Scale of 1 10) 10 - Excellent, 9-8 - Good, 7 Fair, 6-1 Poor) or below and the project staff have failed to take corrective actions. Once issued, the ICA status will remain in effect until corrective actions have been satisfactorily implemented. To ensure that compliance with the Sedimentation pollution Control Act and/or NPDES Permit is regained, a follow-up inspection will be conducted in five (5) working days after an ICA is issued. If the follow-up inspection reveals that needed corrective actions have been satisfactorily completed the ICA will be lifted (removed). Circumstances may warrant, however, that an ICA will remain in effect for an extended period after its issuance. This is the case when corrective work is hampered by adverse weather, erosion control materials needed for corrective actions or are unavailable, or corrective items on an ICA have been totally neglected or ignored.

**Commented [JC8]:** Do we not now need to address ECPARs, PCNs, and CICA-SWOs that have entered the picture since the original delegation agreement was written? These are listed on your monthly report.

**Commented [HB9R8]:** Julie, We did not include these items since they are either notifications or something that we no longer need.

ECPAR was something created to force communication between the contractor and consultant engineer. It was developed to bring attention to a situation that often is two personalities not getting along. ECPAR may change as we evolve

PCN - The PCN was created to alert our Div Environmental Engineers that an issue has developed that creates issues with a permit. Sometimes it is sediment related but often it can be other issues. We did not think it warranted to be in the MOA.

NCDOT-SWO was created to help ease concerns when we built 1-77 in Mecklenburg County. Since a third party was funding it, Mel Nevills was concerned that Roadside would need something more than an ICA. He even suggested that we ask for enforcement authority from SCC. We chose this Stop Work Order option, but we never had to use it. The normal processes worked. We do not believe this may be needed in the future.

**Commented [JC10]:** Recommend elaborating on these grades and the scale. It is a bit unclear as to the difference between 6 & 7 or 7 & 8 when evaluating the installation of BMPs, for example.

**Commented [HB11R10]:** Do you think that additional information explains the grade scale?

- Immediate Corrective Action Extension (ICA-EX) Should the follow-up inspection for an ICA reveal that significant progress has been made towards the completion of needed actions, but not enough corrective work has been accomplished to justify lifting (removing) the ICA, an ICA-EX will be issued. The purpose of an ICA-EX is to grant additional time for completion of the remaining erosion control items. When an ICA EX is issued, a follow-up inspection will be conducted in five (5) working days. If the follow-up inspection reveals that needed corrective actions have been satisfactorily completed the ICA will be lifted (removed). Projects are limited to a maximum of two (2) ICA-EX's.
- Continuing Immediate Corrective Action (CICA) When any follow-up inspection reveals that little or no progress has been made towards the completion of necessary corrective actions or additional corrective actions are now needed to bring the project into compliance a CICA may be issued. The purpose of a CICA is to alert Project, Division and NCDOT management that there has been an inadequate response to an ICA, the project now poses a higher risk for offsite sedimentation damage, and detrimental effects to the environment are imminent. When a CICA is issued, a follow-up inspection will be conducted every five (5) working days until the corrective actions identified as needed in the ICA and/or follow-up inspection report(s) have been satisfactorily completed.

#### Department Responsibilities for ICA, ICA-Ex, CICA, or CICA-SWO

Once a project is in an ICA, ICA-EX, CICA, or CICA-SWO status, the Engineer responsible for the project will prepare an outlined plan detailing corrective measures that will be instituted and an anticipated completion date. All ICA, ICA-Ex, CICA, and CICA-SWO reports will be sent to Program personnel within the Land Quality Section of DEMLR.

#### Suspension of Project Activities:

The suspension of work on any active construction project may occur if the responsible engineer deems it necessary to remain in compliance with the Department's Erosion and Sediment Control Program.

If the Roadside Environmental Unit issues an ICA notice and determines that the proper corrective actions are not being taken within a reasonable period, they will immediately contact the Division Engineer. The Division Engineer will be responsible for ensuring proper corrective actions are being implemented. Suspension of work associated with land disturbing activities on the project may occur until such time as appropriate corrective actions have been taken to abate the non-compliant issues.

The Chief Engineer will be notified and will determine if further action is necessary to ensure compliance with the Department's Erosion and Sediment Control Program.

#### Program Review and Evaluation:

The Commission shall review and evaluate the Department of Transportation's Sedimentation and Erosion Control Program on an annual basis or as deemed necessary by DEMLR.

#### **Existing Uncovered Areas:**

The Department of Transportation has implemented and will continue a program that will, subject to the availability of funds, provide corrective treatment to all existing uncovered areas that exceed one acre on a project and are experiencing continued accelerated erosion. The treatment provided will consist of the establishment of groundcover or other protective measures, structures, or devices to control off-site sedimentation. The program places priority on those areas that are contributing to off-site damage.

#### **Annual Report to the Sedimentation Control Commission:**

The Department of Transportation will present an annual report to the Commission. The report shall include but not be limited to an overview of the program, the number of plans prepared by NCDOT and its agents, project reviews and planned emphasis areas for the next twelve months. This report will be submitted to the Commission when the Department of Transportation's delegated program is reviewed.

#### Approval:

The North Carolina Sedimentation Control Commission hereby approves the program of erosion and sedimentation control associated with highway construction, maintenance, and specified land development submitted by the North Carolina Department of Transportation as conforming to the general state program as provided for the G.S. 113A-56(b) and except for external monitoring and any necessary legal action delegates the jurisdiction conferred on the Commission by G.S. 113A-56(a) to the Department of Transportation to carry out the approved Erosion and Sedimentation Control Program. The responsibility for the external monitoring of the program and any necessary legal actions is not delegated to the Department of Transportation but is retained by the Commission.

Approved for	the Sedimentation Control Commissio	n.
Signature:		Date:
(	Chairperson of SCC	

**Commented [JC12]:** This provision removed from our Model Ordinance.

Commented [HB13R12]: So we should delete it?

#### LINCOLN COUNTY LOCAL ORDINANCE

SOIL EROSION and SEDIMENTATION CONTROL

Revised November 2021

Commented [JC1]: Show date as approved by SCC

Commented [ZS2R1]: Date should reflect approval by SCC and Lincoln Co Commission

#### TABLE OF CONTENTS

SECTION 1	Title	3
SECTION 2	Purpose	3
SECTION 3	Definitions	3
SECTION 4	Scope and Exclusions	7
SECTION 5	Mandatory Standards for Land-Disturbing Activity	)
SECTION 6	Erosion and Sedimentation Control Plans	)
SECTION 7	Basic Control Objectives	5
SECTION 8	Design and Performance Standards	7
SECTION 9	Storm Water Outlet Protection	3
SECTION 10	Borrow and Waste Areas	)
SECTION 11	Access and Haul Roads	)
SECTION 12	Operations in Lakes or Natural Watercourses	l
SECTION 13	Responsibility for Maintenance	l
SECTION 14	Additional Measures	l
SECTION 15	Fees	l
SECTION 16	Plan Appeals 22	2
SECTION 17	Inspections and Investigations	3
SECTION 18	Penalties	5
SECTION 19	Injunctive Relief	7
SECTION 20	Restoration After Non-Compliance	7
SECTION 21	Severability	3
SECTION 22	Effective Date 29	₹

ORDINANCE NO.

AN ORDINANCE TO PROVIDE FOR THE CONTROL OF SOIL EROSION AND SEDIMENTATION.

NOW, THEREFORE, BE IT ORDAINED by the (Governing Body) of the (City), (Town), (County) hereby adopts the following ordinance.

SECTION 1 <u>Title</u>

This ordinance may be cited as the Lincoln County Soil Erosion and Sedimentation Control Ordinance.

SECTION 2 Purpose

This ordinance is adopted for the purposes of:

- regulating certain land-disturbing activity to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and
- (b) establishing procedures through which these purposes can be fulfilled.

#### SECTION 3 <u>Definitions</u>

As used in this ordinance, unless the context clearly indicates otherwise, the following definitions apply:

- (a) **ACCELERATED EROSION.** Any increase over the rate of natural erosion as a result of land-disturbing activity.
- (b) <u>Act</u> means the North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it.
- (c) <u>Adequate Erosion Control Measure, Structure, or Device</u> means one which controls the soil material within the land area under responsible control of the Person conducting the land-disturbing activity.
- (d) <u>Affiliate</u> means a Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control of another Person.
- (e) <u>Approving Authority</u> means the Department or other State or a local government agency that has been delegated erosion and sedimentation plan review

Commented [ZS3]: Should put in Lincoln Co ordinance numbering from code book

Commented [JC4]: Substitute county information here.

Commented [MG5R4]: Information is included in the

Commented [JC6]: Provide county information here.

responsibilities in accordance with the provisions of the Act.

- (f) <u>Being Conducted</u> means a land-disturbing activity has been initiated and not deemed complete by the Approving Authority.
- (g) **BOARD**. The Environmental Review Board as established by the joint resolution of the Lincolnton Mayor, Lincolnton City Council, and the Lincoln County Board of Commissioners, together with any amendments thereto.
- (h) <u>Borrow</u> means fill material that is required for on-site construction that is obtained from other locations.
- (i) Buffer Zone means the strip of land adjacent to a lake or natural watercourse.
- (j) CERTIFICATE OF OCCUPANCY. The document required by the State Building Code certifying that a new building shall not be occupied or a change made in occupancy, nature or use of a building until after all required building and services systems have been inspected for compliance with the technical codes and other applicable laws and ordinances and released by the Lincoln County Department of Development Services.
- (k) Commission means the North Carolina Sedimentation Control Commission.
- (l) <u>Completion of Construction or Development</u> means that no further landdisturbing activity is required on a phase of a project except that which is necessary for establishing a permanent ground cover.
- (m) <u>Department</u> means the North Carolina Department of Environmental Quality.
- (n) <u>Director</u> means the Director of the Division of Energy Mineral and Land Resources of the Department of Environmental Quality.
- (o) <u>Discharge Point or Point of Discharge</u> means that point where runoff leaves a tract of land where a land-disturbing activity has occurred or enters a lake or natural watercourse.
- (p) <u>District</u> means the Lincoln Soil and Water Conservation District created pursuant to Chapter 139, North Carolina General Statutes.
- (q) Energy Dissipator means a structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.
- (r) <u>Erosion</u> means the wearing away of land surfaces by the action of wind, water, gravity, or any combination thereof.

Commented [ZS7]: Make sure formatting matches before final

- (s) <u>Ground Cover</u> means any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.
- (t) <u>High Quality Waters</u> means those classified as such in 15A NCAC 02B .0224, which is herein incorporated by reference including subsequent amendments and additions.
- (u) <u>High Quality Water (HQW) Zones</u> –means, for the Coastal Counties, areas within 575 feet of High Quality Waters; and for the remainder of the state, areas within one mile and draining to HQW's.
- (v) <u>Lake or Natural Watercourse</u> means any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond.
- (w) <u>Land-disturbing Activity</u> means any use of the land by any Person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.
- (x) <u>Local Government</u> means any county, incorporated village, town or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the Act.
- (y) <u>Natural Erosion</u> means the wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.
- (z) <u>Parent</u> means an affiliate that directly, or indirectly through one or more intermediaries, controls another Person.
- (aa) <u>Person</u> means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body, or other legal entity.
- (bb) Person Conducting the Land-Disturbing Activity means any Person who may be held responsible for violation unless expressly provided otherwise by this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act.
- (cc) Person Who Violates or Violator, as used in G.S. 113A-64, means: any landowner or other Person who has financial or operational control over the land-disturbing activity; or who has directly or indirectly allowed the activity, and who has failed to comply with any provision of the Act, the rules of this Chapter or any order or local ordinance adopted pursuant to the Act as it imposes a duty upon that Person.
- (dd) Plan means an erosion and sedimentation control plan.

- (ee) <u>Sediment</u> means solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.
- (ff) <u>Sedimentation</u> means the process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land-disturbing activity or into a lake or natural watercourse.
- (gg) <u>Siltation</u> means sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a landdisturbing activity; and which has been deposited, or is in suspension in water.
- (hh) <u>Storm Drainage Facilities</u> means the system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.
- (ii) <u>Stormwater Runoff</u> means the runoff of water resulting from precipitation in any form.
- (jj) <u>Subsidiary</u> means an affiliate that is directly, or indirectly through one or more intermediaries, controlled by another Person.
- (kk) Ten-Year Storm means a rainfall of an intensity that, based on historical data, is predicted by a method acceptable to the Approving Authority to be equaled or exceeded, on the average, once in ten years, and of a duration that will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.
- (ll) <u>Tract</u> means all contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.
- (mm) Twenty-five Year Storm means a rainfall of an intensity that, based on historical data, is predicted by a method acceptable to the Approving Authority to be equaled or exceeded, on the average, once in 25 years, and of a duration that will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.
- (nn) <u>Uncovered</u> means the removal of ground cover from, on, or above the soil surface.
- (oo) <u>Undertaken</u> means the initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.
- (pp) <u>Velocity</u> means the speed of flow through a cross section perpendicular to the direction of the main channel at the peak flow of the storm of interest but not exceeding bank full flows.

- (qq) Waste means surplus materials resulting from on-site land-disturbing activities and being disposed of at other locations.
- (rr) WATER SUPPLY WATERSHED. Any water supply watershed protection area regulated with various controls within the jurisdictional boundaries of Lincoln County or the City of Lincolnton.
- (ss) WETLANDS. Land having vegetative, soil and hydrologic characteristics to be regulated by Sections 401 and 404 of the Federal Clean Water Act, as defined by the United States Army Corp of Engineers and the State Division of Water Quality.

#### SECTION 4 Scope and Exclusions

- (a) Geographical Scope of Regulated Land-Disturbing Activity. This ordinance shall apply to land-disturbing activity within the territorial jurisdiction of the City of Lincolnton, including the extraterritorial jurisdiction of the City of Lincolnton (as applicable) and Lincoln County as allowed by agreement between the local governments, the extent of annexation or other appropriate legal instrument or law.
- (b) Exclusions from Regulated Land-Disturbing Activity. Notwithstanding the general applicability of this ordinance to all land-disturbing activity, this ordinance shall not apply to the following types of land-disturbing activity:
  - (1) Activities, including the production and activities relating or incidental to the production of crops, grains, fruits, vegetables, ornamental and flowering plants, dairy, livestock, poultry, and all other forms of agriculture undertaken on agricultural land for the production of plants and animals useful to man, including, but not limited to:
    - forage and sod crops, grain and feed crops, tobacco, cotton, and peanuts.
    - (ii) dairy animals and dairy products.
    - (iii) poultry and poultry products.
    - (iv) livestock, including beef cattle, llamas, sheep, swine, horses, ponies, mules, and goats.
    - (v) bees and apiary products.
    - (vi) fur producing animals.
    - (vii) mulch, ornamental plants, and other horticultural products. For purposes of this section, "mulch" means substances composed primarily of plant remains or mixtures of such substances.
  - (2) An Activity undertaken on forestland for the production and harvesting of timber and timber products and conducted in accordance with standards defined by the Forest Practice Guidelines Related to Water Quality (Best Management Practices), as adopted by the North Carolina Department of Agriculture and Consumer Services. If land-disturbing activity undertaken

on forestland for the production and harvesting of timber and timber products is not conducted in accordance with standards defined by the Forest Practice Guidelines Related to Water Quality, the provisions of this ordinance shall apply to such activity and any related land-disturbing activity on the tract.

- (3) An activity for which a permit is required under the Mining Act of 1971, Article 7 of Chapter 74 of the General Statutes.
- (4) A land-disturbing activity over which the State has exclusive regulatory jurisdiction as provided in G.S. 113A-56(a).
- (5) An activity which is essential to protect human life during an emergency.
- (6) Activities undertaken to restore the wetland functions of converted wetlands to provide compensatory mitigation to offset impacts permitted under Section 404 of the Clean Water Act.
- (7) Activities undertaken pursuant to Natural Resources Conservation Service standards to restore the wetlands functions of converted wetlands as defined in Title 7 Code of Federal Regulations § 12.2
- (c) Erosions and sedimentation control measures. All land-disturbing activities, including those that disturb less than one (1) acre, shall provide adequate erosion control measures, structures, or devices in accordance with this chapter.
- (d) Plan Approval Requirement for Land-Disturbing Activity. No Person shall undertake any land-disturbing activity subject to this ordinance without first obtaining a Plan approval from Lincoln County, that meets any of the following criteria:
  - (1) Uncovers one (1) acre or more; and/or
  - (2) Any non-residential land disturbance of 20,000 square feet or greater requiring a building permit; and/or
- (e) Permit Requirement. Any land disturbance 1,000 square feet or greater, not meeting the requirements as set forth in Sections (d)(1) and (d)(2) of this subsection, but requiring a building permit must complete an erosion and sediment control application.
- (f) Protection of Property. Persons conducting land-disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity.
- (g) More Restrictive Rules Shall Apply. Whenever conflicts exist between federal, state, or local laws, ordinance, or rules, the more restrictive provision shall apply.

(h) Plan Approval Exceptions. Notwithstanding the general requirement to obtain a Plan approval prior to undertaking land-disturbing activity, a Plan approval shall not be required for land-disturbing activity that does not meet the requirements as set forth in section (d)(1) or (2) of this sub-section. In determining the area, lands under one or diverse ownership being developed as a unit will be aggregated.

#### SECTION 5 <u>Mandatory Standards for Land-Disturbing Activity</u>

No land-disturbing activity subject to the control of this ordinance shall be undertaken except in accordance with the following mandatory standards:

#### (a) Buffer zone

- (1) <u>Standard Buffer</u>. No land-disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land-disturbing activity.
  - (i) Projects On, Over or Under Water. This subdivision shall not apply to a land-disturbing activity in connection with the construction of facilities to be located on, over, or under a lake or natural watercourse.
  - (ii) <u>Buffer Measurement</u>. Unless otherwise provided, the width of a buffer zone is measured horizontally from the edge of the water to the nearest edge of the disturbed area, with the 25 percent of the strip nearer the land-disturbing activity containing natural or artificial means of confining visible siltation.
- (b) Graded Slopes and Fills. The angle for graded slopes and fills shall be no greater than the angle that can be retained by vegetative cover or other adequate erosion control devices or structures. In any event, slopes left exposed will, within 21 calendar days of completion of any phase of grading, be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints.
- (c) <u>Fill Material.</u> Materials being used as fill shall be consistent with those described in 15A NCAC 13B .0562 unless the site is permitted by the Department's Division of Waste Management to operate as a landfill. Not all materials described in Section .0562 may be suitable to meet geotechnical considerations of the fill activity and should be evaluated accordingly.
- (d) Ground Cover. Whenever land-disturbing activity shall meet the requirements for

- a Plan Approval (as defined herein), the Person conducting the land-disturbing activity shall install erosion and sedimentation control devices and practices that are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover sufficient to restrain erosion after completion of construction or development. Except as provided in Section 8(c)(4), provisions for a permanent ground cover sufficient to restrain erosion must be accomplished within 90 calendar days following completion of construction or development.
- (e) Prior Plan Approval. Whenever land-disturbing activity shall meet the requirements for a Plan Approval (as defined herein), no Person shall initi`ate any land-disturbing activity unless, thirty (30) or more days prior to initiating the activity, a Plan for the activity is filed with and approved by Lincoln County. An erosion and sedimentation control plan may be filed less than 30 days prior to initiation of a land-disturbing activity if the plan is submitted under an approved express permit program. The land-disturbing activity may be initiated and conducted in accordance with the plan once the plan has been approved, and a pre-construction conference has been held with Lincoln County.

Lincoln County shall forward to the Director of the Division of Water Resources a copy of each Plan for a land-disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table of the tract.

(f) The land-disturbing activity shall be conducted in accordance with the approved erosion and sedimentation control plan.

#### SECTION 6 Erosion and Sedimentation Control Plans

- (a) Plan Submission. A Plan shall be prepared for all land-disturbing activities subject to this ordinance whenever the proposed activity meets the requirements set forth in Section 4(d)(1) and (2). The Plan shall be filed with Lincoln County; a copy shall be simultaneously submitted to the Lincoln Soil and Water Conservation District at least 30 days prior to the commencement of the proposed activity.
- (b) Financial Responsibility and Ownership. Plans may be disapproved unless accompanied by an authorized statement of financial responsibility and documentation of property ownership. This statement shall be signed by the Person financially responsible for the land-disturbing activity or his attorney in fact. The statement shall include the mailing and street addresses of the principal place of business of (1) the Person financially responsible, (2) the owner of the land, and (3) any registered agents. If the Person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or non-compliance with the Plan, the Act, this ordinance, or rules or orders adopted or issued pursuant to this ordinance. Except as provided in subsections (c) or (k) of this section, if the applicant is not

Commented [JC8]: You can remove this language if you don't have or plan to have an Express Permit Review program.

the owner of the land to be disturbed, the draft erosion and sedimentation control plan must include the owner's written consent for the applicant to submit a draft erosion and sedimentation control plan and to conduct the anticipated land-disturbing activity.

- (c) If the applicant is not the owner of the land to be disturbed and the anticipated land-disturbing activity involves the construction of utility lines for the provision of water, sewer, gas, telecommunications, or electrical service, the draft erosion and sedimentation control plan may be submitted without the written consent of the owner of the land, so long as the owner of the land has been provided prior notice of the project.
- (d) Two copies of the plan shall be filed with the Lincoln County Department of Soil and Water. A copy of the approved plan shall be maintained on the job site for the duration of the job. A plan approval issued under this chapter shall be prominently displayed until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. A copy of the approved plan shall be kept on file at the job site.
- (e) Efforts should be made to prevent the uncovering of more than 20-acres at any one time. If more than 20 acres are to be uncovered at any one time, Plan shall contain the following additional information:
  - (1) The method of limiting time of exposure and amount of exposed area to achieve the objectives of this chapter;
  - A cut/fill analysis that shows where soil will be moved from one area of the Tract to another as ground elevation is changed;
  - (3) Construction sequence and construction phasing to justify the time and amount of exposure;
  - (4) Techniques to be used to prevent sedimentation associated with larger disturbed areas; and
  - (5) Additional erosion control measures, structures, and devices to prevent sedimentation.
- (f) Environmental Policy Act Document. Any Plan submitted for a land-disturbing activity for which an environmental document is required by the North Carolina Environment Policy Act (G.S. §113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The (city)(town)(county) shall promptly notify the Person submitting the Plan that the 30-day time limit for review of the Plan pursuant to this ordinance shall not begin until a complete environmental document is available for review.
- (g) The land-disturbing activity described in the Plan shall not result in a violation of rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters.

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- (h) The land-disturbing activity described in the plan shall not result in a violation of any local ordinance, law, rule or regulation, including, but not limited to, zoning, tree protection, stream, lake and watershed buffers and floodplain regulations.
- (i) <u>Content</u>. The Plan required by this section shall contain architectural or engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this ordinance. Plan content may vary to meet the needs of specific site requirements. Detailed guidelines for Plan preparation may be obtained from Lincoln County on request.
- (j) Soil and Water Conservation District Comments. The District shall review the Plan and submit any comments and recommendations to Lincoln County within 20 days after the District received the Plan, or within any shorter period of time as may be agreed upon by the District and Lincoln County. Failure of the District to submit its comments and recommendations within 20 days or within any agreed-upon shorter period of time shall not delay final action on the Plan.
- (k) Timeline for Decisions on Plans. Lincoln County will review each complete Plan submitted to them and within 30 days of receipt thereof will notify the Person submitting the Plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications, or disapprove a complete Plan within 30 days of receipt shall be deemed approval. Lincoln County will review each revised Plan submitted to them and within 15 days of receipt thereof will notify the Person submitting the Plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications, or disapprove a revised Plan within 15 days of receipt shall be deemed approval.
- (1) Approval. Lincoln County shall only approve a Plan upon determining that it complies with all applicable State and local regulations for erosion and sedimentation control. Approval assumes the applicant's compliance with the federal and state water quality laws, regulations and rules. Lincoln County shall condition approval of Plans upon the applicant's compliance with federal and state water quality laws, regulations and rules.
- (m) <u>Disapproval for Content</u>. Lincoln County may disapprove a Plan or draft Plan based on its content. A disapproval based upon a Plan's content must specifically state in writing the reasons for disapproval.
- (n) Other Disapprovals. Lincoln County shall disapprove an erosion and sedimentation control plan if implementation of the plan would result in a violation of rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters. Lincoln County may disapprove an erosion and sedimentation control plan or disapprove a transfer of a plan under subsection (k) of this section upon finding that an applicant or a parent, subsidiary, or other affiliate of the applicant:

- (1) Is conducting or has conducted land-disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to this Article and has not complied with the notice within the time specified in the notice.
- (2) Has failed to pay a civil penalty assessed pursuant to this Article or a local ordinance adopted pursuant to this Article by the time the payment is due.
- (3) Has been convicted of a misdemeanor pursuant to G.S. 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to this Article.
- (4) Has failed to substantially comply with State rules or local ordinances and regulations adopted pursuant to this Article.

In the event that an erosion and sedimentation control plan or a transfer of a plan is disapproved by Lincoln County pursuant to subsection (j) of this section, the local government shall so notify the Director of the Division of Energy, Mineral, and Land Resources within 10 days of the disapproval. Lincoln County shall advise the applicant or the proposed transferee and the Director in writing as to the specific reasons that the plan was disapproved. Notwithstanding the provisions of Section 16(a), the applicant may appeal the county's disapproval of the plan directly to the Commission.

For purposes of this subsection, an applicant's record or the proposed transferee's record may be considered for only the two (2) years prior to the application date.

- (o) <u>Transfer of Plans</u>. The county administering an erosion and sedimentation control program may transfer an erosion and sedimentation control plan approved pursuant to this section without the consent of the plan holder to a successor-owner of the property on which the permitted activity is occurring or will occur as provided in this subsection.
  - (1) Lincoln County may transfer a plan if all of the following conditions are met:
    - (i) The successor-owner of the property submits to the local government a written request for the transfer of the plan and an authorized statement of financial responsibility and documentation of property ownership.
    - (ii) Lincoln County finds all of the following:
      - a. The plan holder is one of the following:
        - 1. A natural person who is deceased.
        - 2. A partnership, limited liability corporation, corporation, or any other business association that has been dissolved.
        - A Person who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur.

- 4. A Person who has sold the property on which the permitted activity is occurring or will occur.
- b. The successor-owner holds title to the property on which the permitted activity is occurring or will occur.
- The successor-owner is the sole claimant of the right to engage in the permitted activity.
- d. There will be no substantial change in the permitted activity.
- (2) The Plan holder shall comply with all terms and conditions of the plan until such time as the plan is transferred.
- (3) The successor-owner shall comply with all terms and conditions of the plan once the plan has been transferred.
- (4) Notwithstanding changes to law made after the original issuance of the plan, Lincoln County may not impose new or different terms and conditions in the plan without the prior express consent of the successorowner. Nothing in this subsection shall prevent Lincoln County from requiring a revised plan pursuant to G.S. 113A-54.1(b).
- (p) <u>Notice of Activity Initiation</u>. No Person may initiate a land-disturbing activity before notifying the agency that issued the Plan approval of the date that landdisturbing activity will begin.
- (q) Preconstruction Conference. If a Plan approval is required under this chapter, the person conducting the land-disturbing activity or an agent of that party shall contact the Soil and Water Department of Lincoln County, at least 48 hours before commencement, of the land-disturbing activity. The purpose of the preconstruction conference is to arrange an on-site meeting with the Soil and Water Department to review and discuss the approved Plan and the proposed land-disturbing activity.
- (r) <u>Display of Plan Approval</u>. A Plan approval issued under this Article shall be prominently displayed until all construction is complete, all temporary measures have been removed, all permanent sedimentation and erosion control measures are installed, and the site has been stabilized. A copy of the approved plan shall be kept on file at the job site.
- (s) Required Revisions. After approving a Plan, if Lincoln County, either upon review of such Plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, Lincoln County shall require a revised Plan. Pending the preparation of the revised Plan, work shall cease or shall continue under conditions outlined by the appropriate authority. If following commencement of a land-disturbing activity pursuant to an approved Plan, Lincoln County determines that the Plan is inadequate to meet the requirements of this ordinance, Lincoln County may require any revision of the Plan that is necessary to comply with this ordinance.
- (t) <u>Amendment to a Plan.</u> Applications for amendment of a Plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by Lincoln County,

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the land-disturbing activity shall not proceed except in accordance with the Plan as originally approved.

- (u) Failure to File a Plan. Any Person engaged in land-disturbing activity who fails to file a Plan in accordance with this ordinance, or who conducts a land-disturbing activity except in accordance with provisions of an approved Plan shall be deemed in violation of this ordinance.
- (v) <u>Self-Inspections</u>. The landowner, the financially responsible party, or the landowner's or the financially responsible party's agent shall perform an inspection of the area covered by the plan after each phase of the plan has been completed and after establishment of temporary ground cover in accordance with G.S. 113A-57(2). In addition, weekly and rain-event self-inspections are required by federal regulations, that are implemented through the NPDES Construction General Permit No. NCG 010000. The Person who performs the inspection shall maintain and make available a record of the inspection at the site of the land-disturbing activity. The record shall set out any significant deviation from the approved erosion control plan, identify any measures that may be required to correct the deviation, and document the completion of those measures. The record shall be maintained until permanent ground cover has been established as required by the approved erosion and sedimentation control plan. The inspections required by this subsection shall be in addition to inspections required by G.S. 113A-61.1.

Where inspections are required by Section 6(r) of this Ordinance or G.S. 113A-54.1(e), the following apply:

- (1) The inspection shall be performed during or after each of the following phases of the plan;
  - (i) initial installation of erosion and sediment control measures;
  - (ii) clearing and grubbing of existing ground cover;
  - (iii) completion of any grading that requires ground cover;
  - (iv) completion of all land-disturbing activity, construction, or development, including permanent ground cover establishment and removal of all temporary measures; and
  - (v) transfer of ownership or control of the tract of land where the erosion and sedimentation control plan has been approved and work has begun. The new owner or Person in control shall conduct and document inspections until the project is permanently stabilized as set forth in Sub-Item (iii) of this Item.
- (2) Documentation of self-inspections performed under Item (1) of this Rule shall include:
  - Visual verification of ground stabilization and other erosion control measures and practices as called for in the approved plan;
  - (ii) Verification by measurement of settling basins, temporary construction entrances, energy dissipators, and traps.
  - (iii) The name, address, organization affiliation, telephone number, and signature of the person conducting the inspection and the date of the

inspection shall be included, whether on a copy of the approved erosion and sedimentation control plan or an inspection report. A template for an example of an inspection and monitoring report is provided on the DEMLR website at: https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms. Any relevant licenses and certifications may also be included. Any documentation of inspections that occur on a copy of the approved erosion and sedimentation control plan shall occur on a single copy of the plan and that plan shall be made available on the site.

- (iv) A record of any significant deviation from any erosion or sedimentation control measure from that on the approved plan. For the purpose of this Rule, a "significant deviation" means an omission, alternation, or relocation of an erosion or sedimentation control measure that prevents it from performing as intended. The record shall include measures required to correct the significant deviation, along with documentation of when those measures were taken. Deviations from the approved plan may also be recommended to enhance the intended performance of the sedimentation and erosion control measures.
- (w) Plan Cancellations. Plans for which land-disturbing activity has not commenced within two (2) years from the initial Plan approval are void.

Except as may be required under federal law, rule or regulation, no periodic self-inspections or rain gauge installation is required on individual residential lots where less than one acre is being disturbed on each lot.

#### SECTION 7 <u>Basic Control Objectives</u>

An erosion and sedimentation control Plan may be disapproved if the Plan fails to address the following control objectives:

- (a) <u>Identify Critical Areas</u> On-site areas which are subject to severe erosion, and offsite areas which are especially vulnerable to damage from erosion and/or sedimentation, are to be identified and receive special attention.
- (b) <u>Limit Time of Exposure</u> All land-disturbing activities are to be planned and conducted to limit exposure to the shortest time specified in G.S. 113A-57, the rules of the aforementioned Chapter, or as directed by the Approving Authority.
- (c) <u>Limit Exposed Areas</u> All land-disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time.
- (d) <u>Control Surface Water</u> Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of

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exposure.

- (e) <u>Control Sedimentation</u> All land-disturbing activity is to be planned and conducted to prevent off-site sedimentation damage.
- (f) <u>Manage Stormwater Runoff</u> Plans shall be designed so that any increase in velocity of stormwater runoff resulting from a land-disturbing activity will not result in accelerated erosion of the receiving stormwater conveyance or at the point of discharge. Plans shall include measures to prevent accelerated erosion within the project boundary and at the point of discharge.

#### SECTION 8 Design and Performance Standards

- (a) Except as provided in Section 8(b)(2) and Section 8(c)(1) of this ordinance, erosion and sedimentation control measures, structures, and devices shall be planned, designed, and constructed to provide protection from the calculated maximum peak rate of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the latest edition of the USDA United States Department of Agriculture (USDA), Natural Resources Conservation Service's "National Engineering Field Handbook", or other acceptable calculation procedures.
- (b) <u>HQW Zones</u>. In High Quality Water (HQW) zones the following design standards shall apply:
  - (1) <u>Limit on Uncovered Area</u>. Uncovered areas in HQW zones shall be limited at any time to a maximum total area of twenty acres within the boundaries of the tract. Only the portion of the land-disturbing activity within a HQW zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director upon providing engineering justification with a construction sequence that considers phasing, limiting exposure, weekly submitted self-inspection reports, and a more conservative design than the Twenty-five Year Storm.
  - (2) Maximum Peak Rate of Runoff Protection. Erosion and sedimentation control measures, structures, and devices within HQW zones shall be planned, designed and constructed to provide protection from the runoff of the twenty-five year storm which produces the maximum peak rate of runoff as calculated according to procedures in the latest edition of the United States Department of Agriculture Natural Resources Conservation Service's "National Engineering Field Handbook" or according to procedures adopted by any other agency of this state or the United States or any generally recognized organization or association.
  - (3) <u>Sediment Basin Design</u>. Sediment basins within HQW zones shall be designed and constructed according to the following criteria:
    - (i) use a surface withdrawal mechanism, except when the basin

- drainage area is less than 1.0 acre:
- (ii) have a minimum of 1800 cubic feet of storage area per acre of disturbed area;
- (iii) have a minimum surface area of 325 square feet per cfs of the Twenty-five Year Storm (Q25) peak flow;
- (iv) have a minimum dewatering time of 48 hours;
- (v) incorporate 3 baffles, unless the basin is less than 20 feet in length, in which case 2 baffles shall be sufficient.

Upon a written request of the applicant, the Director may allow alternative design and control measures in lieu of meeting the conditions required in subparagraphs (3)(ii) through (3)(v) of this sub-section if the applicant demonstrates that meeting all of those conditions will result in design or operational hardships and that the alternative measures will provide an equal or more effective level of erosion and sediment control on the site. Alternative measures may include quicker application of ground cover, use of sediment flocculants, and use of enhanced ground cover practices.

- (4) Grade. Newly constructed open channels in HQW zones shall be designed and constructed with side slopes no steeper than two horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other forms of ditch liners proven as being effective in restraining accelerated erosion. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.
- (c) Design and Performance Standards for Land-Disturbing Activities of 20 Acres or Greater. In addition to any other requirements of State, federal, and local law, landdisturbing activity of 20-acres or more within Lincoln County, or the City of Lincolnton, shall meet all of the following additional design standards for sedimentation and erosion control:
  - (1) Sediment basins shall be planned, designed, and constructed to provide protection from the runoff of the 25-year storm that produces the maximum peak rate of runoff as calculated according to procedures set out in the latest edition of the United States Department of Agriculture Natural Resources Conservation Service's "Engineering Field Handbook" found through <a href="mailto:nrcs.usda.gov">nrcs.usda.gov</a> or according to procedures adopted by any other agency of the State or the United States.
  - (2) Construction entrances shall be planned, designed and constructed at a minimum length of one-hundred (100) feet.
  - (3) Sediment Fence (Silt Fencing) used along all watercourses shall planned, designed and constructed as double-row high hazard or super silt fence.

#### SECTION 9 Storm Water Outlet Protection

(a) <u>Intent</u>. Stream banks and channels downstream from any land disturbing activity

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shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity.

- (b) <u>Performance standard</u>. Persons shall conduct land-disturbing activity so that the post construction velocity of the 10-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:
  - (1) the velocity established by the Maximum Permissible Velocities Table set out within this subsection; or
  - (2) the velocity of the ten-year storm runoff in the receiving watercourse prior to development.

If condition (1) or (2) of this Paragraph cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the "prior to development" velocity by 10%.

#### Maximum Permissible Velocities Table

The following is a table for maximum permissible velocity for storm water discharges in feet per second (F.P.S.) and meters per second (M.P.S.):

<u>Material</u>	F.P.S.	M.P.S.
Fine sand (noncolloidal)	2.5	0.8
Sandy loam (noncolloidal)	2.5	0.8
Silt loam (noncolloidal)	3.0	0.9
Ordinary firm loam	3.5	1.1
Fine gravel	5.0	1.5
Stiff clay (very colloidal)	5.0	1.5
Graded, loam to cobbles		
(noncolloidal)	5.0	1.5
Graded, silt to cobbles		
(Colloidal)	5.5	1.7
Alluvial silts (noncolloidal)	3.5	1.1
Alluvial silts (colloidal)	5.0	1.5
Coarse gravel (noncolloidal)	6.0	1.8
Cobbles and shingles	5.5	1.7
Shales and hard pans	6.0	1.8

Source - Adapted from recommendations by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply allowable velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

- (c) <u>Acceptable Management Measures</u> Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. Lincoln County recognizes that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives, while not exhaustive, are to:
  - Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious;
  - (2) Avoid increases in storm water discharge velocities by using vegetated or roughened swales and waterways in place of closed drains and high velocity paved sections:
  - (3) Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge;
  - (4) Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining; and
  - (5) Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.
- (d) <u>Exceptions</u> This rule shall not apply where it can be demonstrated to Lincoln County that storm water discharge velocities will not create an erosion problem in the receiving watercourse.

#### SECTION 10 Borrow and Waste Areas

If the same Person conducts the land-disturbing activity and any related borrow or waste activity, the related borrow or waste activity shall constitute part of the land-disturbing activity, unless the borrow or waste activity is regulated under the Mining Act of 1971, G.S. 74, Article 7, or is a landfill regulated by the Division of Waste Management. If the land-disturbing activity and any related borrow or waste activity are not conducted by the same Person, they shall be considered by the Approving Authority as separate land-disturbing activities.

#### SECTION 11 Access and Haul Roads

Temporary access and haul roads, other than public roads, constructed or used in

connection with any land-disturbing activity shall be considered a part of such activity.

#### SECTION 12 Operations in Lakes or Natural Watercourses

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall minimize the extent and duration of disruption of the stream channel. Where relocation of a stream forms an essential part of the proposed activity, the relocation shall minimize changes in the stream flow characteristics.

#### SECTION 13 Responsibility for Maintenance

During the development of a site, the Person conducting the land-disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this Ordinance, the Act, or any order adopted pursuant to this ordinance or the Act. After site development, the landowner or Person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

#### SECTION 14 Additional Measures

Whenever Lincoln County determines that accelerated erosion and sedimentation continues despite the installation of protective practices, they shall direct the Person conducting the land-disturbing activity to take additional protective action necessary to achieve compliance with the conditions specified in the Act or its rules.

#### SECTION 15 Fees

Lincoln County has established a fee schedule for the review and approval of Plans. The Fees required to be paid under this Chapter shall be determined by the thencurrent Lincoln County Fee Schedule. All fees shall be due and payable at the submittal of a Plan.

#### ADDITIONAL SECTION. Environmental Review Board

- (A) *Creation*. There is hereby created in the county the Environmental Review Board that is charged with the duties as provided for in this chapter. The Environmental Review Board shall consist of the following members:
  - (1) One person appointed by a participating municipality;

- (2) President of the County Home Builders Association, or his or her designee;
- (3) Chairperson of the County Soil and Water Conservation District, or his or her designee;
- (4) Chairperson of the County Natural Resource Committee, or his or her designee;
- (5) Two persons appointed by the Board of Commissioners, with one being a professional environmental biologist; and
- (6) A professional engineer registered under the provision of G.S. Chapter 89C, appointed by the Board of Commissioners.
- (B) Appointments. The Environmental Review Board members appointed by the Board of Commissioners shall serve a term of three years and until their successors are appointed and duly qualified. A member may be reappointed for up to two consecutive three-year terms.
- (C) Fees. The Environmental Review Board shall make fee recommendations to the Board of Commissioners.
- (D) Other duties and responsibilities. The Environmental Review Board shall hear and decide appeals from any decision or determination made by the Erosion Control Specialist in the enforcement of this chapter and other duties as directed by the Board of Commissioners.

#### SECTION 16 Plan Appeals

- (a) Except as provided in Section 16(b) of this ordinance, the appeal of a disapproval or approval with modifications of a Plan shall governed by the following provisions:
  - (1) The disapproval or modification of any proposed Plan by the Lincoln County Soil and Water Department, shall entitle the Person submitting the Plan to a public hearing if such Person submits written demand for a hearing within 15 days after receipt of written notice of disapproval or modifications.
  - (2) A hearing held pursuant to this section shall be conducted by the Lincoln County Environmental Review Board within 30 days after the date of the appeal or request for a hearing.
  - (3) The Lincoln County Environmental Review Board will render its final decision on any Plan within 10 days of the hearing.
  - (4) If the (city)(town)(county) upholds the disapproval or modification of a proposed Plan following the hearing, the Person submitting the Plan shall then be entitled to appeal the (city)(town)(county)'s decision to the Commission as provided in G.S. 113A-61(c) and 15A NCAC 4B .0118(d)

(b) In the event that a Plan is disapproved pursuant to Section 6(n) of this ordinance, the applicant may appeal Lincoln County's disapproval of the Plan directly to the Commission.

#### SECTION 17 <u>Inspections and Investigations</u>

- (a) <u>Inspection</u>. Agents, officials, or other qualified persons authorized by Lincoln County, will periodically inspect land-disturbing activities to ensure compliance with the Act, this ordinance, or rules or orders adopted or issued pursuant to this ordinance, and to determine whether the measures required in the Plan are effective in controlling erosion and sedimentation resulting from land-disturbing activity. Notice of the right to inspect shall be included in the certificate of approval of each Plan.
- (b) Willful Resistance, Delay or Obstruction. No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of Lincoln County, while that person is inspecting or attempting to inspect a land-disturbing activity under this section.
- Notice of Violation. If Lincoln County determines that a Person engaged in land-(c) disturbing activity has failed to comply with the Act, this ordinance, or rules, or orders adopted or issued pursuant to this ordinance, a notice of violation shall be served upon that Person. The notice may be served by any means authorized under GS 1A-1, Rule 4. The notice shall specify a date by which the Person must comply with the Act, or this ordinance, or rules, or orders adopted pursuant to this ordinance, and inform the Person of the actions that need to be taken to comply with the Act, this ordinance, or rules or orders adopted pursuant to this ordinance. Any Person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this ordinance. If the Person engaged in the land-disturbing activity has not received a previous notice of violation under this section, the (city)(town)(county) shall offer assistance in developing corrective measures. Assistance may be provided by referral to a technical assistance program on behalf of the Approving Authority, referral to a cooperative extension program, or by the provision of written materials such as Department guidance documents. The notice of violation may be served in the manner prescribed for service of process by G.S. 1A-1, Rule 4, and shall include information on how to obtain assistance in developing corrective measures.
- (d) <u>Investigation</u>. Lincoln County shall have the power to conduct such investigation as it may reasonably deem necessary to carry out its duties as prescribed in this ordinance, and who presents appropriate credentials for this purpose to enter at reasonable times, any property, public or private, for the purpose of investigating and inspecting the sites of any land-disturbing activity.

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- (e) <u>Statements and Reports</u>. The (city)(town)(county), shall also have the power to require written statements, or filing of reports under oath, with respect to pertinent questions relating to land-disturbing activity.
- (f) Violation. Whenever a violation of this chapter occurs or is alleged to have occurred, any person may file a written complaint. Any written complaint stating fully the cause and basis there of shall be filed with the Soil and Water Department who shall properly record the complaint, investigate and take action as provided by this chapter.
- (g) Certificate of Occupancy. With regard to the development of any Tract that is subject to this chapter, the Lincoln County Department of Development Services shall not issue a certificate of occupancy where any of the following conditions exist:
  - (1) There is a violation of this chapter with respect to the Tract;
  - (2) If there remains due and payable to the county civil penalties that have been levied against the person conducting the land-disturbing activity for violation(s) of this chapter. If a penalty is under appeal, the Erosion Control Specialist may require the amount of the fine, and any other amount that the person would be required to pay under this chapter if the person loses the appeal, be placed in a refundable account or surety prior to issuing the certificate of occupancy;
  - (3) The requirements of the plan have not been completed and the building for which a certificate of occupancy is requested is the only building then under construction on the Tract;
  - (4) On the Tract, which includes multiple buildings on a single parcel, the requirements of the plan have not been completed and the building for which a certificate of occupancy is requested is the last building then under construction on the Tract; and/or
  - (5) On a Tract, which includes multiple parcels created pursuant to the applicable subdivision regulations, the requirements of the plan have not been completed with respect to the parcel for which the certificate of occupancy is requested.

Notwithstanding the provisions of this subsection, the Building and Land Development Department may issue a temporary certificate of occupancy where divisions (3), (4), or (5) above apply and where the person conducting the land-disturbing activity is making substantial progress towards completing the requirements of the plan.

The county may issue a stop-work order and /or suspension of building permits if a land-disturbing activity is being conducted in violation of this chapter or of any rule adopted or order issued pursuant to this chapter.

#### SECTION 18 Penalties

#### (a) Civil Penalties

- (1) Civil Penalty for a Violation. Any Person who violates any of the provisions of this ordinance, or rule or order adopted or issued pursuant to this ordinance, or who initiates or continues a land-disturbing activity for which a Plan is required except in accordance with the terms, conditions, and provisions of an approved Plan, is subject to a civil penalty. The maximum civil penalty amount that Lincoln County may assess per violation is five thousand dollars (\$5,000.00). A civil penalty may be assessed from the date of the violation. Each day of a continuing violation shall constitute a separate violation. When the Person has not been assessed any civil penalty under this subsection for any previous violation, and that Person abated continuing environmental damage resulting from the violation within 180 days from the date of the notice of violation, the maximum cumulative total civil penalty assessed under this subsection for all violations associated with the land-disturbing activity for which the erosion and sedimentation control plan is required is twenty-five thousand dollars (\$25,000).
- (2) Repeat Violations. Repeat violators may be charged by a multiple of the base penalty determined herein. The penalty for a repeat violator may be doubled for each previous time that the repeat violator has been notified of a violation of this chapter, or any other soil erosion and sedimentation control ordinance within the State of North Carolina, within two (2) years prior to the current violation. However, in no case may the penalty exceed the maximum allowed by this chapter.
- (3) <u>Civil Penalty Assessment Factors</u>. The Lincoln County Soil and Water Department shall determine the amount of the civil penalty based upon the following factors:
  - (i) the degree and extent of harm caused by the violation,
  - (ii) the cost of rectifying the damage,
  - (iii) the amount of money the violator saved by noncompliance,
  - (iv) whether the violation was committed willfully, and
  - the prior record of the violator in complying of failing to comply with this ordinance.
- (4) Notice of Civil Penalty Assessment. The Lincoln County Soil and Water Department shall provide notice of the civil penalty amount and basis for assessment to the Person assessed. The notice of assessment shall be served by any means authorized under G.S. 1A-1, Rule 4. A notice of assessment by Lincoln County shall direct the violator to either pay the assessment, contest the assessment within 30 days by filing a petition for hearing with Lincoln County (based upon the procedures herein), or file a request with

Lincoln County Soil and Water Department for remission of the assessment within 30 days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the North Carolina General Statutes and a stipulation of the facts on which the assessment was based.

- (5) <u>Final Decision</u>: The final decision on contested assessments shall be made by the Lincoln County Environmental Review Board in accordance with this chapter.
- (6) Appeal of Final Decision. Appeal of the final decision of Lincoln Environmental Review Board shall be to the Lincoln County Superior Court. Such appeals must be made within 30 days of the final decision of the Lincoln County Environmental Review Board.
- (7) Remission of Civil Penalties. A request for remission of a civil penalty imposed under G.S. 113A-64 may be filed with the Lincoln County Environmental Review Board within 30 days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the General Statutes and a stipulation of the facts on which the assessment was based. The following factors shall be considered in determining whether a civil penalty remission request will be approved:
  - (i) Whether one or more of the civil penalty assessment factors in G.S. 113A-64(a)(3) were wrongly applied to the detriment of the petitioner.
  - (ii) Whether the petitioner promptly abated continuing environmental damage resulting from the violation.
  - (iii) Whether the violation was inadvertent or a result of an accident.
  - (iv) Whether the petitioner had been assessed civil penalties for any previous violations.
  - (v) Whether payment of the civil penalty will prevent payment for necessary remedial actions or would otherwise create a significant financial hardship.
  - (vi) The assessed property tax valuation of the petitioner's property upon which the violation occurred, excluding the value of any structures located on the property.
- (8) Collection. If payment is not received within 30 days after it is due, Lincoln County may institute a civil action to recover the amount of the assessment. The civil action may be brought in the Superior Court of the county where the violation occurred, or the violator's residence or principal place of business is located. Such civil actions must be filed within three (3) years of the date the assessment was due. An assessment that is not contested and a remission that is not requested is due when the violator is served with a notice of assessment. An assessment that is contested or a remission that is

requested is due at the conclusion of the administrative and judicial review of the assessment.

- (9) Credit of Civil Penalties. The clear proceeds of civil penalties collected by Lincoln County under this subsection shall be remitted to the Civil Penalty and Forfeiture Fund in accordance with G.S. 115C-457.2. Penalties collected by Lincoln County may be diminished only by the actual costs of collection. The collection cost percentage to be used shall be established and approved by the North Carolina Office of State Budget and Management on an annual basis, based upon the computation of actual collection costs by Lincoln County for the prior fiscal year.
- (b) <u>Criminal Penalties</u>. Any Person who knowingly or willfully violates any provision of this ordinance, or rule or order adopted or issued by the Commission or a local government, or who knowingly or willfully initiates or continues a land-disturbing activity for which a Plan is required except in accordance with the terms, conditions, and provisions of an approved Plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed \$5,000 as provided in G.S. 113A-64.

#### SECTION 19 <u>Injunctive Relief</u>

- (a) <u>Violation of Local Program</u>. Whenever the County has reasonable cause to believe that any Person is violating or threatening to violate any ordinance, rule, regulation or order adopted or issued by Lincoln County, or any term, condition, or provision of an approved Plan, it may, either before or after the institution of any other action or proceeding authorized by this ordinance, institute a civil action in the name of Lincoln County, for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the superior court of Lincoln County by the County Attorney.
- (b) Abatement of Violation. Upon determination by a court that an alleged violation is occurring or is threatened, the court shall enter any order or judgment that is necessary to abate the violation, to ensure that restoration is performed, or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to the proceedings from any civil or criminal penalty prescribed for violations of this chapter.

#### SECTION 20 Restoration After Non-Compliance

Lincoln County may require a Person who engaged in a land-disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

## SECTION 21 Severability

If any section or sections of this ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

#### SECTION 22 <u>Effective Date</u>

This ordinance becomes effective on \_\_\_\_\_.



# BOARD OF COMMISSIONERS CARROL MITCHEM, CHAIRMAN BUD CESENA, VICE CHAIRMAN ANITA MCCALL CATHY DAVIS JAMIE LINEBERGER

COUNTY MANAGER DAVIN W. MADDEN

COUNTY ATTORNEY
MEGAN H. GILBERT

**CLERK TO THE BOARD**MELISSA ELMORE

# AN ORDINANCE AMENDING CHAPTER 152 OF THE LINCOLN COUNTY CODE OF ORDINANCES

WHEREAS, N.C. General Statute §153A-49, a county may adopt and issue a code of its ordinances; and

WHEREAS, Lincoln County has established and adopted the Lincoln County Soil Erosion and Sedimentation Control Ordinance which is codified as Chapter 152 of the Lincoln County Code of Ordinances; and

WHEREAS, the purpose of the Lincoln County Soil Erosion and Sedimentation Control Ordinance has been adopted to (1) regulate certain land-disturbing activity to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and (2) establish procedures through which these purposes can be fulfilled; and

WHEREAS, pursuant to N.C.G.S. §113A-60, a local government may adopt ordinances and regulations necessary to establish and enforce erosion and sedimentation control programs; and

WHEREAS, pursuant to N.C.G.S. §113A-60(a), the ordinance shall at least meet but may exceed the minimum requirements of Article 4 of Chapter 113A of the North Carolina General Statutes; and

WHEREAS, the current ordinance language needs to be updated to correspond with all updated State laws and regulations; and

WHEREAS, the amendments to the Lincoln County Code of Ordinances set forth in this ordinance are policy neutral.

NOW, THEREFORE, BE IT ORDAINED that:

#### SECTION 1. CHAPTER 152 IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

#### § 152.01. TITLE.

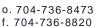
This chapter may be cited as the "Lincoln County Soil Erosion and Sedimentation Control Ordinance."

#### § 152.02. PURPOSE.

This chapter is adopted for the purposes of:

(A) Regulating certain land-disturbing activity to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and







**(B)** Establishing procedures through which these purposes can be fulfilled.

#### **§ 152.03. DEFINITIONS.**

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

**ACCELERATED EROSION**. Any increase over the rate of natural erosion as a result of land-disturbing activity.

**ACT**. The North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it.

ADEQUATE EROSION CONTROL MEASURE, STRUCTURE, OR DEVICE. One which controls the soil material within the land area under responsible control of the Person conducting the land-disturbing activity.

**AFFILIATE**. A Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control of another Person.

APPROVING AUTHORITY. The Division or other State or a local government agency that has been delegated erosion and sedimentation plan review responsibilities in accordance with the provisions of the Act.

**BEING CONDUCTED.** A land-disturbing activity has been initiated and not deemed complete by the Approving Authority.

**BOARD**. The Environmental Review Board as established by the joint resolution of the Lincolnton Mayor, Lincolnton City Council, and the Lincoln County Board of Commissioners, together with any amendments thereto.

**BORROW.** Fill material that is required for on-site construction that is obtained from other locations.

BUFFER ZONE. The strip of land adjacent to a lake or natural watercourse.

**CERTIFICATE OF OCCUPANCY**. The document required by the State Building Code certifying that a new building shall not be occupied or a change made in occupancy, nature or use of a building until after all required building and services systems have been inspected for compliance with the technical codes and other applicable laws and ordinances and released by the Lincoln County Department of Development Services.

**COMMISSION.** The North Carolina Sedimentation Control Commission.

**COMPLETION OF CONSTRUCTION OR DEVELOPMENT.** No further land-disturbing activity is required on a phase of a project except that which is necessary for establishing a permanent ground cover.

**DEPARTMENT**. The North Carolina Department of Environmental Quality.

**DIRECTOR.** The Director of the Division of Energy Mineral and Land Resources of the Department of Environmental Quality.

**DISCHARGE POINT OR POINT OF DISCHARGE.** The point where runoff leaves a tract of land where a land-disturbing activity has occurred or enters a lake or natural watercourse.

**DISTRICT.** The Lincoln Soil and Water Conservation District created pursuant to Chapter 139, North Carolina General Statutes.

**ENERGY DISSIPATOR.** A structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

**EROSION.** The wearing away of land surfaces by the action of wind, water, gravity, or any combination thereof.

**GROUND COVER.** Any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.

HIGH QUALITY WATERS. Those classified as such in 15A NCAC 02B .0224, which is herein incorporated by reference including subsequent amendments and additions.

HIGH QUALITY WATER (HQW) ZONES. Areas within one mile and draining to HQWs.

LAKE OR NATURAL WATERCOURSE. Any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond.

LAND-DISTURBING ACTIVITY. Any use of the land by any Person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

**LOCAL GOVERNMENT**. Any county, incorporated village, town or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the Act.

**NATURAL EROSION**. The wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.

**PARENT.** An affiliate that directly, or indirectly through one or more intermediaries, controls another Person.

**PERSON.** Any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body, or other legal entity.

**PERSON CONDUCTING THE LAND-DISTURBING ACTIVITY.** Any Person who may be held responsible for violation unless expressly provided otherwise by this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act.

**PERSON WHO VIOLATES OR VIOLATOR.** as used in G.S. 113A-64, means: any landowner or other Person who has financial or operational control over the land-disturbing activity; or who has directly or indirectly allowed the activity, and who has failed to comply with any provision of the Act, the rules of this Chapter or any order or local ordinance adopted pursuant to the Act as it imposes a duty upon that Person.

PLAN. An erosion and sedimentation control plan.

**SEDIMENT.** Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.

SEDIMENTATION. The process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land-disturbing activity or into a lake or natural watercourse.

SILTATION. Sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land-disturbing activity; and which has been deposited, or is in suspension in water.

STORM DRAINAGE FACILITIES. The system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.

STORMWATER RUNOFF. The runoff of water resulting from precipitation in any form.

**SUBSIDIARY.** An affiliate that is directly, or indirectly through one or more intermediaries, controlled by another Person.

**TEN-YEAR STORM.** A rainfall of an intensity that, based on historical data, is predicted by a method acceptable to the Approving Authority to be equaled or exceeded, on the average, once in ten years, and of a duration that will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

**TRACT.** All contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

**TWENTY-FIVE YEAR STORM.** A rainfall of an intensity that, based on historical data, is predicted by a method acceptable to the Approving Authority to be equaled or exceeded, on the average, once in 25 years, and of a duration that will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

UNCOVERED. The removal of ground cover from, on, or above the soil surface.

**UNDERTAKEN.** The initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

**VELOCITY.** The speed of flow through a cross section perpendicular to the direction of the main channel at the peak flow of the storm of interest but not exceeding bank full flows.

**WASTE.** Surplus materials resulting from on-site land-disturbing activities and being disposed of at other locations.

WATER SUPPLY WATERSHED. Any water supply watershed protection area regulated with various controls within the jurisdictional boundaries of Lincoln County or the City of Lincolnton.

**WETLANDS**. Land having vegetative, soil and hydrologic characteristics to be regulated by Sections 401 and 404 of the Federal Clean Water Act, as defined by the United States Army Corp of Engineers and the State Division of Water Quality.

#### § 152.04. SCOPE AND EXCLUSIONS.

- (A) Geographical Scope of Regulated Land-Disturbing Activity. This chapter shall apply to land-disturbing activity within the territorial jurisdiction of the City of Lincolnton, including the extraterritorial jurisdiction of the City of Lincolnton (as applicable) and Lincoln County as allowed by agreement between the local governments, the extent of annexation or other appropriate legal instrument or law.
- **(B)** Exclusions from Regulated Land-Disturbing Activity. Notwithstanding the general applicability of this ordinance to all land-disturbing activity, this ordinance shall not apply to the following types of land-disturbing activity:
  - (1) Activities, including the production and activities relating or incidental to the production of crops, grains, fruits, vegetables, ornamental and flowering plants, dairy, livestock, poultry, and all other forms of agriculture undertaken on agricultural land for the production of plants and animals useful to man, including, but not limited to:
    - (a) forage and sod crops, grain and feed crops, tobacco, cotton, and peanuts.
    - **(b)** dairy animals and dairy products.
    - (c) poultry and poultry products.
    - (d) livestock, including beef cattle, llamas, sheep, swine, horses, ponies, mules, and goats.
      - (e) bees and apiary products.
      - (f) fur producing animals.

(g) mulch, ornamental plants, and other horticultural products.

For purposes of this section, "mulch" means substances composed primarily of plant remains or mixtures of such substances.

- (2) An Activity undertaken on forestland for the production and harvesting of timber and timber products and conducted in accordance with standards defined by the Forest Practice Guidelines Related to Water Quality (Best Management Practices), as adopted by the North Carolina Department of Agriculture and Consumer Services. If land-disturbing activity undertaken on forestland for the production and harvesting of timber and timber products is not conducted in accordance with standards defined by the Forest Practice Guidelines Related to Water Quality, the provisions of this ordinance shall apply to such activity and any related land-disturbing activity on the tract.
- (3) An activity for which a permit is required under the Mining Act of 1971, Article 7 of Chapter 74 of the General Statutes.
- (4) A land-disturbing activity over which the State has exclusive regulatory jurisdiction as provided in G.S. 113A-56(a).
  - (5) An activity which is essential to protect human life during an emergency.
- (6) Activities undertaken to restore the wetland functions of converted wetlands to provide compensatory mitigation to offset impacts permitted under Section 404 of the Clean Water Act.
- (7) Activities undertaken pursuant to Natural Resources Conservation Service standards to restore the wetlands functions of converted wetlands as defined in Title 7 Code of Federal Regulations § 12.2
- (C) Erosions and sedimentation control measures. All land-disturbing activities, including those that disturb less than one (1) acre, shall provide adequate erosion control measures, structures, or devices in accordance with this chapter.
- **(D)** Plan Approval Requirement for Land-Disturbing Activity. No Person shall undertake any land-disturbing activity subject to this ordinance without first obtaining a Plan approval from Lincoln County, that meets any of the following criteria:
  - (1) Uncovers one (1) acre or more; and/or
  - (2) Any non-residential land disturbance of 20,000 square feet or greater requiring a building permit.
- (E) **Permit Requirement**. Any land disturbance 1,000 square feet or greater, not meeting the requirements as set forth in Sections (D)(1) and (D)(2) of this subsection, but requiring a building permit must complete an erosion and sediment control application.

- **(F)** *Protection of Property*. Persons conducting land-disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity.
- (G) More Restrictive Rules Shall Apply. Whenever conflicts exist between federal, state, or local laws, ordinance, or rules, the more restrictive provision shall apply.
- (H) Plan Approval Exceptions. Notwithstanding the general requirement to obtain a Plan approval prior to undertaking land-disturbing activity, a Plan approval shall not be required for land-disturbing activity that does not meet the requirements as set forth in Sections (D)(1) or (D)(2) of this subsection. In determining the area, lands under one or diverse ownership being developed as a unit will be aggregated.

#### § 152.05. MANDATORY STANDARDS FOR LAND-DISTURBING ACTIVITY.

No land-disturbing activity subject to the control of this ordinance shall be undertaken except in accordance with the following mandatory standards:

#### (A) Buffer Zone

- (1) <u>Standard Buffer</u>. No land-disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land-disturbing activity.
  - (A) Projects On, Over or Under Water. This subdivision shall not apply to a land-disturbing activity in connection with the construction of facilities to be located on, over, or under a lake or natural watercourse.
  - (B) <u>Buffer Measurement</u>. Unless otherwise provided, the width of a buffer zone is measured horizontally from the edge of the water to the nearest edge of the disturbed area, with the 25 percent of the strip nearer the land-disturbing activity containing natural or artificial means of confining visible siltation.
- **(B)** Graded Slopes and Fills. The angle for graded slopes and fills shall be no greater than the angle that can be retained by vegetative cover or other adequate erosion control devices or structures. In any event, slopes left exposed will, within 21 calendar days of completion of any phase of grading, be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints.
- (C) Fill Material. Materials being used as fill shall be consistent with those described in 15A NCAC 13B .0562 unless the site is permitted by the Department's Division of Waste Management to operate as a landfill. Not all materials described in Section .0562 may be suitable to meet geotechnical considerations of the fill activity and should be evaluated accordingly.

- **(D)** *Ground Cover*. Whenever land-disturbing activity shall meet the requirements for a Plan Approval (as defined herein), the Person conducting the land-disturbing activity shall install erosion and sedimentation control devices and practices that are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover sufficient to restrain erosion after completion of construction or development. Except as provided in Section 8(c)(4), provisions for a permanent ground cover sufficient to restrain erosion must be accomplished within 90 calendar days following completion of construction or development.
- (E) Prior Plan Approval. Whenever land-disturbing activity shall meet the requirements for a Plan Approval (as defined herein), no Person shall initiate any land-disturbing activity unless, thirty (30) or more days prior to initiating the activity, a Plan for the activity is filed with and approved by Lincoln County. An erosion and sedimentation control plan may be filed less than 30 days prior to initiation of a land-disturbing activity if the plan is submitted under an approved express permit program. The land-disturbing activity may be initiated and conducted in accordance with the plan once the plan has been approved, and a pre-construction conference has been held with Lincoln County.

Lincoln County shall forward to the Director of the Division of Water Resources a copy of each Plan for a land-disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table of the tract.

(F) The land-disturbing activity shall be conducted in accordance with the approved erosion and sedimentation control plan.

## § 152.06. EROSION AND SEDIMENTATION CONTROL PLANS.

- (A) Plan Submission. A Plan shall be prepared for all land-disturbing activities subject to this ordinance whenever the proposed activity meets the requirements set forth in § 152.04(D)(1) or (2). The Plan shall be filed with Lincoln County, and a copy shall be simultaneously submitted to the Lincoln Soil and Water Conservation District at least 30 days prior to the commencement of the proposed activity.
- (B) Financial Responsibility and Ownership. Plans may be disapproved unless accompanied by an authorized statement of financial responsibility and documentation of property ownership. This statement shall be signed by the Person financially responsible for the land-disturbing activity or his attorney in fact. The statement shall include the mailing and street addresses of the principal place of business of (1) the Person financially responsible, (2) the owner of the land, and (3) any registered agents. If the Person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the Plan, the Act, this ordinance, or rules or orders adopted or issued pursuant to this ordinance. Except as provided in subsections (c) or (k) of this section, if the applicant is not the owner of the land to be disturbed, the draft erosion and sedimentation control plan must include the owner's written consent for the applicant to submit a draft erosion and sedimentation control plan and to conduct the anticipated land-disturbing activity.
- (C) If the applicant is not the owner of the land to be disturbed and the anticipated landdisturbing activity involves the construction of utility lines for the provision of water, sewer, gas, telecommunications, or electrical service, the draft erosion and sedimentation control plan may be

submitted without the written consent of the owner of the land, so long as the owner of the land has been provided prior notice of the project.

- (**D**) Two copies of the plan shall be filed with the Lincoln County Department of Soil and Water. A copy of the approved plan shall be maintained on the job site for the duration of the job. A plan approval issued under this chapter shall be prominently displayed until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. A copy of the approved plan shall be kept on file at the job site.
- (E) Efforts should be made to prevent the uncovering of more than 20-acres at any one time. If more than 20 acres are to be uncovered at any one time, Plan shall contain the following additional information:
  - (1) The method of limiting time of exposure and amount of exposed area to achieve the objectives of this chapter;
  - (2) A cut/fill analysis that shows where soil will be moved from one area of the Tract to another as ground elevation is changed;
  - (3) Construction sequence and construction phasing to justify the time and amount of exposure;
  - (4) Techniques to be used to prevent sedimentation associated with larger disturbed areas; and
  - (5) Additional erosion control measures, structures, and devices to prevent sedimentation.
- (F) Environmental Policy Act Document. Any Plan submitted for a land-disturbing activity for which an environmental document is required by the North Carolina Environment Policy Act (G.S. §113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The county shall promptly notify the Person submitting the Plan that the 30-day time limit for review of the Plan pursuant to this ordinance shall not begin until a complete environmental document is available for review.
- (G) The land-disturbing activity described in the Plan shall not result in a violation of rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters.
- **(H)** The land-disturbing activity described in the plan shall not result in a violation of any local ordinance, law, rule or regulation, including, but not limited to, zoning, tree protection, stream, lake and watershed buffers and floodplain regulations.
- (I) Content. The Plan required by this section shall contain architectural or engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this ordinance. Plan content may vary to meet the needs of specific site requirements. Detailed guidelines for Plan preparation may be obtained from Lincoln County on request.
- (J) Soil and Water Conservation District Comments. The District shall review the Plan and submit any comments and recommendations to Lincoln County within 20 days after the District

received the Plan, or within any shorter period of time as may be agreed upon by the District and Lincoln County. Failure of the District to submit its comments and recommendations within 20 days or within any agreed-upon shorter period of time shall not delay final action on the Plan.

- (K) Timeline for Decisions on Plans. Lincoln County will review each complete Plan submitted to them and within 30 days of receipt thereof will notify the Person submitting the Plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications, or disapprove a complete Plan within 30 days of receipt shall be deemed approval. Lincoln County will review each revised Plan submitted to them and within 15 days of receipt thereof will notify the Person submitting the Plan that it has been approved, approved with modifications, or disapproved. Failure to approve, approve with modifications, or disapprove a revised Plan within 15 days of receipt shall be deemed approval.
- (L) Approval. Lincoln County shall only approve a Plan upon determining that it complies with all applicable State and local regulations for erosion and sedimentation control. Approval assumes the applicant's compliance with the federal and state water quality laws, regulations and rules. Lincoln County shall condition approval of Plans upon the applicant's compliance with federal and state water quality laws, regulations and rules.
- (M) Disapproval for Content. Lincoln County may disapprove a Plan or draft Plan based on its content. A disapproval based upon a Plan's content must specifically state in writing the reasons for disapproval.
- (N) Other Disapprovals. Lincoln County shall disapprove an erosion and sedimentation control plan if implementation of the plan would result in a violation of rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters. Lincoln County may disapprove an erosion and sedimentation control plan or disapprove a transfer of a plan under subsection (K) of this section upon finding that an applicant or a parent, subsidiary, or other affiliate of the applicant:
  - (1) Is conducting or has conducted land-disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to this Article and has not complied with the notice within the time specified in the notice.
  - (2) Has failed to pay a civil penalty assessed pursuant to this Article or a local ordinance adopted pursuant to this Article by the time the payment is due.
  - (3) Has been convicted of a misdemeanor pursuant to G.S. 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to this Article.
  - (4) Has failed to substantially comply with State rules or local ordinances and regulations adopted pursuant to this Article.

In the event that an erosion and sedimentation control plan or a transfer of a plan is disapproved by Lincoln County pursuant to subsection (J) of this section, the local government shall so notify the Director of the Division of Energy, Mineral, and Land Resources within 10 days of the disapproval. Lincoln County shall advise the applicant or the proposed transferee and the

Director in writing as to the specific reasons that the plan was disapproved. Notwithstanding the provisions of §152.17(A) of this chapter, the applicant may appeal the county's disapproval of the plan directly to the Commission.

For purposes of this subsection, an applicant's record or the proposed transferee's record may be considered for only the two (2) years prior to the application date.

- **(O)** Transfer of Plans. The county administering an erosion and sedimentation control program may transfer an erosion and sedimentation control plan approved pursuant to this section without the consent of the plan holder to a successor-owner of the property on which the permitted activity is occurring or will occur as provided in this subsection.
  - (1) Lincoln County may transfer a plan if all of the following conditions are met:
    - (a) The successor-owner of the property submits to the local government a written request for the transfer of the plan and an authorized statement of financial responsibility and documentation of property ownership.
      - (b) Lincoln County finds all of the following:
        - i. The plan holder is one of the following:
          - 1. A natural person who is deceased.
          - 2. A partnership, limited liability corporation, corporation, or any other business association that has been dissolved.
          - 3. A Person who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur.
          - 4. A Person who has sold the property on which the permitted activity is occurring or will occur.
        - ii. The successor-owner holds title to the property on which the permitted activity is occurring or will occur.
        - iii. The successor-owner is the sole claimant of the right to engage in the permitted activity.
        - iv. There will be no substantial change in the permitted activity.
  - (2) The Plan holder shall comply with all terms and conditions of the plan until such time as the plan is transferred.
  - (3) The successor-owner shall comply with all terms and conditions of the plan once the plan has been transferred.
  - (4) Notwithstanding changes to law made after the original issuance of the plan, Lincoln County may not impose new or different terms and conditions in the plan without the prior express consent of the successor-owner. Nothing in this subsection shall prevent Lincoln County from requiring a revised plan pursuant to G.S. 113A-54.1(b).
- **(P)** Notice of Activity Initiation. No Person may initiate a land-disturbing activity before notifying the agency that issued the Plan approval of the date that land-disturbing activity will begin.

- **(Q) Preconstruction Conference.** If a Plan approval is required under this chapter, the person conducting the land-disturbing activity or an agent of that party shall contact the Soil and Water Department of Lincoln County, at least 48 hours before commencement, of the land-disturbing activity. The purpose of the preconstruction construction is to arrange an on-site meeting with the Soil and Water Department to review and discuss the approved Plan and the proposed land-disturbing activity.
- **(R)** *Display of Plan Approval*. A Plan approval issued under this Article shall be prominently displayed until all construction is complete, all temporary measures have been removed, all permanent sedimentation and erosion control measures are installed, and the site has been stabilized. A copy of the approved plan shall be kept on file at the job site.
- (S) Required Revisions. After approving a Plan, if Lincoln County, either upon review of such Plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, Lincoln County shall require a revised Plan. Pending the preparation of the revised Plan, work shall cease or shall continue under conditions outlined by the appropriate authority. If following commencement of a land-disturbing activity pursuant to an approved Plan, Lincoln County determines that the Plan is inadequate to meet the requirements of this ordinance, Lincoln County may require any revision of the Plan that is necessary to comply with this ordinance.
- (T) Amendment to a Plan. Applications for amendment of a Plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by Lincoln County, the land-disturbing activity shall not proceed except in accordance with the Plan as originally approved.
- (U) Failure to File a Plan. Any Person engaged in land-disturbing activity who fails to file a Plan in accordance with this ordinance, or who conducts a land-disturbing activity except in accordance with provisions of an approved Plan shall be deemed in violation of this ordinance.
- (V) Self-Inspections. The landowner, the financially responsible party, or the landowner's or the financially responsible party's agent shall perform an inspection of the area covered by the plan after each phase of the plan has been completed and after establishment of temporary ground cover in accordance with G.S. 113A-57(2). In addition, weekly and rain-event self-inspections are required by federal regulations, that are implemented through the NPDES Construction General Permit No. NCG 010000. The Person who performs the inspection shall maintain and make available a record of the inspection at the site of the land-disturbing activity. The record shall set out any significant deviation from the approved erosion control plan, identify any measures that may be required to correct the deviation, and document the completion of those measures. The record shall be maintained until permanent ground cover has been established as required by the approved erosion and sedimentation control plan. The inspections required by this subsection shall be in addition to inspections required by G.S. 113A-61.1.

Where inspections are required by Section 6(r) of this Ordinance or G.S. 113A-54.1(e), the following apply:

(1) The inspection shall be performed during or after each of the following phases of the plan;

- (a) initial installation of erosion and sediment control measures;
- **(b)** clearing and grubbing of existing ground cover;
- (c) completion of any grading that requires ground cover;
- (d) completion of all land-disturbing activity, construction, or development, including permanent ground cover establishment and removal of all temporary measures; and
- (e) transfer of ownership or control of the tract of land where the erosion and sedimentation control plan has been approved and work has begun. The new owner or Person in control shall conduct and document inspections until the project is permanently stabilized as set forth in Sub-Item (iii) of this Item.
- (2) Documentation of self-inspections performed under Item (1) of this subsection shall include:
  - (a) Visual verification of ground stabilization and other erosion control measures and practices as called for in the approved plan;
  - (b) Verification by measurement of settling basins, temporary construction entrances, energy dissipators, and traps;
  - (c) The name, address, organization affiliation, telephone number, and signature of the person conducting the inspection and the date of the inspection shall be included, whether on a copy of the approved erosion and sedimentation control plan or an inspection report. A template for an example of an inspection and monitoring report is provided on the DEMLR website at: https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms. Any relevant licenses and certifications may also be included. Any documentation of inspections that occur on a copy of the approved erosion and sedimentation control plan shall occur on a single copy of the plan and that plan shall be made available on the site.
  - (d) A record of any significant deviation from any erosion or sedimentation control measure from that on the approved plan. For the purpose of this Rule, a "significant deviation" means an omission, alternation, or relocation of an erosion or sedimentation control measure that prevents it from performing as intended. The record shall include measures required to correct the significant deviation, along with documentation of when those measures were taken. Deviations from the approved plan may also be recommended to enhance the intended performance of the sedimentation and erosion control measures.
- **(W)** *Plan Cancellations*. Plans for which land-disturbing activity has not commenced within two (2) years from the initial Plan approval are void.

Except as may be required under federal law, rule or regulation, no periodic self-inspections or rain gauge installation is required on individual residential lots where less than one acre is being disturbed on each lot.

#### § 152.07. BASIC CONTROL OBJECTIVES.

An erosion and sedimentation control Plan may be disapproved if the Plan fails to address the following control objectives:

- (A) *Identify Critical Areas.* On-site areas which are subject to severe erosion, and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation, are to be identified and receive special attention.
- **(B)** *Limit Time of Exposure*. All land-disturbing activities are to be planned and conducted to limit exposure to the shortest time specified in N.C.G.S. §113A-57, the rules of the aforementioned Chapter, or as directed by the Approving Authority.
- (C) Limit Exposed Areas. All land-disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time.
- **(D)** *Control Surface Water.* Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure.
- **(E)** Control Sedimentation. All land-disturbing activity is to be planned and conducted to prevent off-site sedimentation damage.
- **(F)** Manage Stormwater Runoff. Plans shall be designed so that any increase in velocity of stormwater runoff resulting from a land-disturbing activity will not result in accelerated erosion of the receiving stormwater conveyance or at the point of discharge. Plans shall include measures to prevent accelerated erosion within the project boundary and at the point of discharge.

#### § 152.08. DESIGN AND PERFORMANCE STANDARDS.

- (A) Except as provided in subsections (B)(2) and (C)(1) of this ordinance, erosion and sedimentation control measures, structures, and devices shall be planned, designed, and constructed to provide protection from the calculated maximum peak rate of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the latest edition of the United States Department of Agriculture (USDA), Natural Resources Conservation Service's "National Engineering Field Handbook", or other acceptable calculation procedures.
- **(B)** *HQW Zones*. In High Quality Water (HQW) zones the following design standards shall apply:
  - (1) <u>Limit on Uncovered Area</u>. Uncovered areas in HQW zones shall be limited at any time to a maximum total area of twenty acres within the boundaries of the tract. Only the portion of the land-disturbing activity within a HQW zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of

the Director upon providing engineering justification with a construction sequence that considers phasing, limiting exposure, weekly submitted self-inspection reports, and a more conservative design than the Twenty-five Year Storm.

- (2) <u>Maximum Peak Rate of Runoff Protection</u>. Erosion and sedimentation control measures, structures, and devices within HQW zones shall be planned, designed and constructed to provide protection from the runoff of the twenty-five year storm which produces the maximum peak rate of runoff as calculated according to procedures in the latest edition of the United States Department of Agriculture Natural Resources Conservation Service's "National Engineering Field Handbook" or according to procedures adopted by any other agency of this state or the United States or any generally recognized organization or association.
- (3) <u>Sediment Basin Design</u>. Sediment basins within HQW zones shall be designed and constructed according to the following criteria:
  - i. use a surface withdrawal mechanism, except when the basin drainage area is less than 1.0 acre;
  - ii. have a minimum of 1800 cubic feet of storage area per acre of disturbed area;
  - have a minimum surface area of 325 square feet per cfs of the Twenty-five Year Storm (Q25) peak flow;
    - iv. have a minimum dewatering time of 48 hours;
  - v. incorporate 3 baffles, unless the basin is less than 20 feet in length, in which case 2 baffles shall be sufficient.

Upon a written request of the applicant, the Director may allow alternative design and control measures in lieu of meeting the conditions required in subparagraphs (3)(ii) through (3)(v) of this sub-section if the applicant demonstrates that meeting all of those conditions will result in design or operational hardships and that the alternative measures will provide an equal or more effective level of erosion and sediment control on the site. Alternative measures may include quicker application of ground cover, use of sediment flocculants, and use of enhanced ground cover practices.

- (4) <u>Grade</u>. Newly constructed open channels in HQW zones shall be designed and constructed with side slopes no steeper than two horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other forms of ditch liners proven as being effective in restraining accelerated erosion. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.
- (C) Design and Performance Standards for Land-Disturbing Activities of 20 Acres or Greater. In addition to any other requirements of State, federal, and local law, land-disturbing activity of 20-acres or more within Lincoln County, or the City of Lincolnton, shall meet all of the following additional design standards for sedimentation and erosion control:
  - (1) Sediment basins shall be planned, designed, and constructed to provide protection from the runoff of the 25-year storm that produces the maximum peak rate of runoff as

calculated according to procedures set out in the latest edition of the United States Department of Agriculture Natural Resources Conservation Service's "Engineering Field Handbook" found through nrcs.usda.gov or according to procedures adopted by any other agency of the State or the United States.

- (2) Construction entrances shall be planned, designed and constructed at a minimum length of one-hundred (100) feet.
- (3) Sediment Fence (Silt Fencing) used along all watercourses shall planned, designed and constructed as double-row high hazard or super silt fence.

#### § 152.09. STORM WATER OUTLET PROTECTION.

- (A) *Intent*. Stream banks and channels downstream from any land disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity.
- **(B)** Performance Standard. Persons shall conduct land-disturbing activity so that the post construction velocity of the 10-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:
  - (1) the velocity established by the Maximum Permissible Velocities Table set out within this subsection; or
  - (2) the velocity of the ten-year storm runoff in the receiving watercourse prior to development.

If condition (1) or (2) of this Paragraph cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the "prior to development" velocity by 10%.

#### Maximum Permissible Velocities Table

The following is a table for maximum permissible velocity for storm water discharges in feet per second (F.P.S.) and meters per second (M.P.S.):

MATERIAL	F.P.S.	M.P.S
Fine sand (noncolloidal)	2.5	0.8
Sandy loam (noncolloidal)	2.5	0.8
Silt loam (noncolloidal)	3.0	0.9
Ordinary firm loam	3.5	1.1
Fine gravel	5.0	1.5
Stiff clay (very colloidal)	5.0	1.5
Graded, loam to cobbles (noncolloidal)	5.0	1.5
Graded, silt to cobbles (Colloidal)	5.5	1.7
Alluvial silts (noncolloidal)	3.5	1.1

Alluvial silts (colloidal)	5.0	1.5
Coarse gravel (noncolloidal)	6.0	1.8
Cobbles and shingles	5.5	1.7
Shales and hard pans	6.0	1.8

Source - Adapted from recommendations by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply allowable velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

- (C) Acceptable Management Measures. Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. Lincoln County recognizes that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives, while not exhaustive, are to:
  - (1) Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious;
  - (2) Avoid increases in storm water discharge velocities by using vegetated or roughened swales and waterways in place of closed drains and high velocity paved sections:
  - (3) Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge;
  - (4) Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining; and
  - (5) Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.
- **(D)** *Exceptions*. This rule shall not apply where it can be demonstrated to Lincoln County that storm water discharge velocities will not create an erosion problem in the receiving watercourse.

#### § 152.10. BORROW AND WASTE AREAS.

If the same Person conducts the land-disturbing activity and any related borrow or waste activity, the related borrow or waste activity shall constitute part of the land-disturbing activity, unless the borrow or waste activity is regulated under the Mining Act of 1971, G.S. 74, Article 7, or is a landfill regulated by the Division of Waste Management. If the land-disturbing activity and any related borrow or waste activity are not conducted by the same Person, they shall be considered by the Approving Authority as separate land-disturbing activities.

#### § 152.11. ACCESS AND HAUL ROADS.

Temporary access and haul roads, other than public roads, constructed or used in connection with any land-disturbing activity shall be considered a part of such activity.

#### § 152.12. OPERATIONS IN LAKES OR NATURAL WATERCOURSES.

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall minimize the extent and duration of disruption of the stream channel. Where relocation of a stream forms an essential part of the proposed activity, the relocation shall minimize changes in the stream flow characteristics.

#### § 152.13. RESPONSIBILITY FOR MAINTENANCE.

During the development of a site, the Person conducting the land-disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this Ordinance, the Act, or any order adopted pursuant to this ordinance or the Act. After site development, the landowner or Person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

#### § 152.14. ADDITIONAL MEASURES.

Whenever Lincoln County determines that accelerated erosion and sedimentation continues despite the installation of protective practices, they shall direct the Person conducting the land-disturbing activity to take additional protective action necessary to achieve compliance with the conditions specified in the Act or its rules.

#### § 152.15. FEES.

Lincoln County has established a fee schedule for the review and approval of Plans. The Fees required to be paid under this Chapter shall be determined by the then-current Lincoln County Fee Schedule. All fees shall be due and payable at the submittal of a Plan.

#### § 152.16. ENVIRONMENTAL REVIEW BOARD.

- (A) *Creation*. There has previously been established and created, and is hereby re-established, as the Environmental Review Board that is charged with the duties as provided for in this chapter. The Environmental Review Board shall consist of the following members:
  - (1) One (1) person appointed by the City of Lincolnton;
  - (2) The President of the County Home Builders Association, or his or her designee;
  - (3) Chairperson of the County Soil and Water Conservation District, or his or her designee;
    - (4) Chairperson of the County Natural Resource Committee, or his or her designee;

- (5) Two (2) persons appointed by the Board of Commissioners, with one being a professional environmental biologist; and
- (6) A professional engineer registered under the provision of G.S. Chapter 89C, appointed by the Board of Commissioners.
- **(B)** Appointments. The Environmental Review Board members appointed by the Board of Commissioners shall serve a term of three years and until their successors are appointed and duly qualified. A member may be appointed for up to two consecutive three-year terms.
- (C) Fees. The Environmental Review Board shall make fee recommendations to the Board of Commissioners for all fees enforced hereunder.
- **(D)** Other Duties and Responsibilities. The Environmental Review Board shall hear and decide appeals from any decision or determination made by the Erosion Control Specialist in the enforcement of this chapter and other duties as directed by the Board of Commissioners.

#### § 152.17. PLAN APPEALS.

- (A) Except as provided in subsection (B) herein, the appeal of a disapproval or approval with modifications of a Plan shall governed by the following provisions:
  - (1) The disapproval or modification of any proposed Plan by the Lincoln County Soil and Water Department, shall entitle the Person submitting the Plan to a public hearing if such Person submits written demand for a hearing within 15 days after receipt of written notice of disapproval or modifications.
  - (2) A hearing held pursuant to this section shall be conducted by the Lincoln County Environmental Review Board within 30 days after the date of the appeal or request for a hearing.
  - (3) The Lincoln County Environmental Review Board will render its final decision on any Plan within 10 days of the hearing.
  - (4) If the Lincoln County Environmental Review Board upholds the disapproval or modification of a proposed Plan following the hearing, the Person submitting the Plan shall then be entitled to appeal that decision to the Commission as provided in G.S. §113A-61(c) and 15A NCAC 4B .0118(d).
- (B) In the event that a Plan is disapproved pursuant to §152.06(N) of this chapter, the applicant may appeal Lincoln County's disapproval of the Plan directly to the Commission.

#### § 152.18. INSPECTIONS AND INVESTIGATIONS.

(A) *Inspection*. Agents, officials, or other qualified persons authorized by Lincoln County, will periodically inspect land-disturbing activities to ensure compliance with the Act, this ordinance, or rules or orders adopted or issued pursuant to this ordinance, and to determine whether the measures required in the Plan are effective in controlling erosion and sedimentation resulting from land-

disturbing activity. Notice of the right to inspect shall be included in the certificate of approval of each Plan.

- **(B)** Willful Resistance, Delay or Obstruction. No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of Lincoln County, while that person is inspecting or attempting to inspect a land-disturbing activity under this section.
- **(C)** Notice of Violation. If Lincoln County determines that a Person engaged in landdisturbing activity has failed to comply with the Act, this ordinance, or rules, or orders adopted or issued pursuant to this ordinance, a notice of violation shall be served upon that Person. The notice may be served by any means authorized under GS 1A-1, Rule 4. The notice shall specify a date by which the Person must comply with the Act, or this ordinance, or rules, or orders adopted pursuant to this ordinance, and inform the Person of the actions that need to be taken to comply with the Act, this ordinance, or rules or orders adopted pursuant to this ordinance. Any Person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this ordinance. If the Person engaged in the land-disturbing activity has not received a previous notice of violation under this section, Lincoln County shall offer assistance in developing corrective measures. Assistance may be provided by referral to a technical assistance program on behalf of the Approving Authority, referral to a cooperative extension program, or by the provision of written materials such as Department guidance documents. The notice of violation may be served in the manner prescribed for service of process by G.S. 1A-1, Rule 4, and shall include information on how to obtain assistance in developing corrective measures.
- **(D)** *Investigation*. Lincoln County shall have the power to conduct such investigation as it may reasonably deem necessary to carry out its duties as prescribed in this ordinance, and who presents appropriate credentials for this purpose to enter at reasonable times, any property, public or private, for the purpose of investigating and inspecting the sites of any land-disturbing activity.
- (E) Statements and Reports. Lincoln County shall also have the power to require written statements, or filing of reports under oath, with respect to pertinent questions relating to land-disturbing activity.
- **(F) Violation**. Whenever a violation of this chapter occurs or is alleged to have occurred, any person may file a written complaint. Any written complaint stating fully the cause and basis there of shall be filed with the Soil and Water Department who shall properly record the complaint, investigate and take action as provided by this chapter.
- **(G)** Certificate of Occupancy. With regard to the development of any Tract that is subject to this chapter, the Lincoln County Department of Development Services shall not issue a certificate of occupancy where any of the following conditions exist:
  - (1) There is a violation of this chapter with respect to the Tract;
  - (2) If there remains due and payable to the county civil penalties that have been levied against the person conducting the land-disturbing activity for violation(s) of this chapter. If a penalty is under appeal, the Erosion Control Specialist may require the amount of the fine, and any other amount that the person would be required to pay under this chapter if the person loses

the appeal, be placed in a refundable account or surety prior to issuing the certificate of occupancy;

- (3) The requirements of the plan have not been completed and the building for which a certificate of occupancy is requested is the only building then under construction on the Tract;
- (4) On the Tract, which includes multiple buildings on a single parcel, the requirements of the plan have not been completed and the building for which a certificate of occupancy is requested is the last building then under construction on the Tract; and/or
- (5) On a Tract, which includes multiple parcels created pursuant to the applicable subdivision regulations, the requirements of the plan have not been completed with respect to the parcel for which the certificate of occupancy is requested.

Notwithstanding the provisions of this subsection, the Building and Land Development Department may issue a temporary certificate of occupancy where divisions (3), (4), or (5) above apply and where the person conducting the land-disturbing activity is making substantial progress towards completing the requirements of the plan.

Lincoln County may issue a stop-work order and /or suspension of building permits if a land-disturbing activity is being conducted in violation of this chapter or of any rule adopted or order issued pursuant to this chapter.

#### **§ 152.19. PENALTIES.**

# (A) Civil Penalties.

- 1. Civil Penalty for a Violation. Any Person who violates any of the provisions of this ordinance, or rule or order adopted or issued pursuant to this ordinance, or who initiates or continues a land-disturbing activity for which a Plan is required except in accordance with the terms, conditions, and provisions of an approved Plan, is subject to a civil penalty. The maximum civil penalty amount that Lincoln County may assess per violation is five thousand dollars (\$5,000.00). A civil penalty may be assessed from the date of the violation. Each day of a continuing violation shall constitute a separate violation. When the Person has not been assessed any civil penalty under this subsection for any previous violation, and that Person abated continuing environmental damage resulting from the violation within 180 days from the date of the notice of violation, the maximum cumulative total civil penalty assessed under this subsection for all violations associated with the land-disturbing activity for which the erosion and sedimentation control plan is required is twenty-five thousand dollars (\$25,000).
- 2. <u>Repeat Violations</u>. Repeat violators may be charged by a multiple of the base penalty determined herein. The penalty for a repeat violator may be doubled for each previous time that the repeat violator has been notified of a violation of this chapter, or any other soil erosion and sedimentation control ordinance within the State of North Carolina, within two (2) years prior to the current violation. However, in no case may the penalty exceed the maximum allowed by this chapter.

- **3.** <u>Civil Penalty Assessment Factors.</u> The Lincoln County Soil and Water Department shall determine the amount of the civil penalty based upon the following factors:
  - i. the degree and extent of harm caused by the violation,
  - ii. the cost of rectifying the damage,
  - iii. the amount of money the violator saved by noncompliance,
  - iv. whether the violation was committed willfully, and
  - **v.** the prior record of the violator in complying of failing to comply with this ordinance.
- 4. <u>Notice of Civil Penalty Assessment</u>. The Lincoln County Soil and Water Department shall provide notice of the civil penalty amount and basis for assessment to the Person assessed. The notice of assessment shall be served by any means authorized under G.S. 1A-1, Rule 4. A notice of assessment by Lincoln County shall direct the violator to either pay the assessment, contest the assessment within 30 days by filing a petition for hearing with Lincoln County (based upon the procedures herein), or file a request with Lincoln County Soil and Water Department for remission of the assessment within 30 days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the North Carolina General Statutes and a stipulation of the facts on which the assessment was based.
- **5.** <u>Final Decision</u>. The final decision on contested assessments shall be made by the Lincoln County Environmental Review Board in accordance with this chapter.
- 6. <u>Appeal of Final Decision</u>. Appeal of the final decision of Lincoln Environmental Review Board shall be to the Lincoln County Superior Court. Such appeals must be made within 30 days of the final decision of the Lincoln County Environmental Review Board.
- 7. Remission of Civil Penalties. A request for remission of a civil penalty imposed under G.S. 113A-64 may be filed with the Lincoln County Environmental Review Board within 30 days of receipt of the notice of assessment. A remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the General Statutes and a stipulation of the facts on which the assessment was based. The following factors shall be considered in determining whether a civil penalty remission request will be approved:
  - i. Whether one or more of the civil penalty assessment factors in G.S. 113A-64(a)(3) were wrongly applied to the detriment of the petitioner.
  - **ii.** Whether the petitioner promptly abated continuing environmental damage resulting from the violation.
    - **iii.** Whether the violation was inadvertent or a result of an accident.
  - **iv.** Whether the petitioner had been assessed civil penalties for any previous violations.
  - **v.** Whether payment of the civil penalty will prevent payment for necessary remedial actions or would otherwise create a significant financial hardship.
  - **vi.** The assessed property tax valuation of the petitioner's property upon which the violation occurred, excluding the value of any structures located on the property.

- 8. <u>Collection</u>. If payment is not received within 30 days after it is due, Lincoln County may institute a civil action to recover the amount of the assessment. The civil action may be brought in the Superior Court of the county where the violation occurred, or the violator's residence or principal place of business is located. Such civil actions must be filed within three (3) years of the date the assessment was due. An assessment that is not contested and a remission that is not requested is due when the violator is served with a notice of assessment. An assessment that is contested or a remission that is requested is due at the conclusion of the administrative and judicial review of the assessment.
- 9. <u>Credit of Civil Penalties</u>. The clear proceeds of civil penalties collected by Lincoln County under this subsection shall be remitted to the Civil Penalty and Forfeiture Fund in accordance with G.S. 115C-457.2. Penalties collected by Lincoln County may be diminished only by the actual costs of collection. The collection cost percentage to be used shall be established and approved by the North Carolina Office of State Budget and Management on an annual basis, based upon the computation of actual collection costs by Lincoln County for the prior fiscal year.
- **(B)** Criminal Penalties. Any Person who knowingly or willfully violates any provision of this ordinance, or rule or order adopted or issued by the Commission or a local government, or who knowingly or willfully initiates or continues a land-disturbing activity for which a Plan is required except in accordance with the terms, conditions, and provisions of an approved Plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed \$5,000 as provided in G.S. 113A-64.

#### § 152.20. INJUNCTIVE RELIEF.

- (A) Violation of Local Program. Whenever the County has reasonable cause to believe that any Person is violating or threatening to violate any ordinance, rule, regulation or order adopted or issued by Lincoln County, or any term, condition, or provision of an approved Plan, it may, either before or after the institution of any other action or proceeding authorized by this ordinance, institute a civil action in the name of Lincoln County, for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the superior court of Lincoln County by the County Attorney.
- **(B)** Abatement of Violation. Upon determination by a court that an alleged violation is occurring or is threatened, the court shall enter any order or judgment that is necessary to abate the violation, to ensure that restoration is performed, or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to the proceedings from any civil or criminal penalty prescribed for violations of this chapter.

#### § 152.21. RESTORATION AFTER NON-COMPLIANCE.

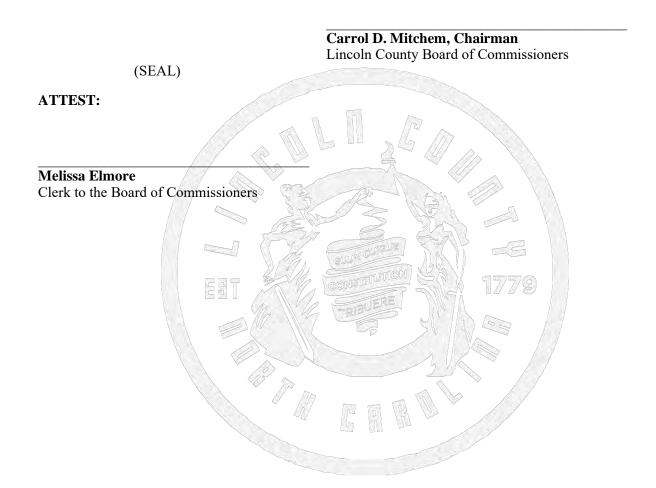
Lincoln County may require a Person who engaged in a land-disturbing activity and failed to retain sediment generated by the activity, as required by N.C.G.S. §113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

#### § 152.22. SEVERABILITY.

If any section or section or sections of this ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

Section 2. This ordinance shall become effective the \_\_\_day of \_\_\_\_\_.

Adopted this the \_\_\_day of \_\_\_\_\_.



# **Active Sediment Case Report as of October 13, 2023**

Case#	Violator (Name of Case)	County	Date of Assessment	Penalty Assessment Amt	Final Amt Paid	Comments
20-022	Blue Ridge Mountain Sky, LLC	Polk	16-Dec-20	\$25,000.00		
20-023	Blue Ridge Mountain Sky, LLC	Polk	N/A	N/A		Injunction. Contempt hearing withdrawn due to progress with sediment removal. Monitoring of site continues.
21-004	Blue Ridge Mountain Sky, LLC	Polk	13-Jul-22	\$268,520.00		Petition for a Contested Case withdrawn by 1/9/2023. All three cases: Sediment removal plan with site access agreements from property owners being delivered. Eligible for payment pending results of sediment removal.
21-014	Dump & Go, Inc.	Cumberland	03-Nov-21	\$5,000.00		Injunctive relief requested 3/22 NOVs issued 5/21/21 & 6/16/21 NOCV issued 6/13/22 Complaint amended as to defendent. Motion to Show Cause pending.
21-015	Wachhund Land Co., LLC	Transylvania	28-Nov-22	\$25,000.00		CPA rescinded
22-001	Wayfarers Cove and Marina Beach, LLC	Pamlico	12-Oct-22	\$25,000.00		Final Agency Decision Letter issued. Settlement Agreement/Payment Schedule in force.
22-002 23-001	Jumping Run, LLC Parker Leland, LLC	Burke Brunswick	28-Feb-23 24-Jul-23	\$21,000.00 \$25,000.00	\$21,000.00	Contested case hearing closed. Settlement Agreement signed 5/2/23. Paid in full. CASE CLOSED
23-001	Hawthorne Headwaters	DIUIISWICK	24-JUI-23	\$25,000.00		
23-002	Apartments, LLC	Pender	11-Aug-23	\$5,000.00		

# N.C. SEDIMENTATION CONTROL COMMISSION ENFORCEMENT REPORT

by the OFFICE OF THE ATTORNEY GENERAL 10/30/2023

Status of Cases	2/3/2023	5/5/2023	7/17/2023	10/30/2023		
LQS Drafting CPA	1	2	1	0		
2. CPAs Out to Violator (30-day)	0	0	1	0		
3. CPAs Prepared by LQS Under Review	4	4	3	5		
4. CP Remission Requests Under Review	0	0	0	2		
5. CP Remission Decisions	1	0	0	0		
6. Cases Pending in OAH	1	0	0	0		
7. Cases Awaiting Final Agency Decision	0	0	0	0		
8. Cases Pending in General Courts of Justice						
a. Judicial Review	0	0	0	0		
b. Injunctions	2	2	2	2		
c. Pre-Judgement Collections	0	0	0	0		
d. Post-Judgement Collections	0	0	0	0		
e. Federal Cases	1	1	1	1		
9. Cases in Bankruptcy Proceedings	0	0	0	0		
10. *Cases where CPA Being Paid by Installment	0	0	0	0		
11. Cases to be Closed	0	1	0	0		
TOTALS:	10	10	8	10		
Action Since Prior Quarterly Report:						
New Cases Received by AGO				0		
Cases Closed by AGO				0		

## **Education Program Status Report**

#### Presentations/Exhibits

- Participated in the 5<sup>th</sup> Annual Mud Day at the Walnut Creek Wetland Center on 8/19/23. Presented a construction sand table for young participants and had coloring pages, informational resources and handouts for older participants.
- Attended NCSU's Civil, Construction and Environmental Engineering Career Connections Job Fair on 9/5/23 with 1 other DEQ employee here we talked to approximately 35 students about DEQ.
- Co-hosted a Project WET workshop for formal and non-formal educators with Lauren Daniel of DWR on 9/14/23 at Blue Jay Point County Park.
- Presented about 'Education Tips & Tricks and Project WET' at the NC S&WCD's annual Conservation Employee Training on 9/19/23.
- Partnered with Lauren Daniel of DWR to present at NCSU to Dr. Allen's Environmental Technology Laboratory I class of 14 students about physical parameters on 9/20/23. We introduced students to NC Stream Watch, sediment jars, and the soil texture by feel method.
- Participated in Moore Square Magnet Middle School's Career Day on 9/22/23; approximately 650 students attended the event. Enviroscape model was presented.
- The Sediment Education Specialist was one of the professionals who partnered with the NC Museum of Natural Sciences at the annual Educator Open House and SciREN Triangle Networking Event on 9/28/23 to distribute information about DEQ's education programs to NC educators.
- Attended NCSU's College of Natural Resources' Fall Career Fair on 10/4/23 with 1 other DEQ employee where we talked to approximately 100 students about DEQ.
- Co-hosted a Project WET workshop for formal and non-formal educators with Lauren Daniel of DWR on 9/14/23 at Pine Knoll Shores Aquarium.
- Exhibited at and handed out educational materials, including the Erosion Patrol Kit, at Bridging the Gap NC STEM Educators Conference in Raleigh on 10/25/23. Enviroscape model presented.
- Attended NC State's ASABE (American Society of Agricultural and Biological Engineers) Fall Career Fair on 10/27/23 where we talked to approximately 25 students about DEQ.
- Exhibited at the NCSTA (North Carolina Science Teachers Association) Annual professional Development Institute on 11/2/23 & 11/3/23 to distribute information about DEQ's education programs to NC educators.
- Continued to co-host monthly Water Education Coffee Talks with DWR's water educator, Lauren Daniel, for formal and non-formal educators. The purpose of these coffee talks are to answer questions, showcase our education resources, facilitate networking, and discover/facilitate collaboration opportunities.

### **Workshops**

The hybrid in-person and virtual NC E&SC Workshop (formally the E&SC Design Workshop) is scheduled for December 6, 2023, in Raleigh at the McKimmon Center. The NC E&SC

Workshop is being planned in partnership with the Southeast Chapter of the International Erosion Control Association and the NCSU Department of Crop & Soil Science.

The 2024 Annual Local Programs Workshop is being planned for April 23 & 24 at the Sturgeon City Education Center in Jacksonville, NC. The Local Program Workshop is being planned in partnership with the Water Resources Research Institute (WRRI).

#### **Contract Administration**

A contract proposal between DEMLR and WRRI is currently being processed. The contract includes support for the 2024 and 2025 Annual Local Program Workshop and Awards Luncheon. The proposed cost of the 2024 Local Program Workshop and Awards Luncheon portion of the contract amounts to \$27,275. The proposed cost of the 2025 Local Program Workshop and Awards Luncheon portion of the contract amounts to \$29,285. For a total contract cost of \$57,060.

#### Professional Development

• Attended the 8/4/23 Intro to Playful Pedagogy workshop.

#### **Updates**

The E&SC website pages are continuously being updated as needed.

If you or a colleague would like to contribute an article or suggest a topic for the December edition of the Sediments Newsletter, email the Sediment Education Specialist! Deadline to submit a topic/article is December  $8^{th}$ .

# LAND QUALITY REGIONAL PROGRAM MONTHLY ACTIVITY REPORT State Total FY 2021-2022 through:

October

Activity	WIRO	WIRO	ARO	ARO	WARO	WARO	WSRO	WSRO	RRO	RRO	FRO	FRO	MRO	MRO	TOTALS
	Month	YTD	Month	YTD	Month	YTD	Month	YTD	Month	YTD	Month	YTD	Month	YTD	
*PLAN/APPLICATION REVIEW*															
New Sedimentation Control Projects Rec'd	2	80	0	33	0	60	0	138	9	123	0	111	0	99	644
2. New Sedimentation Plan Reviews	15	47	0	23	7	122	0	98	2	93	18	99	0	87	569
3. Sedimentation Plan EXPRESS Reviews	0	0	0	5	0	5	0	2	0	39	0	23	0	9	83
4. New Sedimentation Plan Disapprovals	0	0	0	3	0	2	0	25	0	32	0	9	0	41	112
5. Revised Sedimentation Plan Received	7	36	0	15	0	11	0	46	0	52	0	30	0	114	304
6. Revised Sedimentation Plan Reviews	0	3	0	15	0	16	0	45	3	57	1	22	0	100	258
7. Revised Sedimentation Plan Disapprovals	0	0	0	2	0	0	0	6	0	10	0	9	0	22	49
8. Unreviewed E&SC Plans - End of Month	0	0	0	9	0	50	0	81	0	0	0	0	0	112	252
9. E&SC Plan Reviews > 30 Days	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
10. Revised Plan Reviews > 15 Days	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
*MONITORING*															
1. Sedimentation Inspections (Total)	92	617	0	35	155	651	0	694	10	307	21	521	0	607	3432
A. Landfills	2	2	0	0	0	0	0	1	0	0	0	4	0	6	13
B. DOT Contract	0	0	0	0	0	0	0	4	0	1	0	0	0	0	5
C. DOT Force Account	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. Complaints	1	16	0	20	1	8	0	103	4	45	3	33	0	51	276
*ENFORCEMENT*															
1. Sedimentation															
A. Notices of Violation (Total)	1	6	0	6	4	30	0	0	0	17	0	0	0	606	665
B. NOVs to Repeat Violators	0	0	0	1	1	6	0	0	0	4	0	0	0	27	38
C. Cases Referred for Enforcement	0	1	0	0	0	0	0	0	0	1	0	0	0	19	21
*LOCAL PROGRAMS*															
1. Local Ordinance Reviews	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
2. Local Programs Aided (hours)	0	3	0	0	0	0	0	0	0	46	0	3	0	0	52
*OUGTOMED OF DUICE*															
*CUSTOMER SERVICE*			_												
Technical Assistance (Aided Hours)	27	538	0	142	31	600	0	0	48	224	16	203	0	0	1707
Pre-Application Meetings	0	165	0	3	0	52	0	0	0	2	2	27	0	0	249

# Monthly Activity Report Activity Definitions

#### PLAN/APPLICATION REVIEW

- 1. New Sedimentation Control Projects Rec'd The number of *complete* packages for a project that were received (FR/O form, plans, fee, landowner agreement and/or calculations, if either required). These are projects which have been assigned a new project identification number.
- 2. New Sedimentation Plan Reviews The number of plan reviews that resulted in issuance of letters of approval and/or letters of disapproval (i.e., review > disapproval > resubmittal > approval = 2 reviews). It should not include preliminary or cursory reviews conducted by technicians that are followed by a detailed review by the ARE and/or RE. This number should be unique to the Project ID, and not to the reviewer.
- 3. **Sedimentation Plan EXPRESS Reviews** Of the NEW plans that were reviewed, this item reflects the number of those that were express reviews. This number should always be equal to or less than the number reported under Item 2.
- 4. **New Sedimentation Plan Disapprovals** Regular or express plans reviewed and disapproved for the first time. It should <u>not</u> include preliminary or cursory reviews conducted by technicians that are followed by a detailed review by the ARE and/or RE.
- 5. **Revised Sedimentation Plans Received** Total number of previously reviewed regular and express plans received this month. It should <u>not</u> include preliminary or cursory reviews conducted by technicians. The same Project ID can be counted multiple times.
- 6. **Revised Sedimentation Plan Reviews** Total number of regular and express plans revised and reviewed this month. It should <u>not</u> include preliminary or cursory reviews conducted by technicians. The same Project ID can be counted multiple times.
- 7. **Revised Sedimentation Plan Disapprovals** Total number of **revised** regular or **revised** express plans reviewed that were disapproved. The same Project ID can be counted multiple times.
- 8. **Unreviewed E&SC Plans End of Month** The number of complete plans received for the month that have not yet been reviewed. This includes any plans received near the end of the month.

- 9. **E&SC Plan Reviews > 30 days** The number of new projects that took more than 30 days from receipt to approve or disapprove. The goal is zero days.
- 10. **Revised Plan Reviews > 15 days** Revisions to projects submitted that have not been reviewed within 15 days of receipt. The goal is zero days.

#### MONITORING

- 1. **Sedimentation Inspections (Total)** The total number of inspections conducted under the sedimentation program. This number should always be greater than the sum of A through D. Two inspectors together looking at one project equals one inspection.
  - A. Landfills Inspections conducted at landfill sites
  - B. **DOT Contract** Inspections conducted on NCDOT projects under a contract (TIP Projects) and any supplemental agreements.
  - C. **DOT Force Account** Inspections conducted on NCDOT projects under force accounts. These types of arrangements involve notices to contractors to perform extra or altered work not covered by the original contract or by supplemental agreements.
  - D. **Complaints** Inspections conducted on behalf of citizen complaints. The number of contacts that require <u>field review</u> to determine necessary actions or applicability. Those occurrences that only require office telephone interpretation of the law, rules, and/or procedures are <u>not</u> to be included.

#### **ENFORCEMENT**

#### 1. Sedimentation

- A. **Notices of Violation (Total) –** The total number of notices issued under the sedimentation program. This includes first-time and repeat violators.
- B. **NOVs to Repeat Violators** Of the total above, this item represents the number of notices issued to repeat violators. This number should always be equal to or less than the number reported under Item A.
- C. Cases Referred for Enforcement The number of projects that have been issued case numbers (LQS-####-###).

#### LOCAL PROGRAMS

- 1. **Local Ordinance Reviews –** The total number of <u>formal reviews</u> of local programs that are reported to the Sedimentation Control Commission through the Raleigh Central Office.
- 2. **Local Programs Aided (hours)** The total number of hours spent by staff in informal review of local programs <u>and</u> the total number of hours spent working with local programs on specific projects and program administration (i.e., plan reviews, site inspections, enforcement assistance, presentations, training, etc.)

Land Quality Section Report - November 16, 2023							
Organizational Description / Location	Classification						
ENR SO ASEN EML DO LQ CO Asheville Regional Office	Engineer I						
ENR SO ASEN EML DO LQ CO Asheville Regional Office	Environmental Regional Office Specialist I						
ENR SO ASEN EML DO LQ CO Asheville Regional Office	Environmental Regional Office Specialist I						
ENR SO ASEN EML DO LQ CO Fayetteville Regional Office	Environmental Regional Office Specialist I						
ENR SO ASEN EML DO LQ CO Mooresville Regional Office	Environmental Regional Office Specialist I						
ENR SO ASEN EML DO LQ CO Mooresville Regional Office	Environmental Regional Office Specialist I						
ENR SO ASEN EML DO LQ CO Mooresville Regional Office	Engineer II						
ENR SO ASEN EML DO LQ CO Mooresville Regional Office	Engineer II						
ENR SO ASEN EML Directors Office - Raleigh Central Office	Environmental Regional Office Division Director						
ENR SO ASEN EML DO LQ CO Raleigh Regional Office	Environmental Regional Office Specialist I						
ENR SO ASEN EML DO LQ CO Raleigh Regional Office	Engineer II						
ENR SO ASEN EML DO LQ CO Washington Regional Office	Environmental Regional Office Specialist I						
ENR SO ASEN EML DO LQ CO Wilmington Regional Office	Engineer II ARPA						
ENR SO ASEN EML DO LQ CO Wilmington Regional Office	Environmental Regional Office Specialist II						
ENR SO ASEN EML DO LQ CO Wilmington Regional Office	Environmental Regional Office Specialist I						
ENR SO ASEN EML DO LQ CO Wilmington Regional Office	Engineer II						
ENR SO ASEN EML DO LQ CO WinstonSalem Regional Office	Engineer II						
ENR SO ASEN EML DO LQ CO WinstonSalem Regional Office	Engineer I						
ENR SO ASEN EML DO LQ CO WinstonSalem Regional Office	Environmental Regional Office Specialist II						
ENR SO ASEN EML DO LQ CO WinstonSalem Regional Office	Environmental Regional Office Specialist II						