



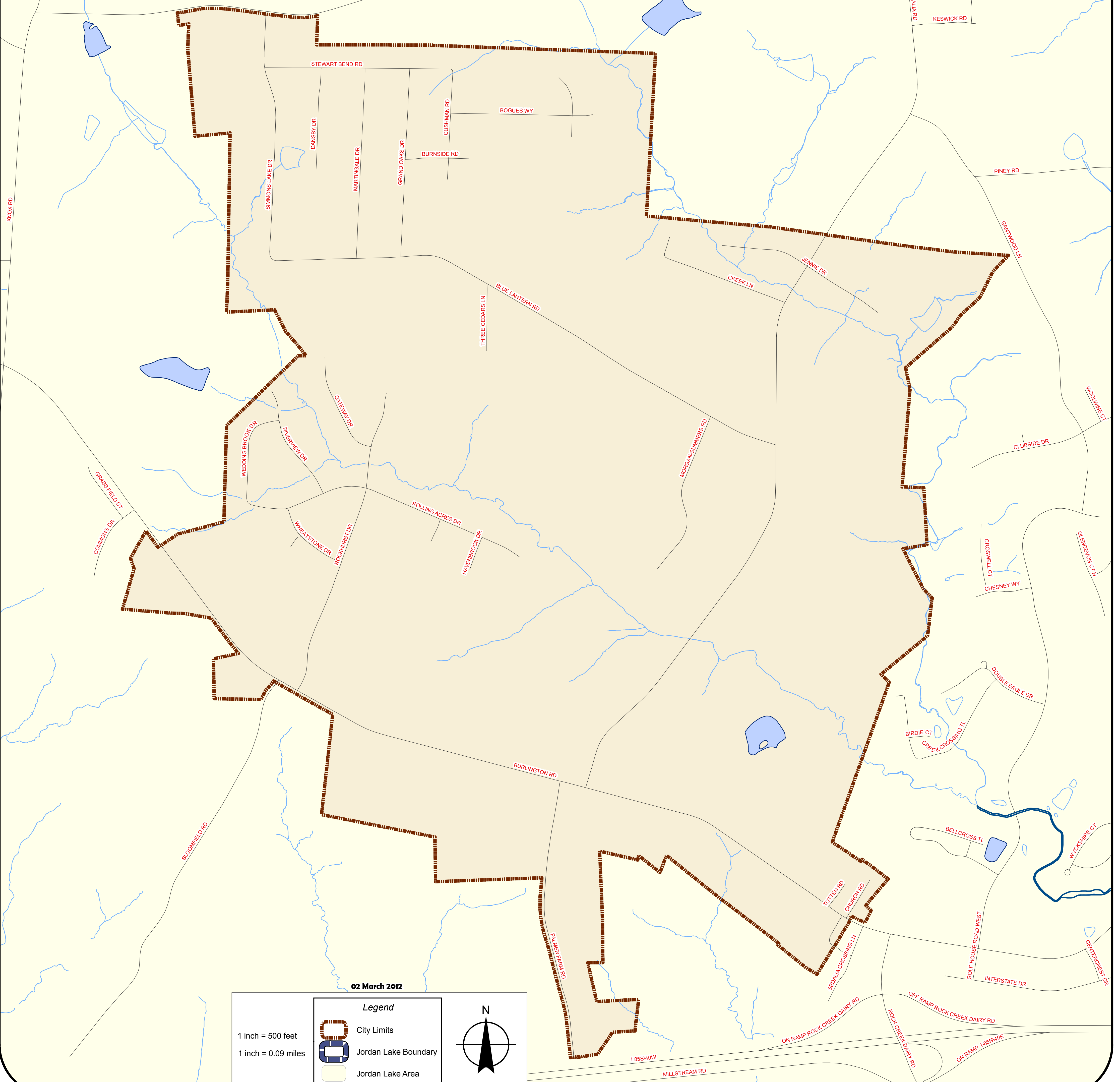
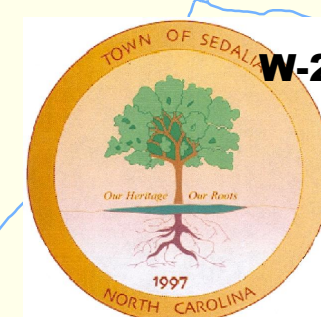
Town of Sedalia Stormwater Program for New Development

**AS REQUIRED BY THE JORDAN NEW DEVELOPMENT
STORMWATER RULE(15A NCAC 2B.0265)**

for Submittal to NCDENR by September 10, 2011






JORDAN LAKE STORMWATER MAP TOWN OF SEDALIA

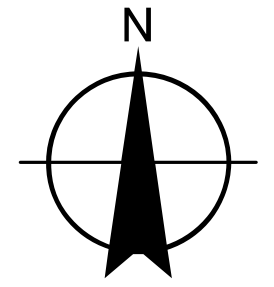


02 March 2012

Legend

-  City Limits
-  Jordan Lake Boundary
-  Jordan Lake Area

1 inch = 500 feet
1 inch = 0.09 miles



Check List for Reviewing the Jordan Lake Stormwater Rule Ordinances

Item	Location
Title	1-1.
Authority	1-5.
Findings	1-3.12
Purpose	1-3
Applicability & Jurisdiction: -General	1.4.1 & 7.13
-Exemptions	7-1.3(B)
-No Development / Redevelopment Until Compliance Permit	7-1.5(C)
-Map	7-1.2
Interpretation	1-7. & 7-1.5(i)
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Relationship to other Laws, Regulations & Private Agreements	1-7.2.
Severability	1-13.
Effective Date & Transitional Provisions	Effective upon adoption & no Transitional Provision
Review & Decision Making Entities	7-1.5(I)
Review Procedures	7-1.5(A)
Establishment of Application Requirements, Schedules, & Fees	7-1.5(A)
Applications for Approval - Concept Plan & Consultation Meeting	Optional but not required by County
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General Standards	7-1.8
Nitrogen & Phosphorus Loading Standards	7-2.4(C)
Nitrogen & Phosphorus Standard is Supplemental	Since the GDO covers all of the required stormwater standards this language was not incorporated because it was not needed.
85% TSS Requirement	7-2.1(D)
Controls & Treatment of Runoff	7-2.1(D)(1)
Partial Offset of Nutrient Control Requirements	7-2.4(C)(1)(b)
Evaluation of Standards for Stormwater Control Measures - Evaluation According to Design Manual - Determination of Adequacy; Presumptions and Alternatives	7-2.3(G)(2)
Dedication of BMPs, Facilities & Improvements	7-1.6
Variances	7-1.9
General Standards for Maintenance - Function of BMPs as Intended - Annual Maintenance Inspection & Report	7-1.6(F) 7-1.6(F)
Operation & Maintenance Agreement - In General - Special Requirements for Homeowners' & Other Associations	7-1.6(F) 7-1.6(F)(1)
Inspection Program	
Performance Security for Installation & Maintenance - May Be Required - Amount	Pond must be complete before Final CO is issued 7-1.6(D) No maintenance bond required by County

- Uses of Performance Security - Costs in Excess of Performance Security - Refund	No maintenance bond required by County
Item	Location
Notice to Owners - Deed Recordation - Signage	7-1.6(D) Not required by Guilford County
Records of Installation & Maintenance Activities	County Keeps Inspection & Maintenance Records
Nuisance	
Maintenance Easement	7-1.6(D)
Enforcement & Violations - General - Authority - Violation Unlawful - Each Day Separate Offense - Responsible Persons / Entities	7-1.6(F)(2) 7-1.6(F)(2) 7-1.6(F)(2) 7-1.6(F)
Remedies & Penalties - Withholding of Certificate of Occupancy - Disapproval of Subsequent Permits & Development Approvals -Injunctions, Abatements - Corrections as Public Health Nuisance, Costs as Lien - Stop Work Order - Civil / Criminal Penalties	7-1.6(C) 1-9.3 & 8-4.3 8-4.1 8-3. 8-4.5 7-1.6(F)(2) & 8-5.1
Procedures - Initiation / Complaint - Inspection - Notice of Violation & Order to Correct	8-3. 7-1.6(F)(2) 7-1.6(F)(2)
Definitions	2-1.2

Notes:

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Introduction and Proposed Changes

Sedalia is a quaint, proud community near the eastern side of Guilford County. The town derived its name from a small post office which operated in the back of a country store in 1901. People would gather there for mail and news. The post office was named, "Sedalia" and soon the community began to refer to itself as the news. The post office was named, "Sedalia" and soon the community began to refer to itself as the same. Sedalia has a rich heritage and the community has maintained its historic homes and buildings. As of the census of 2000, there were 618 people, 226 households, and 181 families residing in the town. The population density was 266.8 people per square mile (102.8/km²).

The Town is within the Haw River sub-basin of the Cape Fear River Basin and is divided into two additional local sub-basins: Rock Creek and the Haw River. The Rock Creek is part of the Lake Mackintosh Water Supply Watershed (Water Supply Watershed IV). This sub-basin is further divided into a General Watershed Area and a Watershed Critical Area. .

The Jordan Lake New Development Rule sets out standards that named communities are to incorporate into local stormwater programs, and require the Division of Water Quality to develop a model local stormwater program for those communities to use to create a New Development

Program that complies with the rule. The Jordan Lake New Development Ordinance is the legal mechanism that local governments will use to enforce these standards on new development projects greater than ½ acre in disturbed area (or 1 acre for single family residential or commercial, industrial, and multi-family development that disturbs a half acre or more (as is stated in the “Permitting” section)).

Many communities within the Jordan Lake watershed are NPDES MS4 Phase II communities that have, or will be required to have, Phase II Stormwater Post-Construction Ordinances. These Phase II Ordinances have specific standards that apply to development of properties greater than 1 acre in size within the corporate and extraterritorial jurisdictions of the community. These standards include High and Low Density designations, with projects that exceed 24% Built Upon Area being designated as High Density Projects. Projects that are designated as High Density are then required to treat the “first flush” (or 1” of rain) to remove 85% of the Total Suspended Solids (TSS).

The Jordan Lake New Development Rule is centered on removal of Nitrogen and Phosphorous from stormwater. These two pollutants can be removed with many of the same processes as TSS but at differing removal rates and with a different calculation to determine the effectiveness of the treatment processes.

The Town utilized the majority of the model ordinance in crafting these text amendments after comparing the adopted regulations with the model ordinance to ensure the consistent requirements were included. Later the NC Environmental Management Commission approved our proposed ordinance text amendments on May, 2012.

Jordan Lake

The B. Everett Jordan Reservoir is a multi-use impoundment operated by the US Army Corps of Engineers formed by the construction of a dam on the Haw River east of Pittsboro in Chatham County, NC. The lake is operated for flood control, water quality, fish and wildlife conservation, recreation, and water supply. There are two arms of the Reservoir—the Haw River and the New Hope Creek. The watershed encompasses 1,686 square miles and includes parts of Alamance, Caswell, Chatham, Durham, Forsyth, Guilford, Orange, Randolph, Rockingham, and Wake counties. The reservoir is considered to be a nutrient sensitive watershed, causing algae blooms, and taste and odor problems in drinking water.

The Jordan Lake Nutrient Management Strategy (“Jordan Lake Rules”) aims to restore and maintain the water quality, protect the lake’s classified uses, and maintain or enhance protections currently implemented by local governments in existing water supply watersheds. The Total Maximum Daily Load for nutrients was established to provide specific limits to the amount of nitrogen and phosphorus entering the lake to control the algae blooms and associated problems. This is being done through a series of rules and regulations aimed at New Development, Existing Development, Agricultural Activities, Fertilizer Management, Riparian Buffers, and Wastewater Discharge activities.

The Local Stormwater Program for New Development is one of a comprehensive set of thirteen rules known as the Jordan Nutrient Strategy. This Strategy is generally designed to reduce excess nutrient impacts, specifically nitrogen and phosphorus, into Jordan Lake to reduce algal growth and other nutrient related water quality problems.

Program Adoption and Effective Date

This New Development Program and Ordinance have been reviewed at a staff level and many of the components of the program are similar (or the same as) NPDES Phase II practices. The program has been reviewed by the Guilford County Environmental Review Board and after EMC approval the program will be reviewed submitted to the planning board and then to the Board of Commissioners for approval. The program will be effective August 01, 2012, dependent upon EMC approval in May, 2012.

Other Stormwater Programs

The Town of Sedalia has implemented a Water Supply Watershed Protection Program since 2000 and the Unified Development Ordinance Article VII Watershed Protection was adopted. Two overlay districts cover the incorporated areas of Town of Sedalia. They are the National Pollutant Discharge Elimination System (NPDES) and the Water Supply Watershed overlays. The Water Supply Watershed area is further divided into the Watershed Critical Area (WCA) and the General Watershed Area (GWA). The WCA covers the portion of the watershed adjacent to a water supply intake or reservoir. The GWA covers the rest of the watershed draining to the reservoir or intake.

The adoption of the Jordan Lake Nutrient Management Strategy by the State in August 2009 and the Jordan Lake Buffer Ordinance adopted October, 2010. The town is exempt from the Phase II National Pollution Discharge Elimination System (NPDES) permitting requirements due to absence of a municipal owned MS4 and concentrated flow of storm water from public streets and properties.

Statement of Riparian Buffer Ordinance Compliance

The town adopted the Jordan Lake Buffer Ordinance based on a State Model in October of 2010. The buffer ordinance was found by the North Carolina Department of Environment and Natural Resources (DNER) to comply with all State requirements.

The town affirms our program and will carry out the review process. This process is described in the town Development Ordinance under the section 7-6.

State and Federal Entities Implementation

The Town of Sedalia DRAFT Jordan Stormwater Ordinance for New Development does not include language that provides for the Town to permit State and Federal projects that do not have an NPDES stormwater permit. The Town of Sedalia will refer State and Federal projects to the Division of Water Quality for permitting under the Jordan State and Federal Rule 15A NCAC 02B.0271.

Area of Applicability

The Guilford County will enforce this ordinance within the incorporated area of Town of Sedalia.

Minimum Qualifications of the Enforcement Official

At a minimum the Enforcement Official will be certified Stormwater Plan Reviewer by the NC Division of Water Quality and /or a graduate of the NC DWQ Surface Water Identification Course. It is preferred that this person is a Professional Engineer with a background in storm water or water resource, but persons with the above qualifications would be considered adequately qualified.

Maintenance and inspection Program

Where BMPs are implemented to achieve compliance with the water supply watershed regulations, the nitrogen and phosphorus loading, and flow attenuation requirements for a development, then the Guilford County is responsible for ensuring that BMPs continue to function for the life of the development. The Guilford County believes that an annual inspection of a BMP by qualified town staff is needed to ensure ongoing performance.

Maintenance of runoff control structures shall be performed at such time as the designated sediment storage volume of the structure has been lost to sediment or a part of the installation is not functioning as originally designed. The Guilford County Planning Department shall have the responsibility to inspect runoff control structures annually, to record the results on forms approved or supplied by the N. C. Division of Water Quality, and to notify the responsible property owner or owner's association when maintenance or repairs are required. All required repairs and maintenance shall be performed within ninety (90) days after such notice. In case of failure by the responsible party to perform the required maintenance or repairs within the stated period, the jurisdiction may perform such maintenance or repairs and recover all costs attendant thereto from the property owner or owner's association.

The Guilford County will maintain a database of BMPs installed to comply with the requirements of the Ordinance, to track activities associated with those BMPs, and to provide the Division of Water Quality access to this information upon request. When runoff control structures serve more than one lot, an owner's association or binding contract for the purpose of maintenance shall be required.

Nutrient Loading Accounting Tool

The Town of Sedalia will use the Jordan/Falls Nutrient Load Accounting Tool as provided in the Jordan Model Program Appendices – Appendix O.

Program Contact and Professional Qualifications

Matt Williams, PE (PE, NCCES Certified for BMP Maintenance & Inspections)
 County of Guilford
 Planning & Development Department
 400 W. Market Street

P.O. Box 3427
Greensboro, NC 27402
E-mail: mwillia5@co.guilford.nc.us
Direct: 336-641-5565
Fax: 336-641-6988

Frank Park, MS, PE (PE, NCCES Certified for BMP Reviewer)
County of Guilford
Planning & Development Department
400 W. Market Street
P.O. Box 3427
Greensboro, NC 27402
E-mail: fpark@co.guilford.nc.us
Direct: 336-641-3753
Fax: 336-641-6988
hall be required.

Forms in Administrative Manual

Forms have been copied from DWQ site and are available for use.

The following is a list of forms included in Appendix C:

- 1 **Operation and Maintenance Agreement**
- 2 **Stormwater Permit Application**
- 3 **Stormwater As-Built Submission Form**
- 4 Watershed Protection Inspection Report
- 5 Bioretention Area Certification
- 6 Bioretention Area Checklist
- 7 Wet Detention Pond Certification
- 8 Wet Detention Pond Checklist
- 9 Sand Filter Certification
- 10 Sand Filter Checklist
- 11 Extended Detention Wetland Certification
- 12 Extended Detention Wetland Checklist

Stormwater devices are to be reviewed as part of a submission for a building permit or a site plan review for a particular development. Operation and Maintenance Agreements will be treated similar to the current process according to the Town of Sedalia Development Ordinance.

STATE OF NORTH CAROLINA Permit No. _____ COUNTY OF GUILFORD

OPERATION AND MAINTENANCE AGREEMENT

THIS AGREEMENT made pursuant to Town of Sedalia Watershed Protection Ordinance and entered into this _____ day of _____, 20___, by and between the TOWN OF SEDALIA, a North Carolina Municipal Corporation, Party of the First Part, hereinafter referred to as "TOWN"; and _____ and _____, Parties of the Second Part, here-in after referred to as "Property Owner".

WITNESSETH:

1. The Property Owner is the owner of certain lands lying in Tax Block _____, Tax Lot _____ as more particularly described in Deed Book _____, Page _____, in the Office of the Register of Deeds of Guilford County, North Carolina upon which it is erecting and will make improvements, said development to be known as _____ (hereinafter the "PROPERTY").

2. The Property Owner desires to build engineered stormwater controls using wet detention ponds and related structures (hereinafter Stormwater Control Structure) to provide storage and treatment of stormwater runoff to serve the development on said Property, as required by the Town of Sedalia Watershed Protection Ordinance (hereinafter the "ORDINANCE").

3. The Property Owner has applied to the TOWN for the issuance of a stormwater permit to construct, maintain and operate the Stormwater Control Structure consistent with the plans and specifications of the Stormwater Control Structure and the Operation and Maintenance Agreement on file at the office of the Enforcement Official and to develop lands within the Lake Mackintosh Watershed.

4. The Property Owner has conveyed unto the Town of Sedalia, or its successors or assigns an Easement and Right-of-Way establishing the right of ingress, egress and regress over the property for the purpose of inspection, repair, or maintenance of the stormwater control structure(s). A description of the area containing the stormwater control structure(s) within a drainage easement is contained within the Deed of Easement filed with the Register of Deeds together with all dedication(s) necessary for access to and from the storm-water control structure(s) and a public street. The detention pond, vegetative filters, all pipes and water control structures, including berms and dikes, and sufficient area to perform inspections, maintenance, repairs and reconstruction together with all Easements and Right-of-Way applying thereto has been described in the Deed of Easement.

5. The TOWN desires to assure that the Stormwater Control Structure(s) on the PROPERTY are properly constructed, maintained and operated in accordance with law, the ORDINANCE, and High

Density Watershed Permit (hereinafter "PERMIT") provisions in order to protect the quality of the waters of the State and the public interest therein.

NOW, THEREFORE, in consideration of the promises and the benefits to be derived by each of the parties hereto, the TOWN and Property Owner do hereby mutually agree as follows:

1. The Property Owner shall construct the Stormwater Control Structure(s) in accordance with the ORDINANCE, PERMIT and plans and specifications hereafter issued and approved by the TOWN; and shall thereafter properly operate and maintain such systems and facilities in accordance with the ORDINANCE, and applicable PERMIT provisions, the plans and specifications of the Stormwater Control Structure(s), the Operation and Maintenance Agreement and State Law.
2. The Property Owner shall not transfer ownership and/or control of any lots until construction of the Stormwater Control Structure has been completed in accordance with the PERMIT and approved plans, and the Guilford County has inspected and the Town's Council has approved of the facilities. In order to change the name of the permit holder, the Property Owner must request that the permit be re-issued to the property owners.
3. The Property Owner shall provide in an Operation and Maintenance Plan that the Stormwater Control Structure, appurtenances and access easements thereto shall thereafter be property maintained and operated in conformity with law and the provisions of the PERMIT for construction, operation, repair and maintenance of the Stormwater Control Structure.
4. The agreements set forth in numbered paragraphs 1,2,3,4,and 5 above shall be conditions of any PERMIT issued by the TOWN to the Property Owner for the construction, maintenance, repair and operation of the Stormwater Control Structure.
5. A copy of this Operation and Maintenance Agreement shall be filed at the Guilford County Register of Deeds and in the office of the Guilford County Planning and Development.

IN WITNESS WHEREOF, the parties have hereto set their hands and seals, this _____ day of _____, 20__:

PARTY OF THE FIRST PART:

TOWN OF SEDALIA

By: _____ Howard J. Morgan, Mayor

ATTESTED TO:

Cam Dungee, Town Administrator/Clerk

PARTY OF THE SECOND PART:

_____(SEAL)

By: _____

ATTESTED TO:(STATE OF NORTH CAROLINA) COUNTY OF GUILFORD

I, _____, a Notary Public of Guilford County, North Carolina, do hereby certify that _____ personally came before me this day and acknowledged that he is the Town Administrator of the Sedalia, a North Carolina municipal corporation, and that by authority duly given as the act of the Town of Sedalia, the foregoing instrument was signed in its name by its Mayor, sealed with its corporate seal and attested by her as its Town Administrator.

Witness my hand and official seal, this the ____ day of _____, 20__.

Notary Public Print/Type Name: _____

My Commission Expires: _____

===== STATE OF NORTH CAROLINA)COUNTY OF _____)

I, _____, a Notary Public of _____ County, North Carolina, do hereby certify that _____, the _____ of _____ personally came before me this day and acknowledged the execution and sealing of the foregoing instrument as _____ on behalf of and as the act of the company referred to in this acknowledgment.

Witness my hand and notarial seal, this the ____ day of _____, 20__.

_____ My Commission Expires: _____ Notary Public
=====

(or, if individual owner)

STATE OF NORTH CAROLINA)

COUNTY OF _____)

I, _____, a Notary Public in and for said County and State, do hereby certify that _____ personally appeared before me this day and acknowledged the execution of the foregoing Deed of Easement.

Witness my hand and notarial seal, this the ____ day of _____, 20__.

_____ My Commission Expires: _____

Notary Public



Guilford County Stormwater Permit Application

Section A. SUMMARY INFORMATION

DEVELOPMENT NAME: _____

LOCATION: _____

PARCEL ID NO.: _____

TOTAL ACRES: _____ TOTAL DWELLING UNITS (if applicable) : _____

TOTAL DU/Acre: _____ % Built Upon Area: _____ TOTAL Built Upon Area: _____

LOW DENSITY (no more than two dwelling units per acre or twenty-four percent built-upon area).

HIGH DENSITY (exceeds the low density thresholds for dwelling units per acre or built-upon area).

Section B. APPLICANT INFORMATION

Owner (Owner or Developer)

Owner: _____ Phone No.: _____

Company: _____ Fax No: _____

Address: _____

_____ Zip: _____

Fax No: _____ Email Address: _____

Consultant (Person to contact regarding questions or revisions to the plan)

Contact Name: _____ Phone No.: _____

Company: _____ Fax No.: _____

Address: _____

_____ Zip: _____

Fax No: _____ Email Address: _____

ALL ITEMS ON THIS APPLICATION MUST BE ADDRESSED PRIOR TO SUBMITTAL. ALL INCOMPLETE SUBMITTALS WILL BE RETURNED.

Section C. REQUIRED ITEMS CHECKLIST

The following checklists outline submittal requirements. Initial in the space provided to indicate the following submittal requirements have been met and supporting documentation is attached.

General Requirements:

Applicant's initials

- _____ 1. Sheets shall be no larger than 36" x 24" plan and profile paper.
- _____ 2. Minimum text size shall be 1/8".
- _____ 3. Scale on plan view shall be no smaller than 1" = 50'; scale on profile view shall be no smaller than 1" = 50' horizontally and 1" = 5' vertically using a grid showing 1' intervals.
- _____ 4. All drawings to be in North Carolina State Plane coordinate system.
- _____ 5. Cover sheet shall have a vicinity map at a scale no smaller than 1" = 200'.
- _____ 6. Provide a legend indicating existing and proposed lines, features and symbols.
- _____ 7. Cover sheet shall include all general notes, owner's name, telephone number, and mailing address.
- _____ 8. All elevations shall be given in relation to mean sea level; elevations in profile view shall be labeled in 10' intervals on the heavy lines (Ex. 350, 360).
- _____ 9. Benchmark elevations and locations shall be shown on plan view.
- _____ 10. Plan views shall have a north arrow on each drawing.
- _____ 11. Each drawing shall have the following information in the title block: Street or project title, limits, horizontal and vertical scales, original date, revisions date, drawing number, checked by and drawn by. Recommended placement is lower right-hand corner.
- _____ 12. All drawings sealed, signed and dated by a NC Professional Engineer.

- _____ 13. A signed and sealed statement on the plans (if a high density project) certifying that the design of all stormwater management facilities and practices will control and treat the runoff from the from the first one inch of rain over the total drainage area, that the designs and plans are sufficient to comply with applicable standards and policies found in the *Stormwater BMP Design Manual*, and that the designs and plans ensure compliance with the County's Stormwater Ordinance.
- _____ 14. Plan view shall show all actual street names. State road numbers shall be shown if applicable. Plan view should also indicate whether street is asphalt, concrete, gravel or dirt. Proposed street & Right-of-way widths will be dimensioned back to-back and labeled in plan view.
- _____ 15. Plan view shall show proposed and existing curb and gutter, pavement, storm sewers, drainage structures, driveway pipes, water mains, sanitary sewer mains, etc. All available elevations shall be shown on the profile view. Direction of flow shall be shown on plan view for all sanitary sewers and storm drains. Materials and pipe sizes shall be labeled.
- _____ 16. Existing utility lines shall be shown and labeled on plan view and indicated in the legend.
- _____ 17. Plans shall show final proposed locations and dimensions of all water, storm drain, and sanitary sewer lines, devices to be installed on the system, catch basins, culverts, ditches, including grades, pipes sizes, elevations, assumptions, calculations, invert elevations for all inlets and manholes and profiles of sanitary sewer lines.
- _____ 18. All existing and proposed water, storm drainage and sanitary sewer easements shall be shown on all applicable sheets.
- _____ 19. Number of dwelling units.
- _____ 20. Existing and proposed topographic lines (minimum 2-foot intervals).
- _____ 21. City limits, county lines, and other jurisdiction lines, if any.
- _____ 22. Streams, ponds, wetlands, etc. on the project site and within 50 feet of the property lines.
- _____ 23. Location of floodplain and floodway (if applicable).
- _____ 24. Location of drainage ways and easements.

Site Drainage Features:

- _____ 25. Existing and planned drainage patterns (include off-site areas that drain through project).
- _____ 26. Any existing stormwater control systems.
- _____ 27. Sub-watershed delineation showing drainage areas.
- _____ 28. Show extent and number of disturbed acres.
- _____ 29. Proposed impervious areas.
- _____ 30. Soil information: type, special characteristics.
- _____ 31. Name and classification of receiving

Permanent Stormwater Control Measures (High Density only):

- _____ 32. Type of BMP (wet pond, rain-garden, etc).
- _____ 33. Designer's certification.
- _____ 34. Narrative description of proposed stormwater system (where runoff originates (e.g. roofs, roads, parking lots etc.), its conveyance within the project, its treatment, and its conveyance from the project to the receiving water body).
- _____ 35. Profile along the centerline of the principal spillway/outfall pipe extending below the protected outfall or to the downstream structure.
- _____ 36. Elevations of the "water quality" surface, temporary storage water surface, and the 10 and 100 year storms.
- _____ 37. Stage-storage table for each BMP.
- _____ 38. If BMP is to be used to treat construction site runoff, provide steps necessary to restore BMP to original design condition.
- _____ 39. All necessary construction specifications.
- _____ 40. Sequence of construction.
- _____ 41. Individual drainage areas for each stormwater BMP.
- _____ 42. Construction drawings and details for permanent measures.
- _____ 43. Size and location of culverts.
- _____ 44. Size and location of subsurface drainage conveyances.
- _____ 45. Disclosure of party ultimately responsible for operation and maintenance of the stormwater system.

Stormwater Calculations:

- _____ 46. Narrative description of calculations (methods, variables, assumptions, etc.) and results.
- _____ 47. Stormwater BMPs designed in accordance with North Carolina Department of the Environment and Natural Resources-Division of Water Quality's *Manual of Stormwater Best Management Practices*.
- _____ 48. Time of concentration for pre/post development conditions
- _____ 49. Pre-construction and post-construction runoff calculations for each outlet from the site (at peak discharge points).
- _____ 50. Pre-construction and post-construction design calculations and hydrographs.

- _____ 51. Design calculations of culverts and storm sewers.
- _____ 52. Discharge and velocity calculations for open channel and ditch flows (easement & right-of-ways).
- _____ 53. Design calcs of cross sections and method of stabilization of existing and planned channels (include temporary linings).
- _____ 54. Design calcs and construction details of energy dissipators below culvert and storm sewer outlets (diameters & apron dimensions).
- _____ 55. Amount and type of existing and proposed land use.

Operation and Maintenance Manual (for each BMP, High Density only):

- _____ 56. Narrative description of the purpose and operation of the BMP.
- _____ 57. Detailed list, description, and procedure of routine maintenance items.
- _____ 58. Detailed list, description, and procedure of non-routine maintenance items.
- _____ 59. Maintenance schedule.
- _____ 60. Steps needed to restore BMP in the event of a failure.
- _____ 61. Maintenance checklist and inspection form.
- _____ 62. BMP construction drawings. Replace with record drawings when BMP is complete.
- _____ 63. Latitude and longitude of each stormwater BMP.

Section D. ATTACHMENTS

- 3 Sets of plans
- 1 set of calculations
- Operation and Maintenance Manual
- Application Fee



Guilford County Stormwater As-built Submission Form

Prior to obtaining a Certificate of Occupancy, the following items must be provided to the Guilford County Enforcement Official for approval. These will be compared to the approved stormwater permit application for any irregularities or non-conformance with the approved plans.

- As-built Drawings (2 paper copies)
- Electronic As-built Drawings (.dwg, or pdf format.)
- Designer's Stormwater BMP Certification

The as-built drawings shall reflect the "as-constructed" condition of the development, and shall include sufficient information to demonstrate conformance with the approved stormwater permit application. Significant deviations from the approved plan shall be considered violations of the Guilford County Stormwater Ordinance and are grounds for the invocation of the injunctions and penalties defined therein, and/or withholding the release of any bond pending the completion of corrective action(s), and/or requiring a submittal of a revised stormwater permit application.

In the event that the Enforcement Official requires submittal of a revised plan, the revision shall include a description of the discrepancies between the site conditions and the prior approved stormwater permit application, along with design calculations that demonstrate that the as-built conditions comply with the Guilford County Stormwater Ordinance. Should the as-built conditions be shown to have a negative impact with regards to flooding, maintenance, erosion or water quality, the Enforcement official has the authority to require other mitigation measures and proposed design plans to mitigate any potential impacts from the development.

Submitted By: _____ Date: _____

(Signature Required)

Print Name: _____

Seal (N.C.P.E. or A.S.L.A.)

WATERSHED PROTECTION INSPECTION REPORT
 Guilford County – Planning & Development Department

The Guilford County Development Ordinance requires that runoff control structures be inspected annually to insure they are being maintained and are functioning as originally designed.

A. General Information:

Project Name: _____	Owner/Contact Name: _____
Date: _____	Address: _____
Index No.: _____	_____
Watershed: _____	_____

B. The following stormwater runoff controls are found at this project site:

- | | | |
|--|--|--|
| Wet Detention Pond
..... Extended Detention Wetland
..... Grassed Swales | _____ Sand Filters
_____ Bio-retention Area
..... Infiltration Devices | _____ WQCE
_____ Stream Buffers: _____ ft
..... Other: |
|--|--|--|

C. THE RESULTS OF THIS YEAR'S INSPECTION ARE AS FOLLOWS:

- VISUAL INSPECTION FOUND NO APPARENT PROBLEMS.
- COMPLETE THE REPAIR AND/OR MAINTENANCE ITEMS INDICATED BELOW WITHIN 90 DAYS OF THIS REPORT:

D. Repair and/or Maintenance Items to be completed within 90 Days:

<p>Ponds/Basins:</p> <p><u>DAM TOP & SLOPES / FACES</u> <u>Type:</u></p> _____ Remove trees & high bushes. _____ Repair eroded areas. _____ Seed bare areas. _____ Repair holes, slides, depressions, cracks. _____ Evidence of seepage, overtopping. _____ Other <hr/> <p><u>EMERGENCY SPILLWAY</u> <u>Type:</u></p> _____ Remove trees and high bushes. _____ Repair eroded areas. _____ Seed bare areas. _____ Repair displaced rip-rap. _____ Remove obstructions from spillway. _____ Enlarge spillway to adequate capacity. _____ Other	<p><u>PRINCIPAL & WQ SPILLWAYS</u> <u>Type:</u></p> _____ Clear obstructed water quality hole or riser. _____ Repair leaking, cracked, deteriorated, collapsed, damaged riser/barrel. _____ Repair leaking, cracked, deteriorated, spalling, damaged concrete spillway _____ Outlet end of barrel is eroded or blocked. _____ Filter rock is clogged. _____ Other <hr/> <p><u>IMPOUNDMENT</u> <u>Type:</u></p> _____ Repair eroded inlet channel and/or drains. _____ Repair eroded slopes. _____ Clean sediment from forebay area. _____ Permanent pool less than 3 feet. Perform pond volume check. _____ Clean clogged filter surface. _____ Other
---	---

E. Additional Comments/Recommendations:

Please notify us when work is complete or if you have questions (336)641-3753.

Inspection by: _____

WATERSHED PROTECTION INSPECTION REPORT
 Guilford County – Planning & Development Department

The Guilford County Development Ordinance requires that runoff control structures be inspected annually to insure they are being maintained and are functioning as originally designed.

A. General Information:

Project Name: _____	Owner/Contact Name: _____
Date: _____	Address: _____
Index No.: _____	_____
Watershed: _____	_____

B. The following stormwater runoff controls are found at this project site:

- | | | |
|--|--|--|
| Wet Detention Pond
..... Extended Detention Wetland
..... Grassed Swales | _____ Sand Filters
_____ Bio-retention Area
..... Infiltration Devices | _____ WQCE
_____ Stream Buffers: _____ ft
..... Other: |
|--|--|--|

C. THE RESULTS OF THIS YEAR'S INSPECTION ARE AS FOLLOWS:

- VISUAL INSPECTION FOUND NO APPARENT PROBLEMS.
- COMPLETE THE REPAIR AND/OR MAINTENANCE ITEMS INDICATED BELOW WITHIN 90 DAYS OF THIS REPORT:

D. Repair and/or Maintenance Items to be completed within 90 Days:

<p>Ponds/Basins:</p> <p><u>DAM TOP & SLOPES / FACES</u> <u>Type:</u></p> _____ Remove trees & high bushes. _____ Repair eroded areas. _____ Seed bare areas. _____ Repair holes, slides, depressions, cracks. _____ Evidence of seepage, overtopping. _____ Other <hr/> <p><u>EMERGENCY SPILLWAY</u> <u>Type:</u></p> _____ Remove trees and high bushes. _____ Repair eroded areas. _____ Seed bare areas. _____ Repair displaced rip-rap. _____ Remove obstructions from spillway. _____ Enlarge spillway to adequate capacity. _____ Other	<p><u>PRINCIPAL & WQ SPILLWAYS</u> <u>Type:</u></p> _____ Clear obstructed water quality hole or riser. _____ Repair leaking, cracked, deteriorated, collapsed, damaged riser/barrel. _____ Repair leaking, cracked, deteriorated, spalling, damaged concrete spillway _____ Outlet end of barrel is eroded or blocked. _____ Filter rock is clogged. _____ Other <hr/> <p><u>IMPOUNDMENT</u> <u>Type:</u></p> _____ Repair eroded inlet channel and/or drains. _____ Repair eroded slopes. _____ Clean sediment from forebay area. _____ Permanent pool less than 3 feet. Perform pond volume check. _____ Clean clogged filter surface. _____ Other
---	---

E. Additional Comments/Recommendations:

Please notify us when work is complete or if you have questions (336)641-3753.

Inspection by: _____

Bioretention Area
Record of Construction
Engineer's Statement of Completion

Project: _____ Date: _____

	<u>Description</u>	<u>Design</u>	<u>As-built</u>
1.	Surface area		
2.	Elevations of the following:		
a.	Bottom of planting soil		
b.	Top of planting soil		
c.	Top of mulch layer		
3.	Emergency spillway or top of berm – base width and elevation		
4.	Ponding depth (3 - 2c)		
5.	Runoff volume captured (1 x 4)		
6.	Underdrain system:		
a.	Size and type of material		
b.	Number of lines		
c.	Invert elevation of underdrain		
d.	Invert elevation of outflow pipe at outlet		
7.	Planting soil (attach soil test reports)		
a.	Depth (2b - 2a)		
b.	Percentage clay		
c.	Percentage silt		
d.	Percentage sand		
e.	Percentage of organic material		
f.	pH		
8.	Plants:		
a.	Number of trees		
b.	Number of shrubs		
c.	Groundcover (if applicable)		

ENGINEER'S STATEMENT OF COMPLETION

I state to the best of my knowledge and belief that the permanent runoff control structure
for _____ is duly recorded in the Office of the Guilford County Register of Deeds and has been
(name of plat)
completed in conformance with the approved plans and specifications dated _____
(approval date)

SIGNATURE _____

DATE _____

(P.E. SEAL)

PROJECT: _____

DATE: _____

**BIORETENTION AREA
CONSTRUCTION PLAN CHECKLIST**

GENERAL INFORMATION:

- _____ BIO-CELL LOCATION
- _____ EX. & PROP. TOPOGRAPHY
- _____ ACCESS & MAINTENANCE EASEMENT
- _____ VICINITY MAP
- _____ NORTH ARROW & GRAPHIC SCALE
- _____ PE SEAL & SIGNATURE

- _____ COORD. WITH CITY REQUIREMENTS
- _____ UTILITY CONFLICTS
- _____ 100 YR. FLOODPLAIN
- _____ LABEL CELL "PERMANENT BIORETENTION AREA"
- _____ CERTIFICATION OF RUNOFF CONTROL
- _____ ENGINEER - NAME, ADDRESS, TELEPHONE
- _____ OWNER - NAME, ADDRESS, TELEPHONE

CELL DESIGN:

- _____ DRAINAGE AREA < 5 ACRES
- _____ LAYOUT DIMENSIONS
- _____ CROSS SECTION
- _____ SURFACE AREA
- _____ PONDING DEPTH (6" MAXIMUM)
- _____ RUNOFF VOLUME CAPTURED
- _____ HARDWOOD MULCH (2"-3", SHREDDED, AGED)
- _____ WATER TABLE 2' BELOW BOTTOM OF CELL
- _____ DIVERSION DITCHES

- _____ INLET PROTECTION
- _____ BYPASS OUTLET
- _____ OUTLET PROTECTION
- _____ SLOPE ON EMBANKMENT (3:1 MIN.)
- _____ 10" BENCH FOR MAINT. AROUND FILTER
- _____ UNDERDRAIN SYSTEM (SIZE & TYPE OF MATERIAL)
- _____ NUMBER OF UNDERDRAIN LINES
- _____ GRAVEL ENVELOPE 2" OVER UNDERDRAIN

PLANTS:

- _____ HERBACIOUS GROUND COVER
- _____ TREE DENSITY (100 TREES PER ACRE)
- _____ SHRUB DENSITY (300 SHRUBS PER ACRE)
- _____ SIZE REQUIREMENTS MET
- _____ PLANT SPECIES

PLANTING SOIL:

- _____ DEPTH
- _____ CLAY (15% MAXIMUM)
- _____ SILT (25% MAXIMUM)
- _____ SAND (65% - 75%)
- _____ ORGANIC MATERIAL (0 - 10%)
- _____ Ph (5.5 - 6.5)

NOTES:

- _____ POND MAINTENANCE RESPONSIBILITY
- _____ PRECONSTRUCTION MEETING
- _____ FULL DESIGN VOLUME

- _____ PE CERTIFICATION OF COMPLETION
- _____ RIGHT OF ACCESS FOR INSPECTION

OTHER:

- _____ OPERATION & MAINTENANCE MANUAL
- _____ SPECIFICATIONS
- _____ OTHER PERMITS (WETLAND, FLOODPLAIN, DAM SAFETY)

COMMENTS:

Wet Detention Pond
Record of Construction
Engineer's Statement of Completion

Project: _____

Date: _____

	<u>Description</u>	<u>Design</u>		<u>As-built</u>	
1	Slope of embankments (3:1)				
2	Elevations on the following:				
a	Bottom of pond				
b	Bottom of riser				
c	Top of riser				
d	Water quality hole				
e	Invert of inflow and outflow pipes				
3	Top of dam: Elevation and width				
4	Width of maintenance benches				
5	Anti-seep collars - size				
6	Size and material of riser/barrel				
7	Verification of volume:				
a	Permanent Sediment Storage (CF)				
b	Permanent Water Quality (SF)				
c	Temporary Water Quality (CF)				
8	Baffle location and top elevation				
9	Emergency Spillway - Width and Elevation				
10	Waterstops installed (if applicable)				
11	Reinforcing according to plan (if applicable)				
12	Size of footing (if applicable)				

ENGINEER'S STATEMENT OF COMPLETION

I state to the best of my knowledge and belief that the permanent runoff control structure for _____ is duly recorded in the Office of the Guilford County Register of Deeds and has
(name of plat)
 been completed in conformance with the approved plans and specifications dated _____.
(approval date)

SIGNATURE _____

DATE _____

(P.E. SEAL)

PROJECT: _____ DATE: _____

WET DETENTION POND CONSTRUCTION PLAN CHECKLIST

GENERAL INFORMATION:

- | | |
|--|--|
| <input type="checkbox"/> POND LOCATION | <input type="checkbox"/> COORD. WITH CITY REQUIREMENTS |
| <input type="checkbox"/> EX. & PROP. TOPOGRAPHY | <input type="checkbox"/> UTILITY CONFLICTS |
| <input type="checkbox"/> ACCESS & MAINTENANCE EASEMENT | <input type="checkbox"/> 100 YR. FLOODPLAIN |
| <input type="checkbox"/> VICINITY MAP | <input type="checkbox"/> POND LABEL |
| <input type="checkbox"/> NORTH ARROW & GRAPHIC SCALE | <input type="checkbox"/> CERTIFICATION OF RUNOFF CONTROL |
| <input type="checkbox"/> PE SEAL & SIGNATURE | <input type="checkbox"/> ENGINEER - NAME, ADDRESS, TELEPHONE |
| | <input type="checkbox"/> OWNER - NAME, ADDRESS, TELEPHONE |

POND DESIGN:

- | | |
|---|--|
| <input type="checkbox"/> LAYOUT DIMENSIONS | <input type="checkbox"/> TRASH RACK |
| <input type="checkbox"/> CROSS SECTION | <input type="checkbox"/> W. Q. RELEASE HOLE |
| <input type="checkbox"/> SEDIMENT STORAGE | <input type="checkbox"/> TRASH GUARD FOR WQ HOLE |
| <input type="checkbox"/> PERMANENT WATER QUALITY | <input type="checkbox"/> ANTISEEP COLLAR (BAR. DIA. + 4 FT.) |
| <input type="checkbox"/> TEMPORARY WATER QUALITY | <input type="checkbox"/> COLLAR LOCATED DOWNSTR. OF DAM CL |
| <input type="checkbox"/> PRINCIPAL SPILLWAY | <input type="checkbox"/> FLANGE JOINTS W/ GASKET(CAP) OR O-RING(RCP) |
| <input type="checkbox"/> EMERGENCY SPILLWAY | <input type="checkbox"/> CUT-OFF TRENCH (4' WIDTH) |
| <input type="checkbox"/> INLET & OUTLET VELOCITY PADS | <input type="checkbox"/> CL OF TRENCH @ CL OF DAM |
| <input type="checkbox"/> FLOTATION OF RISER | <input type="checkbox"/> SLOPE ON EMBANKMENT (3:1 MIN.) |
| <input type="checkbox"/> RIP-RAP BAFFLE | <input type="checkbox"/> 10' BENCH FOR MAINT. AROUND POND |
| <input type="checkbox"/> POND DRAIN W/ HANDLE | <u>CONCRETE CONSTRUCTION:</u> |
| <input type="checkbox"/> 50' SEPARATION FROM WELL | <input type="checkbox"/> THICKNESS OF SLAB OR WALL |
| <input type="checkbox"/> 50' SEPARATION FROM SEPTIC | <input type="checkbox"/> REINFORCING |
| | <input type="checkbox"/> STRENGTH OF CONCRETE |
| | <input type="checkbox"/> WATERSTOPS |
| | <input type="checkbox"/> JOINT SPACING |

NOTES:

- | | |
|--|---|
| <input type="checkbox"/> POND MAINTENANCE RESPONSIBILITY | <input type="checkbox"/> PE CERTIFICATION OF COMPLETION |
| <input type="checkbox"/> PRECONSTRUCTION MEETING | <input type="checkbox"/> RIGHT OF ACCESS FOR INSPECTION |
| <input type="checkbox"/> FULL DESIGN VOLUME | |

OTHER:

- | | |
|---|---|
| <input type="checkbox"/> OPERATION & MAINTENANCE MANUAL | <input type="checkbox"/> SPECIFICATIONS |
| <input type="checkbox"/> OTHER PERMITS (WETLAND, FLOODPLAIN,
DAM SAFETY) | |

COMMENTS:

Sand Filter
Record of Construction
Engineer's Statement of Completion

Project: _____ Date: _____

	Description	Design	As-built
1	Sediment Chamber:		
a	Bottom Elevation		
b	Depth of Chamber		
c	Surface Area		
d	Volume		
2	Weir Elevation		
3	Sand Chamber:		
a	Top of Sand Elevation		
b	Depth of Sand		
c	Surface Area		
d	Volume		
e	Sand Particle Size		
4	Underdrain System:		
a	Size and type of perforated pipe		
b	Number of lines		
c	Invert elevation of underdrain		
d	Invert elevation of outflow pipe at outlet		
5	Dissipator Pad, Length and Width		

ENGINEER'S STATEMENT OF COMPLETION

I state to the best of my knowledge and belief that the permanent runoff control structure for _____ is duly recorded in the Office of the Guilford County Register of Deeds and has been completed in conformance with the approved plans and specifications dated _____.

(name of plat) *(approval date)*

SIGNATURE _____

DATE _____

(P.E. SEAL)

PROJECT: _____ DATE: _____

**SAND FILTER
CONSTRUCTION PLAN CHECKLIST**

GENERAL INFORMATION:

- | | |
|--|--|
| <input type="checkbox"/> FILTER LOCATION | <input type="checkbox"/> COORD. WITH CITY REQUIREMENTS |
| <input type="checkbox"/> EX. & PROP. TOPOGRAPHY | <input type="checkbox"/> UTILITY CONFLICTS |
| <input type="checkbox"/> ACCESS & MAINTENANCE EASEMENT | <input type="checkbox"/> 100 YR. FLOODPLAIN |
| <input type="checkbox"/> VICINITY MAP | <input type="checkbox"/> FILTER LABEL |
| <input type="checkbox"/> NORTH ARROW & GRAPHIC SCALE | <input type="checkbox"/> CERTIFICATION OF RUNOFF CONTROL |
| <input type="checkbox"/> PE SEAL & SIGNATURE | <input type="checkbox"/> ENGINEER - NAME, ADDRESS, TELEPHONE |
| | <input type="checkbox"/> OWNER - NAME, ADDRESS, TELEPHONE |

FILTER DESIGN:

- | | |
|--|---|
| <input type="checkbox"/> DRAINAGE AREA < 5AC. | <input type="checkbox"/> UNDERDRAIN LINE W/ SOCK OR GRAVEL JACKET |
| <input type="checkbox"/> LAYOUT DIMENSIONS | <input type="checkbox"/> 6" MAX. UNDERDRAIN |
| <input type="checkbox"/> CROSS SECTION | <input type="checkbox"/> MIN. 12" SAND OVER UNDERDRAIN |
| <input type="checkbox"/> SEDIMENT CHAMBER VOLUME | <input type="checkbox"/> DIVERSION DITCHES NEEDED |
| <input type="checkbox"/> SEDIMENT CHAMBER SURFACE AREA | <input type="checkbox"/> TOP OF SAND 2" - 6" BELOW WEIR |
| <input type="checkbox"/> SEDIMENT CHAMBER DEPTH | <input type="checkbox"/> SLOPE ON EMBANKMENT (3:1 MIN.) |
| <input type="checkbox"/> SAND CHAMBER VOLUME | <input type="checkbox"/> 10' BENCH FOR MAINT. AROUND FILTER |
| <input type="checkbox"/> SAND CHAMBER SURFACE AREA | <input type="checkbox"/> INLET PROTECTION |
| <input type="checkbox"/> SAND CHAMBER DEPTH | |

CONCRETE CONSTRUCTION:

- | |
|--|
| <input type="checkbox"/> THICKNESS OF SLAB OR WALL |
| <input type="checkbox"/> REINFORCING |
| <input type="checkbox"/> STRENGTH OF CONCRETE |
| <input type="checkbox"/> WATERSTOPS |
| <input type="checkbox"/> JOINT SPACING |

NOTES:

- | | |
|---|---|
| <input type="checkbox"/> SAND FILTER MAINTENANCE RESPONSIBILITY | <input type="checkbox"/> PE CERTIFICATION OF COMPLETION |
| <input type="checkbox"/> PRECONSTRUCTION MEETING | <input type="checkbox"/> RIGHT OF ACCESS FOR INSPECTION |
| <input type="checkbox"/> FULL DESIGN VOLUME | |

OTHER:

- | | |
|---|---|
| <input type="checkbox"/> OPERATION & MAINTENANCE MANUAL | <input type="checkbox"/> SPECIFICATIONS |
| <input type="checkbox"/> OTHER PERMITS (WETLAND, FLOODPLAIN,
DAM SAFETY) | |

COMMENTS:

Extended Detention Wetland
Record of Construction
Engineer's Statement of Completion

Project: _____

Date: _____

	Description	Design		As-built	
1	Slope of embankments (3:1)				
2	Elevations on the following:				
a	Bottom of pond				
b	Bottom of riser				
c	Top of riser				
d	Water quality hole				
e	Invert of inflow and outflow pipes				
3	Top of dam: Elevation and width				
4	Width of maintenance benches				
5	Anti-seep collars - size				
6	Size and material of riser/barrel				
7	Verification of volume:				
a	Permanent Sediment Storage (CF)				
b	Permanent Water Quality (SF)				
b(i)	Perm. Pool 0" – 18" (Surf. Area)				
b(ii)	Perm. Pool 0" – 9" (Surf. Area)				
b(iii)	Perm. Pool 9" – 18" (Surf. Area)				
c	Temporary Water Quality (CF)				
8	Pool @ Principal Spillway				
9	Micropool (SF)				
10	Emergency Spillway - Width and Elevation				

ENGINEER'S STATEMENT OF COMPLETION

I state to the best of my knowledge and belief that the permanent runoff control structure for _____ is duly recorded in the Office of the Guilford County Register of Deeds and has
 (name of plat)
 been completed in conformance with the approved plans and specifications dated _____.
 (approval date)

SIGNATURE _____

DATE _____

(P.E. SEAL)

PROJECT: _____ DATE: _____

**EXTENDED DETENTION WETLAND
CONSTRUCTION PLAN CHECKLIST**

GENERAL INFORMATION:

- | | |
|--|--|
| <input type="checkbox"/> WETLAND LOCATION | <input type="checkbox"/> COORD. WITH CITY REQUIREMENTS |
| <input type="checkbox"/> EX. & PROP. TOPOGRAPHY | <input type="checkbox"/> UTILITY CONFLICTS |
| <input type="checkbox"/> ACCESS & MAINTENANCE EASEMENT | <input type="checkbox"/> 100 YR. FLOODPLAIN |
| <input type="checkbox"/> VICINITY MAP | <input type="checkbox"/> LABEL AS PERM. EXTENDED DETENTION WETLAND |
| <input type="checkbox"/> NORTH ARROW & GRAPHIC SCALE | <input type="checkbox"/> CERTIFICATION OF RUNOFF CONTROL |
| <input type="checkbox"/> PE SEAL & SIGNATURE | <input type="checkbox"/> ENGINEER - NAME, ADDRESS, TELEPHONE |
| | <input type="checkbox"/> OWNER - NAME, ADDRESS, TELEPHONE |

POND DESIGN:

- | | |
|---|--|
| <input type="checkbox"/> LAYOUT DIMENSIONS | <input type="checkbox"/> TRASH RACK |
| <input type="checkbox"/> DRAINAGE AREA > 10 ACRES | <input type="checkbox"/> W. Q. RELEASE HOLE |
| <input type="checkbox"/> CROSS SECTION | <input type="checkbox"/> TRASH GUARD FOR WQ HOLE |
| <input type="checkbox"/> SEDIMENT STORAGE (FOREBAY) | <input type="checkbox"/> ANTISEEP COLLAR (BAR. DIA. + 4 FT.) |
| <input type="checkbox"/> PERMANENT WATER QUALITY (3' PRM. POOL) | <input type="checkbox"/> COL. LOCATED DOWNSTR. OF DAM CL |
| <input type="checkbox"/> PERM. POOL 0" - 18" (70% SA) | <input type="checkbox"/> FLANGE JOINTS W/ GASKET(CAP) OR O-RING(RCP) |
| <input type="checkbox"/> PERM. POOL 0" - 9" (35% SA) | <input type="checkbox"/> CUT-OFF TRENCH (4' WIDTH) |
| <input type="checkbox"/> PERM. POOL 9" - 18" (35% SA) | <input type="checkbox"/> CL OF TRENCH @ CL OF DAM |
| <input type="checkbox"/> TEMPORARY WATER QUALITY | <input type="checkbox"/> SLOPE ON EMBANKMENT (3:1 MIN.) |
| <input type="checkbox"/> PRINCIPAL SPILLWAY | <input type="checkbox"/> 10' BENCH FOR MAINT. AROUND POND |
| <input type="checkbox"/> EMERGENCY SPILLWAY | <input type="checkbox"/> PLANTING PLAN & SCHEDULE |
| <input type="checkbox"/> INLET & OUTLET VELOCITY PADS | <input type="checkbox"/> POND BUFFER > 30' |
| <input type="checkbox"/> FLOTATION OF RISER | <input type="checkbox"/> 50' SEPARATION FROM WELL |
| <input type="checkbox"/> MICROPOOL (15% SURFACE AREA) | <input type="checkbox"/> 50' SEPARATION FROM SEPTIC FIELD |
| <input type="checkbox"/> POND DRAIN W/ HANDLE | |

NOTES:

- | | |
|--|---|
| <input type="checkbox"/> POND MAINTENANCE RESPONSIBILITY | <input type="checkbox"/> PE CERTIFICATION OF COMPLETION |
| <input type="checkbox"/> PRECONSTRUCTION MEETING | <input type="checkbox"/> RIGHT OF ACCESS FOR INSPECTION |
| <input type="checkbox"/> FULL DESIGN VOLUME | |

OTHER:

- | | |
|---|---|
| <input type="checkbox"/> OPERATION & MAINTENANCE MANUAL | <input type="checkbox"/> SPECIFICATIONS |
| <input type="checkbox"/> OTHER PERMITS (WETLAND, FLOODPLAIN,
DAM SAFETY) | |

COMMENTS:

2.1 DEFINITIONS

2-1.2. Drainage and Watershed Protection.

- (A) APPROVED ACCOUNTING TOOL. The accounting tool for nutrient loading approval by the EMC for the relevant geography and development type under review.
- (BA) BEST MANAGEMENT PRACTICE (BMP). A structural or nonstructural management-based practice used singularly or in combination to reduce nonpoint source inputs to receiving waters in order to achieve water quality protection goals.
- (CB) BUILT-UPON AREA (BUA). That portion of a development project that is covered by impervious or partially impervious cover including buildings, pavement, gravel (for pedestrian or vehicular use), recreation facilities (e.g. tennis courts), etc. ~~(Note: Wooden slatted decks and the water area of a swimming pool are not considered built-upon area.)~~ “Built-upon area” does not include a wooden slatted deck, the water are of a swimming pool, or pervious or partially pervious paving material to the extent that the paving material absorbs water or allows water to infiltrate through the paving material. The project site or area must exclude any land adjustment to the area disturbed by the project that has been counted as pervious by any other development regulated under a federal, state or local stormwater regulation.
- (D) COMMISSION. The North Carolina Enviromental Management Commission.
- (E) DEPARTMENT. The North Carolina Department of Environment and Natural Resources.
- (F) DESIGN MANUAL. The stormwater design manual approved for use in this part of the Jordan Watershed and Water Supply Watershed by the Department for the proper implementation of the requirement of the Jordan Watershed and Water Supply Watershed by the Department for the proper implementation of the requirements of the Jordan Watershed and Water Supply Watershed Stormwater program. All references herein to the Design Manual are to the latest published edition or revision.
- (GE) DEVELOPMENT. Any land-disturbing activity which adds to or changes the amount of built-upon area or otherwise decreases the infiltration of precipitation into the soil. (This definition applies only with respect to watershed protection regulations.)
- ~~(D) — DEVELOPMENT, EXISTING. Those projects that are built and those projects that, at a minimum, have established a vested right under N.C. zoning law prior to the implementation of applicable stormwater regulations, based on at least one of the following criteria: 1) substantial expenditure of resources (time, labor, money) based on a good faith reliance upon having received a valid local government approval to proceed with the project; or 2) having a valid outstanding building permit; or 3) having expended substantial resources (time, labor, money) and having an approved site specific (or phased) development plan in compliance with NCGS 153A-344.1 or NCGS 160A-385.1. (This definition applies only with respect to watershed protection regulations.)~~
- (HE) DISCHARGING LANDFILL. A facility with liners, monitoring equipment, and other measures to detect and/or prevent leachate from entering the environment and in which the leachate is treated on site and discharged to a receiving stream. These facilities require approval and a discharge permit from the N.C. Department of Environmental Management for legal operation.
- (IF) DRAINAGEWAY AND OPEN SPACE EASEMENT. Land designated for use as an open channel conveying the flow from a one-hundred year storm event and for use as open space. Granting of the easement does not transfer title. Drainageway and open space shall be left in its

natural condition or graded to a section approved by the Jurisdiction which will allow economical and efficient maintenance and shall be stabilized with permanent vegetative cover. The area within the easement can be included in the gross property area used for calculation of density of development. w-32

- (JG) DRAINAGE, REQUIRED CHANNEL. The theoretical stream bed section which is required to carry and discharge the runoff from a one-hundred-year storm.
- (KH) DRAINAGE, TYPICAL REQUIRED CHANNEL SECTION. A cross-sectional view of a required drainage channel.
- (L) DRAINAGEWAY. Any natural or manmade channel that carries surface runoff from precipitation.
- (M) ENGINEERED STORMWATER CONTROL. A physical device designed to trap, settle out, or filter pollutants from stormwater runoff; to alter or reduce stormwater runoff velocity, amount, timing, or other characteristics; to approximate the pre-development hydrology on a developed site; or to achieve any combination of these goals. Engineered stormwater control includes physical practices such as constructed wetlands, vegetative practices, filter strips, grassed swales, and other methods installed or created on real property. "Engineered stormwater control" is synonymous with "structural practice," "stormwater control facility," "stormwater control practice," "stormwater treatment practice," "stormwater management practice," "stormwater control measures," "structural stormwater treatment systems," and similar terms used in this ordinance.
- (N) EXISTING DEVELOPMENT. Development not otherwise exempted by this ordinance that meets one of the following criteria:
(a) It either is built or has established a statutory or common-law vested right as of the effective date of this ordinance; or
(b) It occurs after the effective date of this ordinance, but does not result in a net increase in built-upon area and does not decrease the infiltration of precipitation into the soil.
- (O) HAZARDOUS MATERIAL. Any material listed as such in: Superfund Amendments and Reauthorization Act (SARA) Section 302 Extremely Hazardous Substances (42 USC 1100 et seq.); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Hazardous Substances (42 USC 9601 et seq.); or Section 311 of the Clean Water Act, as amended (CWA) (33 USC 1251 et seq.; oil and hazardous substances) hereby incorporated by reference including any subsequent amendments and editions.
- (PK) HIGH DENSITY OPTION. A density or intensity option for development wherein the density or intensity exceeds the applicable limit for development under the Low Density Option (see Performance Tables in Article VII), thereby imposing a requirement for engineered stormwater controls (runoff control structures) in conformance with the requirements of Article VII (Environmental Regulations) of this Ordinance.
- (Q) LAND DISTURBING ACTIVITY. Any use of the land that results in a change in the natural cover or topography that may cause or contribute to sedimentation.
- (R) LARGER COMMON PLAN OF DEVELOPMENT, REDEVELOPMENT OR SALE: Any area where multiple separate and distinct construction or land-disturbing activities will occur under one plan. A plan is any announcement or piece of documentation (including but not limited to a sign, public notice or hearing, sales pitch, advertisement, loan application, drawing, permit application, zoning request, or computer design) or physical demarcation (including but not

limited to boundary signs, lot stakes, or surveyor markings) indicating that construction activities may occur on a specific plot. **W-33**

- (~~SL~~) **LOW DENSITY OPTION.** A density or intensity option for development wherein the density, expressed in dwelling units per acre, and/or the intensity, expressed in percentage of the land surface covered by built-upon area, does not exceed certain limits established in Article VII of this Ordinance. The limits vary depending upon the classification of the watershed and upon which overlay zone. Stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable.
- (~~T~~) **MAJOR VARIANCE.** A variance from the minimum statewide watershed protection or Jordan rules that results in the relaxation, by a factor greater than five percent of any buffer, density or built-upon area requirement under the high density option; any variation in the design, maintenance or operation requirements of a wet detention pond or other approved stormwater management system; or relaxation by a factor greater than 10 percent, of any management requirement under the low density option. For provisions in this ordinance that are more stringent than the state's minimum water supply protection rules and Jordan rules, a variance to this ordinance is not considered a major variance as long as the result of the variance is not less stringent than the state's minimum requirements.
- (~~U~~) **MINOR VARIANCE.** A variance from the minimum statewide watershed protection or Jordan rules that results in a relaxation, by a factor of up to five percent of any buffer, density or built-upon area requirement under the high density option; or that results in a relaxation by a factor up to 10 percent, of any management requirement under the low density option.
- (~~V~~) **NEW DEVELOPMENT.** Any development project that does not meet the definition of existing development set out in this Ordinance.
- (~~W~~) **ONE-YEAR, 24-HOUR STORM.** The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in 12 months and with a duration of 24 hours.
- (~~Y~~) **OWNER.** The legal or beneficial owner of land, including but not limited to a mortgagee or vendee in possession, receiver, executor, trustee, or long-term or commercial lessee, or any other person or entity holding proprietary rights in the property or having legal power of management and control of the property. "Owner" shall include long-term commercial tenants; management entities, such as those charged with or engaged in the management of properties for profit; and every person or entity having joint ownership of the property. A secured lender not in possession of the property does not constitute an owner, unless the secured lender is included within the meaning of "owner" under another description in this definition, such as a management entity.
- (~~ZM~~) **PERENNIAL AND INTERMITTENT STREAM.** Streams, with associated lakes and ponds, that are indicated as such on the following:
- 1) On the most recent version of the United States Geological Survey 1:24000 scale (7.5 minute quadrangle) topographical map;
 - 2) On the most recent version of the Soil Survey of Guilford County developed by the USDA--Natural Resource Conservation Service (formerly United States Department of Agricultural-Soil Science Service); or
 - 3) By examination of site-specific evidence that indicates to the Enforcement Officer (using criteria approved by the N.C. Division of Water Quality) the presence of waters not shown on either of these two maps or, evidence that no actual stream or water body exists.
- (~~AA~~) **PERSON.** Includes, without limitation, individuals, firms, partnerships, associations institutions, corporations, municipalities and other political subdivisions, and governmental agencies.

- (~~ABN~~) REDEVELOPMENT. Any development on previously-developed land. Redevelopment of structures or improvements that (i) existed prior to December 2001 and (ii) would not result in an increase in built-upon area and (iii) provides stormwater control at least equal to the previous development is not required to meet the nutrient loading targets of this ordinance.
- (~~ACQ~~) SLUDGE. Any solid or semisolid waste generated from a wastewater treatment plant, water treatment plant, or air pollution control facility permitted under authority of the N.C. Environmental Management Commission.
- (~~ADP~~) STORM DRAINAGE FACILITIES. The system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey stormwater through and from a given drainage area.
- (~~AEQ~~) STORM, TEN (10)--YEAR. The surface runoff resulting from a rainfall of an intensity that has a ten (10) percent chance of being equaled or exceeded in any given year and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.
- (~~AFR~~) STORM, ONE-HUNDRED (100)-YEAR. The surface runoff resulting from a rainfall of an intensity that has a one (1) percent chance of being equaled or exceeded in any given year and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.
- (~~AGS~~) STORMWATER RUNOFF. The direct runoff of water resulting from precipitation in any form.
- (~~AHT~~) STREAM. A watercourse that collects surface runoff.
- (~~AIU~~) STREAM BUFFER. A natural or vegetated area through which stormwater runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants. The buffer width is measured landward from the normal pool elevation of impoundments and from the top of bank of each side of streams or rivers. (This definition applies only with respect to watershed protection regulations.)
- (~~AJV~~) SUBSTANTIALLY COMPLETED. Work has progressed to the point that, in the opinion of the Enforcement Officer, it is sufficiently completed in accordance with the approved plans and specifications that the work can be utilized for its intended purposes. For permanent runoff control structures this generally means that the following have been accomplished: 1) the dam has been constructed to the approved lines and grades; 2) all slopes have been fine graded, seeded, mulched, fertilized, and tacked to establish permanent ground cover; 3) principal and emergency spillways have been installed at the approved elevations and dimensions; and 4) permanent velocity controls on the inlet and outlet pipes and channels have been installed.
- (~~AK~~) SUBSTANTIAL PROGRESS. For the purposes of determining whether sufficient progress has been made on an approved plan, one or more of the following construction activities toward the completion of a site or subdivision plan shall occur: obtaining a grading permit and conducting grading activity on a continuous basis and not discontinued for more than thirty (30) days; or installation and approval of on-site infrastructure; or obtaining a building permit for the construction and approval of a building foundation. "Substantial progress" for purposes of determining whether an approval plan is null and void is not necessarily the same as "substantial expenditures" used for determining vested rights pursuant to applicable law.

~~VARIANCE, MAJOR WATERSHED. Variance of the existing regulations that does not meet the definition of a Minor Watershed Variance. The North Carolina Environmental Management Commission is designated to rule on all major watershed variance requests.~~ **W-35**

~~VARIANCE, MINOR WATERSHED. Variance of the existing regulations that meets one of the following criteria: (A) Variance of any standard present in the Ordinance but not in the State Water Supply Watershed Protection Rules; (B) Variance of any standard on which the level of performance required by the Ordinance exceeds that required by the corresponding section of the State Water Supply Watershed Protection Rules, provided that approval of the variance does not lower the level of performance below that required by the State regulations; (C) Variance of the State Water Supply Watershed Protection Regulations by a factor of up to five (5) percent under the high density option or ten (10) percent under the low density option of any standard expressed as a number; or (D) Variance to National Pollutant Discharge Elimination System (NPDES) standards.~~

~~(ALK) VELOCITY. 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.~~

~~(AMZ) WATER DEPENDENT STRUCTURES. Structures for which the use requires access or proximity to or siting within surface waters to fulfill its basic purpose, such as boat ramps, boat houses, docks, and bulkheads. Ancillary facilities such as restaurants, outlets for boat supplies, parking lots, and commercial boat storage areas are not water dependent structures.~~

~~(ANAA) WATERSHED, WATER SUPPLY. The entire area contributing drainage to Lake Townsend, Lake Brandt, Lake Higgins, Oak Hollow Lake, High Point City Lake, Polecat Creek Lake, Reidsville Reservoir, Lake Mackintosh, Ramseur Reservoir, Madison intake, and the Randleman Dam reservoir.~~

~~(AOAB) WATERSHED CRITICAL AREA. That portion of the watershed within the lake basin of the water supply reservoir as delineated in Article VII (Environmental Regulations).~~

~~(Amd. of 4-21-05; Case No. 5-06, 1-18-07; Case No. 5-08, 11-19-09)~~

7-1. STORMWATER MANAGEMENT/WATERSHED PROTECTION DISTRICTS

7-1.1. District Descriptions.

Two ~~Three~~ overlay districts cover the incorporated areas of Sedalia. They are the National Pollutant Discharge Elimination System (NPDES), ~~Jordan Lake Watershed~~ and the Water Supply Watershed overlays. The Water Supply Watershed area is further divided into the Watershed Critical Area (WCA) and the General Watershed Area (GWA). The WCA covers the portion of the watershed adjacent to a water supply intake or reservoir. The GWA covers the rest of the watershed draining to the reservoir or intake.

7-1.2. Incorporation of Designated Water Supply Watershed/NPDES Phase II Stormwater Map of Guilford County, North Carolina.

The provisions of this Ordinance shall apply to all incorporated areas of Sedalia, as shown on the map titled "Designated Water Supply Watershed/NPDES Phase II Stormwater Map of Guilford County, North Carolina" ("the Stormwater Map") ~~and "Jordan Watershed Stormwater Map of the Town of Sedalia, North Carolina"~~, which is adopted simultaneously herewith. The Stormwater Map and all explanatory matter contained thereon accompanies, and is hereby made a part of, this Ordinance.

The Stormwater Map shall be kept on file by the Enforcement Officer and shall be updated to take into account changes in the land area covered by this Ordinance and the geographic location of all structural BMPs permitted under this Ordinance. In the event of a dispute, the applicability of this Ordinance to a particular area of land or BMP shall be determined by reference to the North Carolina Statutes, the North Carolina Administrative Code, and local zoning and jurisdictional boundary maps and the Sedalia Development Ordinance.

7-1.3. Applicability.

(A) Coverage:

- 1) Sections 7-1 and 7-2 apply to all sites in Sedalia's planning jurisdiction unless specifically exempted pursuant to item (B) of this section.
- 2) The construction of new streets by local government shall comply with best management practices developed in response to the NCDOT's EPA-NPDES Stormwater Management Program which is incorporated herein by reference.
- 3) Widening of existing streets and the installation of sidewalks shall comply with the provisions of this Ordinance to the extent practicable. When determined by the Enforcement Officer, or designee that the provisions of these sections cannot be met, the widening of existing streets and the installation of sidewalks shall comply with best management practices developed in response to the NCDOT's EPA-NPDES Stormwater Management Program which is incorporated herein by reference.

(B) *Exempt Activities:* The following activities are exempt from the Stormwater Management/Watershed Development requirements of this Section. However, any restrictions upon building location, drainageways, pavement or other built-upon area, or any other matter appearing on any previously approved Stormwater Management/Watershed Development plan covering the subject property shall be complied with unless and until replaced by an approved revised plan.

- 1) Construction of a single family dwelling and its accessory structures on a legal lot of record established prior to the regulations for the watershed protection district. This exemption does not apply to riparian buffer protection for lands within the Jordan Lake Watershed.
- 2) Replacement of existing built-upon area with a like or lesser amount of new built-upon area at the same location, ~~or at a different location on the same zoned lot if the Enforcement Officer, or designee has determined that equal or improved water quality will result~~ provided that the Enforcement Officer has determined that equal or improved stormwater management will result

and that within the Lake Jordan Watershed District the postdevelopment nutrient loadings of built-upon area legally existing after December 1, 2001 relating to nitrogen and phosphorus does not increase. Requires submittal of site plan documenting removal/relocation of built-upon area. **W-37**

3) Placement of small accessory buildings or structures or small amounts of other built-upon area provided that the total additional built-upon area is no greater than four hundred (400) square feet. This exemption shall apply to an individual property for one time only after January 1, 1994. Requires submittal of site plan documenting location of 400 sf built-upon area. This provision shall not allow any development to circumvent the riparian buffer protection for lands within the Jordan Lake Watershed.

4) Existing development in watershed districts until such time that additional new development is initiated on the site.

7-1.4. Participation in a Public Regional Water Quality Lake Program.

(A) *Where Permitted:* Where a regional water quality lake program has been established by one or more local governments, or by an authority operating on behalf of one or more local governments, and approved by the N.C. Environmental Management Commission, a development may participate in said program in lieu of any certification of runoff control required by this Article, provided that:

- 1) The development is within an area covered by a public regional water quality lake program;
- 2) Runoff from the development drains to an existing or funded public regional water quality lake which is part of said program;
- 3) Participation is in the form of contribution of funds, contribution of land, contribution of lake construction work, or a combination of these, the total value of which shall be in accordance with a fee schedule adopted by the Governing Body; and
- 4) The Enforcement Officer, or designee finds that the watershed development plan is in compliance with all other applicable requirements of this Article.

(B) *Use of Contributions:* Each contribution from a development participating in a public regional water quality lake program shall be used for acquisition, design, or construction of one or more such lakes in the same water supply watershed that the development lies in.

7-1.5. Stormwater Management/Watershed Development Plan.

(A) *Plan Required:* A Stormwater Management/Watershed Development plan in accordance with the performance standards specified in Table 7-2-1 or the requirements of Sections 7-2.2, ~~and~~ 7-2.3, 7-2.4 and with other requirements of this Article shall be submitted to the Enforcement Officer and shall include all applicable information listed in Appendix 2 (Map Standards) of this Ordinance.

(B) *Plan Approval:* The Enforcement Officer is authorized to approve any Stormwater Management/Watershed Development plan which is in conformance with the performance standards specified in Table 7-2-1 or the requirements of Section 7-2.2, ~~and~~ 7-2.3, and 7-2.4 whichever is applicable, and with other requirements of this Article.

(C) *Approved Plan a Prerequisite:* The Enforcement Officer is not authorized to issue any permits, except as provided in Section 3-4.1(D) for development on any land unless and until a Stormwater Management/Watershed Development plan in compliance with the requirements of this Section has been approved.

(D) *Deed Restriction-Restrictive Covenant:* In accordance with applicable National Pollutant Discharge Elimination System (NPDES) Phase II regulations recorded deed restrictions and protective covenants shall be required to ensure that development activities maintain the development consistent with the approved project plans. Effective July 1, 2007, the following restriction shall be required for all developments in incorporated Sedalia.

The Enforcement Officer, or designee shall review and approve plats and deeds prior to recording or prior to issuing a building permit. A copy of the recorded document shall be forwarded to the Enforcement Officer, or designee prior to issuing a certificate of occupancy.

The deed restriction and protective covenants note shall take the following form for plats and deeds:

DEED RESTRICTION-RESTRICTIVE COVENANT:

"Development of subject property is required to be in accordance with applicable state and federal regulations for the National Pollutant Discharge Elimination System (NPDES) Phase II stormwater management program. The recording of this document establishes an enforceable restriction on property usage that runs with the land to ensure that future development and/or redevelopment shall maintain the site in a manner consistent with applicable law and the approved project plans. Any alterations to the site shall not be permitted without review and approval by the local governmental office having jurisdiction for watershed/stormwater management protection."

(E) *Permanent Runoff Control Structures:* When a permanent runoff control structure is required for a development/redevelopment to meet the requirements of this Article, a North Carolina registered professional engineer shall prepare the plan with the Engineer's Statement of Runoff Control from Article 7-1.6(B) affixed, signed, sealed, and dated.

(F) Stormwater Permit: A stormwater permit shall govern the design, installation, and construction of stormwater management and control practices on the site, including engineered stormwater controls and elements of site design for stormwater management other than engineered stormwater controls. The permit is intended to provide a mechanism for the review, approval, and inspection of the approach to be used for the management and control of stormwater for the development or redevelopment site consistent with the requirements of this ordinance, whether the approach consists of engineered stormwater controls or other techniques such as low-impact or low-density design. The permit does not continue in existence indefinitely after the completion of the project; rather, compliance after project construction is assured by the maintenance provisions of this ordinance.

~~(G)~~ *Appeals:* Appeals of the Enforcement Officer's, or designee's decision on a Stormwater Management/Watershed Development plan shall be made in writing to the Town Council.

(H) Event of Conflict: In the event of a conflict or inconsistency between the text of this ordinance and any heading, caption, figure, illustration, table, or map, the text shall control.

(I) Enforcement Officer: An Enforcement Officer shall be designated by the Town of Sedalia to administer and enforce this ordinance.

1) Powers and Duties: In addition to the powers and duties that may be conferred by other provisions of the Article VII Environmental Regulations of the Town of Sedalia ordinances and other laws, the Enforcement Officer shall have the following powers and duties under this ordinance:

a. To review and approve, approve with conditions, or disapprove applications for approval of plans pursuant to this ordinance.

b. To make determinations and render interpretations of this ordinance.

c. To establish application requirements and schedules for submittal and review of applications and appeals, to review and make recommendations to the Town Council on applications for development or redevelopment approvals.

d. To enforce the provisions of this ordinance in accordance with its enforcement provisions.

e. To maintain records, maps, forms and other official materials as relate to the adoption, amendment, enforcement, and administration of this ordinance.

f. To provide expertise and technical assistance to the Town Council, upon request.

g. To designate appropriate other person(s) who shall carry out the powers and duties of the Enforcement Officer.

h. To take any other action necessary to administer the provisions of this ordinance.

2) Authority for Interpretation: The Enforcement Officer has authority to determine the interpretation of this ordinance. Any person may request an interpretation by submitting a written request to Enforcement Officer who shall respond in writing within 30 days. The Enforcement Officer shall keep on file a record of all written interpretations of this ordinance.

7-1.6. Improvements.

(A) *Design of Improvements:*

- 1) Design of improvements shall:
 - a) Be performed by a North Carolina registered professional engineer;
 - b) Be subject to approval of the Enforcement Officer, or designee; and
 - c) Meet or exceed the guidelines in the latest edition of the Guilford County Water Quality Protection Manual, issued by Guilford County.
- 2) The Enforcement Officer, or designee may recommend, and the Town Council require, that a given runoff control structure(s) be positioned on a site such that water quality protection is improved.
- 3) The construction plans for required runoff control structures shall be approved prior to issuance of any building permit on a site. For subdivisions, construction plans shall be submitted in accordance with Section 5-7.1 (Plans).

(B) *Engineer's Statement of Runoff Control.* The engineering certification required on Stormwater Management/Watershed Development Plans and construction plan drawings shall be of the following form:

ENGINEER'S STATEMENT OF RUNOFF CONTROL

I state that, to the best of my knowledge and belief, the runoff control measure(s) shown on this plan have been designed to control and treat runoff from the first one inch of rain from all built-upon areas over the total drainage area and the discharge of the storage volume is at a rate equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm and that the runoff control measures shown on this plan meet or exceed the guidelines in the latest edition of the Guilford County Water Quality Protection Manual issued by Guilford County.

SIGNATURE _____ P.E. SEAL _____

DATE _____

(C) *Construction of Improvements:*

- 1) The construction of all improvements designed for post construction runoff control and shown on an approved Stormwater Management/Watershed Development plan shall be substantially completed prior to any plat recordation or issuance of any building certificate of occupancy (compliance).
- 2) Final approval of installed post construction runoff control structures will be required at finalization of the grading permit or at issuance of the final building certificate of occupancy (compliance), whichever comes later. If neither a building permit nor a grading permit is required for a site, then any required runoff control structure shall be substantially completed prior to installation of any built-upon area on the site. Engineering statement of completion and record of construction Article 7-1.6(E) shall be required prior to final approval by the Enforcement Officer.

(D) *Recordation of Permanent Improvements:* All permanent runoff control structures and associated access/maintenance easement(s) (specific or general, at the owner's option) shall be

recorded on a final plat; and a Best Management Practice Operation and Maintenance Agreement **W-40** outlined in the latest edition of the Guilford County Water Quality Protection Manual shall be submitted to the Enforcement Officer for review and approval, then subsequently recorded in the Office of the Guilford County Register of Deeds concurrent with or prior to plat recordation.

(E) *Engineer's Statement of Completion:* The Record of Construction (as shown in the Water Quality Protection Manual) and the Engineer's Statement required upon completion of permanent runoff control structures shall be of the following form:

ENGINEER'S STATEMENT OF COMPLETION

I state that, to the best of my knowledge and belief, the permanent runoff control structure for (name of plat) is duly recorded in the Office of the Guilford County Register of Deeds and has been completed in conformance with the approved plans and specifications dated (approval date).

SIGNATURE _____ P.E. SEAL _____
DATE _____

(F) *Maintenance Responsibility:*

1) When runoff control structures serve more than one lot, an owner's association or binding contract for the purpose of maintenance shall be required. See Section 5-8.2 (Permanent Runoff Control Structures).

2) Maintenance of runoff control structures shall be performed at such time as the designated sediment storage volume of the structure has been lost to sediment or a part of the system is not functioning as originally designed. The Enforcement Officer shall have the responsibility to inspect runoff control structures annually, to record the results on forms approved or supplied by the N. C. Division of Water Quality, and to notify the responsible property owner or owner's association when maintenance or repairs are required. All required repairs and maintenance shall be performed within ninety (90) days after such notice. In case of failure by the responsible party to perform the required maintenance or repairs within the stated period, in accordance with Section 8-5 of this Ordinance the jurisdiction may impose an assessment of a civil penalty up to two hundred dollars (\$200.00) per day for each violation.

3) Prior to issuance of any permit for development requiring a runoff control structures pursuant to this ordinance, the applicant or owner of the site must execute an operation and maintenance agreement that shall be binding on all subsequent owners of the site portions of the site, and lot or parcels served by the runoff control structures. Until the transference of all property, sites, or lots served by the runoff control structures, the original owners or applicant shall have the primary responsibility for carrying out the provisions of the maintenance agreement.

7-1.7. Clustering.

(A) *Clustering Encouraged:* Clustering of residential development is encouraged. Clustering of single family detached development is allowed under the provisions of Section 4-4.1(B) (Single Family Detached Cluster Development). Multifamily development may be clustered so long as the development complies with the standards of Section 4-4.2 (Multifamily Districts).

(B) *Performance Requirements:* Clustering is allowed if the overall density of the project meets the applicable density and stormwater runoff control requirements, the built-upon areas are designed and sited to minimize stormwater runoff impact to the receiving waters and minimize concentrated stormwater flow, the remainder of the tract remains in a vegetated or natural state, and the stream buffering requirements found in Section 7-1.9 are met.

7-1.8. Drainage.

Refer to Section 5-13.7

7-1.9. Stream Buffer Required.

(A) Riparian Buffer Protection for Lands within the Jordan Lake Watershed **W-41**

- 1) Authority: Section 7-1.9(A) is adopted pursuant to the authority vested in the Town of Sedalia by the Session Laws and the General Statutes of North Carolina, particularly Session Law 2009-216 (House Bill 239), Session Law 2009-484 (Senate Bill 838), N.C. Gen. Stat §153A-121, 153A-140, Chapter 153A, Article 18, N.C. Gen. Stat §160A-174, 160A-193, Chapter 160A, Article 19, and any special legislation enacted by the General Assembly for The Town of Sedalia.
- 2) Purpose and Intent: The purposes of the Town in adopting Section 7-1.9(A) is to protect and preserve existing riparian buffers throughout the Jordan Watershed as generally described in Rule 15A NCAC 02B .0262 (Jordan Water Supply Nutrient Strategy: Purpose and Scope), in order to maintain their nutrient removal and stream protection functions. Additionally this Ordinance will help protect the water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed. The requirements of Section 7-1.9(A) shall supersede all other locally implemented buffer requirements as outlined in Section 7-1.9(B).

Buffers adjacent to streams provide multiple environmental protection and resource management benefits. Forested buffers enhance and protect the natural ecology of stream systems, as well as water quality through bank stabilization, shading, and nutrient removal. They also help to minimize flood damage in flood prone areas. Well-vegetated streamside riparian areas help to remove nitrogen and prevent sediment and sediment-bound pollutants such as phosphorous from reaching the streams.

- 3) Jurisdiction: Section 7-1.9(A) shall be applied to all land in the planning jurisdiction of the Town.
- 4) Applicability: Section 7-1.9(A) applies to all landowners and other persons conducting activities in the area described in Section 7-1.9(A)3), with the exception of activities conducted under the authority of the State, the United States, multiple jurisdictions, or local units of government, and forest harvesting and agricultural activities. The NC Division of Water Quality shall administer the requirements of Rule 15A NCAC 02B .0267 and .0268 (Jordan Water Supply Nutrient Strategy: Protection of Existing Riparian Buffers and Mitigation of Existing Riparian Buffers, respectively) for these activities.
- 5) Riparian Area Protection within the Jordan Reservoir Watershed:

a. Buffers Protected

The following minimum criteria shall be used for identifying regulated buffers:

- i. Section 7-1.9(A) shall apply to activities conducted within, or outside of with hydrologic impacts in violation of the diffuse flow requirements set out in Section 7-1.9(A)5)e upon, 50-foot wide riparian buffers directly adjacent to surface waters in the Jordan watershed (intermittent streams, perennial streams, lakes, reservoirs and ponds), excluding wetlands.

- ii. Wetlands adjacent to surface waters or within 50 feet of surface waters shall be considered as part of the riparian buffer but are regulated pursuant to Rules 15A NCAC 2B .0230 and .0231, Rules 15A NCAC 2H .0500, 15A NCAC 2H .1300, and Sections 401 and 404 of the Federal Water Pollution Control Act.
- iii. For the purpose of this Ordinance, only one of the following types of maps shall be used for purposes of identifying a water body subject to the requirements of this ordinance:
 - (1) The most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture.
 - (2) The most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS).
 - (3) A map approved by the Geographic Information Coordinating Council and by the NC Environmental Management Commission. Prior to approving a map under this Item, the Commission shall provide a 30-day public notice and opportunity for comment. Alternative maps approved by the Commission shall not be used for buffer delineation on projects that are existing and ongoing within the meaning of Section 7-1.9(A)5)c of this Ordinance.
- iv. Where the specific origination point of a stream regulated under this Item is in question, upon request of the NC Division of Water Quality or another party, the Town shall make an on-site determination. A Town representative who has successfully completed the Division's *Surface Water Identification Training Certification* course, its successor, or other equivalent training curriculum approved by the Division, shall establish that point using the latest version of the Division publication, *Identification Methods for the Origins of Intermittent and Perennial Streams*, available at http://h2o.enr.state.nc.us/ncwetlands/documents/NC_Stream_ID_Manual.pdf or from the NC Division of Water Quality - 401 Oversight Express Permitting Unit, or its successor. The Town may accept the results of a site assessment made by another party who meets these criteria. Any disputes over on-site determinations made according to this Item shall be referred to the Director of the Division of Water Quality c/o the 401 Oversight Express Permitting Unit, or its successor, in writing. The Director's determination is subject to review as provided in Articles 3 and 4 of G.S. 150B.
- v. Riparian buffers protected by this Ordinance shall be measured pursuant to Section 7-1.9(A)5)d of this Ordinance.

NOTE: All stream buffers shall be identified on a record as "Drainage and Stream Buffer Easement" or dedicated as public open space when development or any portion of the development is required to be platted and recorded pursuant to other applicable sections of this Ordinance.

- vi. Parties subject to this Ordinance shall abide by all State rules and laws regarding waters of the state including but not limited to Rules 15A NCAC 2B .0230 and .0231, Rules 15A NCAC 2H .0500, 15A NCAC 2H .1300, and Sections 401 and 404 of the Federal Water Pollution Control Act.
- vii. No new clearing, grading, or development shall take place nor shall any new building permits be issued in violation of this Ordinance.

b. Exemption Based on On-site Determination

When a landowner or other affected party including the Division believes that the maps have inaccurately depicted surface waters, he or she shall consult the Town. Upon request, a Town representative who has successfully completed the Division of Water Quality's *Surface Water Identification Training Certification* course, its successor, or other equivalent training curriculum approved by the Division, shall make an on-site determination. The Town may also accept the results of site assessments made by other parties who have successfully completed such training. Any disputes over on-site determinations shall be referred to the Director of the Division of Water Quality c/o the 401 Oversight Express Permitting Unit, or its successor, in writing. A determination of the Director as to the accuracy or application of the maps is subject to review as provided in Articles 3 and 4 of G.S. 150B. Surface waters that appear on the maps shall not be subject to these buffer requirements if a site evaluation reveals any of the following cases:

- i. Man-made ponds and lakes that are not part of a natural drainage way that is classified in accordance with 15A NCAC 2B .0100, including ponds and lakes created for animal watering, irrigation, or other agricultural uses. (A pond or lake is part of a natural drainage way when it is fed by an intermittent or perennial stream or when it has a direct discharge point to an intermittent or perennial stream.)
- ii. Ephemeral streams.
- iii. The absence on the ground of a corresponding intermittent or perennial stream, lake, reservoir, or pond.
- iv. Ditches or other man-made water conveyances, other than modified natural streams.

c. Exemption when Existing Uses are Present and Ongoing

This Ordinance shall not apply to uses that are existing and ongoing; however, this Ordinance shall apply at the time an

existing, ongoing use is changed to another use. Change ~~WL44~~ shall involve the initiation of any activity that does not meet either of the following criteria for existing, ongoing activity:

- i. It was present within the riparian buffer as of the effective date of this Ordinance and has continued to exist since that time. Existing uses shall include agriculture, buildings, industrial facilities, commercial areas, transportation facilities, maintained lawns, utility lines and on-site sanitary sewage systems, any of which involve either specific, periodic management of vegetation or displacement of vegetation by structures or regular activity. Only the portion of the riparian buffer occupied by the footprint of the existing use is exempt from this Ordinance. Change of ownership through purchase or inheritance is not a change of use. Activities necessary to maintain uses are allowed provided that the site remains similarly vegetated, no impervious surface is added within 50 feet of the surface water where it did not previously exist as of the effective date of this Ordinance, and existing diffuse flow is maintained. Grading and revegetating Zone Two is allowed provided that the health of the vegetation in Zone One is not compromised, the ground is stabilized and existing diffuse flow is maintained.
- ii. Projects or proposed development that are determined by the Town to meet at least one of the following criteria:
 - (1) Project requires a 401 Certification/404 Permit and these were issued prior to the effective date this Ordinance, and prior to the effective date of this Ordinance.
 - (2) Projects that require a state permit, such as landfills, NPDES wastewater discharges, land application of residuals and road construction activities, have begun construction or are under contract to begin construction and had received all required state permits and certifications prior to the effective date of this Ordinance;
 - (3) Projects that are being reviewed through the Clean Water Act Section 404/National Environmental Policy Act Merger 01 Process (published by the US Army Corps of Engineers and Federal Highway Administration, 2003) or its immediate successor and that have reached agreement with DENR on avoidance and minimization by the effective date of the Ordinance, or
 - (4) Projects that are not required to be reviewed by the Clean Water Act Section 404/National Environmental Policy Act Merger 01 Process (published by the US Army Corps of Engineers and Federal Highway Administration, 2003) or its immediate successor if a Finding of No Significant Impact has been issued for the project and the project has

written approval of the Town prior to the effective date of this Ordinance. **W-45**

d. Zones of the Riparian Buffer

The protected riparian buffer shall have two zones as follows:

i. Zone One shall consist of a vegetated area that is undisturbed except for uses provided for in the Table of Uses, Section 7-1.9(A)6)b of this Ordinance. The location of Zone One shall be as follows:

(1) For intermittent and perennial streams, Zone One shall begin at the top of the bank and extend landward a distance of 30 feet on all sides of the surface water, measured horizontally on a line perpendicular to a vertical line marking the top of the bank.

(2) For ponds, lakes and reservoirs located within a natural drainage way, Zone One shall begin at the normal water level and extend landward a distance of 30 feet, measured horizontally on a line perpendicular to a vertical line marking the normal water level.

ii. Zone Two shall consist of a stable, vegetated area that is undisturbed except for uses provided for in the Table of Uses, Section 7-1.9(A)6)b of this Ordinance. Grading and revegetating in Zone Two is allowed provided that the health of the vegetation in Zone One is not compromised. Zone Two shall begin at the outer edge of Zone One and extend landward 20 feet as measured horizontally on a line perpendicular to the surface water. The combined width of Zones One and Two shall be 50 feet on all sides of the surface water.

e. Diffuse Flow Requirements

Diffuse flow of runoff shall be maintained in the riparian buffer by dispersing concentrated flow prior to its entry into the buffer and reestablishing vegetation as follows:

i. Concentrated runoff from new ditches or man-made conveyances shall be converted to diffuse flow at non-erosive velocities before the runoff enters Zone Two of the riparian buffer;

ii. Periodic corrective action to restore diffuse flow shall be taken as necessary and shall be designed to impede the formation of erosion gullies; and

iii. As set out in Sections 7-1.9(A)5)d and 7-1.9(A)6)b of this Ordinance, The Zones of the Riparian Buffer and Table of Uses respectively, no new stormwater conveyances are allowed through the buffers except for those specified in the Table of Uses, Section 7-1.9(A)6)b of this Ordinance, addressing stormwater management ponds, drainage ditches, roadside ditches, and stormwater conveyances.

6) Potential Uses and Associated Requirements

a. Approval for New Development

The Town of Sedalia shall issue an approval for new development only if the development application proposes to avoid impacts to riparian buffers defined in Section 7-1.9(A)5a of this Ordinance, or where the application proposes to impact such buffers, it demonstrates that the applicant has done the following, as applicable:

- i. Determined the activity is exempt from requirements of this Ordinance;
- ii. Received an Authorization Certificate from the Town pursuant to Section 7-1.9(A)7a of this Ordinance;
- iii. For uses designated as Allowable with Mitigation in the Table of Uses in Section 7-1.9(A)6b, received approval of mitigation plan pursuant to Section 7-1.9(A)7c of this Ordinance; and
- iv. Received a variance pursuant to Section 7-1.9(A)7b.

b. Table of Uses

The following chart sets out potential new uses within the buffer, or outside the buffer with impacts on the buffer, and categorizes them as exempt, allowable, or allowable with mitigation. All uses not categorized as exempt, allowable, or allowable with mitigation are considered prohibited and may not proceed within the riparian buffer or outside the buffer if the use would impact the buffer, unless a variance is granted pursuant to Section 7-1.9(A)7b of this Ordinance, Variances. The requirements for each category are given in Section 7-1.9(A)6c of this Ordinance following the Table of Uses.

Use	Exempt *	Allowable *	Allowable with Mitigation*
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Use	Exempt *	Allowable *	Allowable with Mitigation* W-47
<p>Access trails: Pedestrian access trails leading to the surface water, docks, fishing piers, boat ramps and other water dependent activities:</p> <ul style="list-style-type: none"> • Pedestrian access trails that are restricted to the minimum width practicable and do not exceed 4 feet in width of buffer disturbance, and provided that installation and use does not result in removal of trees as defined in this Ordinance and no impervious surface is added to the riparian buffer • Pedestrian access trails that exceed 4 feet in width of buffer disturbance, the installation or use results in removal of trees as defined in this Ordinance or impervious surface is added to the riparian buffer 	X	X	
<p>Airport facilities:</p> <ul style="list-style-type: none"> • Airport facilities that impact equal to or less than 150 linear feet or one-third of an acre of riparian buffer • Airport facilities that impact greater than 150 linear feet or one-third of an acre of riparian buffer • Activities necessary to comply with FAA requirements (e.g. radar uses or landing strips)¹ 		X X	X
Archaeological activities	X		
Bridges		X	
Canoe Access provided that installation and use does not result in removal of trees as defined in this Ordinance and no impervious surface is added to the buffer.	X		
<p>Dam maintenance activities:</p> <ul style="list-style-type: none"> • Dam maintenance activities that do not cause additional buffer disturbance beyond the footprint of the existing dam or those covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3 • Dam maintenance activities that do cause additional buffer disturbance beyond the footprint of the existing dam or those not covered under the U.S. Army Corps of Engineers Nationwide Permit No.3 	X	X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6)c of this Ordinance.

Use	Exempt *	Allowable *	Allowable with Mitigation* W-49
Driveway crossings of streams and other surface waters subject to this Ordinance: <ul style="list-style-type: none"> • Driveway crossings on single family residential lots that disturb equal to or less than 25 linear feet or 2,500 square feet of riparian buffer • Driveway crossings on single family residential lots that disturb greater than 25 linear feet or 2,500 square feet of riparian buffer • In a subdivision that cumulatively disturb equal to or less than 150 linear feet or one-third of an acre of riparian buffer • In a subdivision that cumulatively disturb greater than 150 linear feet or one-third of an acre of riparian buffer 	X	X X	X
Driveway impacts other than crossing of a stream or other surface waters subject to this Ordinance			X
Fences: <ul style="list-style-type: none"> • Fences provided that disturbance is minimized and installation does not result in removal of trees as defined in this Ordinance • Fences provided that disturbance is minimized and installation results in removal of trees as defined in this Ordinance 	X	X	
Fertilizer application: one-time application to establish vegetation	X		
Grading and revegetation in Zone Two provided that diffuse flow and the health of existing vegetation in Zone One is not compromised and disturbed areas are stabilized until they are revegetated.	X		

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6c of this Ordinance.

Use	Exempt *	Allowable *	Allowed with Mitigation* W-50
Greenway / hiking trails designed, constructed and maintained to maximize nutrient removal and erosion protection, minimize adverse effects on aquatic life and habitat, and protect water quality to the maximum extent practical.		X	
Historic preservation	X		
Maintenance access on modified natural streams: a grassed travel way on one side of the water body when less impacting alternatives are not practical. The width and specifications of the travel way shall be only that needed for equipment access and operation. The travel way shall be located to maximize stream shading.		X	
<p>Mining activities:</p> <ul style="list-style-type: none"> • Mining activities that are covered by the Mining Act provided that new riparian buffers that meet the requirements of Sections 7-1.9(A)6d and 7-1.9(A)6e of this Ordinance are established adjacent to the relocated channels • Mining activities that are not covered by the Mining Act OR where new riparian buffers that meet the requirements of Sections 7-1.9(A)6d and 7-1.9(A)6e of this Ordinance are not established adjacent to the relocated channels • Wastewater or mining dewatering wells with approved NPDES permit 	X	X	X
<p>Playground equipment:</p> <ul style="list-style-type: none"> • Playground equipment on single family lots provided that installation and use does not result in removal of vegetation • Playground equipment installed on lands other than single-family lots or that requires removal of vegetation 	X	X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in 7-1.9(A)6c of this Ordinance.

Use	Exempt *	Allowable *	Allowed with W-51 Mitigation*
Ponds created by impounding streams and not used as stormwater BMPs: <ul style="list-style-type: none"> • New ponds provided that a riparian buffer that meets the requirements of Sections 7-1.9(A)6d and 7-1.9(A)6e of this Ordinance is established adjacent to the pond • New ponds where a riparian buffer that meets the requirements of Sections 7-1.9(A)6d and 7-1.9(A)6e of this Ordinance is NOT established adjacent to the pond 		X	X
Protection of existing structures, facilities and stream banks when this requires additional disturbance of the riparian buffer or the stream channel		X	
Railroad impacts other than crossings of streams and other surface waters subject to this Ordinance.			X
Railroad crossings of streams and other surface waters subject to this Ordinance: <ul style="list-style-type: none"> • Railroad crossings that impact equal to or less than 40 linear feet of riparian buffer • Railroad crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer • Railroad crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer 	X	X	X

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6c of this Ordinance.

Use	Exempt *	Allowable *	Allowed with Mitigation* W-52
Recreational and accessory structures in Zone Two: <ul style="list-style-type: none"> • Sheds and gazebos in Zone Two, provided they are not prohibited under local water supply ordinance: <ul style="list-style-type: none"> ○ Total footprint less than or equal to 150 square feet per lot. ○ Total footprint greater than 150 square feet per lot. • Wooden slatted decks and associated steps, provided the use meets the requirements of Sections 7-1.9(A)6d and 7-1.9(A)6e of this Ordinance: <ul style="list-style-type: none"> ○ Deck at least eight feet in height and no vegetation removed from Zone One. ○ Deck less than eight feet in height or vegetation removed from Zone One. 		X X	X X
Removal of previous fill or debris provided that diffuse flow is maintained and vegetation is restored	X		
Road impacts other than crossings of streams and other surface waters subject to this Ordinance			X
Road crossings of streams and other surface waters subject to this Ordinance: <ul style="list-style-type: none"> • Road crossings that impact equal to or less than 40 linear feet of riparian buffer • Road crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer • Road crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer 	X	X X	X X

To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6c of this Ordinance.

Use	Exempt *	Allowable *	Allowable with W-53 Mitigation*
<p>Road relocation: Relocation of existing private access roads associated with public road projects where necessary for public safety:</p> <ul style="list-style-type: none"> • Less than or equal to 2,500 square feet of buffer impact • Greater than 2,500 square feet of buffer impact 		X	X
<p>Stormwater BMPs:</p> <ul style="list-style-type: none"> • Wet detention, bioretention, and constructed wetlands in Zone Two if diffuse flow of discharge is provided into Zone One • Wet detention, bioretention, and constructed wetlands in Zone One 		X	X
Scientific studies and stream gauging	X		
Streambank or shoreline stabilization		X	
<p>Temporary roads, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions immediately after construction is complete and replanted immediately with comparable vegetation, except that tree planting may occur during the dormant season. A one-time application of fertilizer may be used to establish vegetation: At the end of five years the restored buffer shall comply with the restoration criteria in Section 7-1.9(A)7)c.vii of this Ordinance:</p> <ul style="list-style-type: none"> • Less than or equal to 2,500 square feet of buffer disturbance • Greater than 2,500 square feet of buffer disturbance • Associated with culvert installation or bridge construction or replacement. 	X	X X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6)c of this Ordinance.

Use	Exempt *	Allowable *	Allowed with Mitigation* W-54
<p>Temporary sediment and erosion control devices, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions immediately after construction is complete and replanted immediately with comparable vegetation, except that tree planting may occur during the dormant season. A one-time application of fertilizer may be used to establish vegetation. At the end of five years the restored buffer shall comply with the restoration criteria in Section 7-1.9(A)7)c.vii of this Ordinance:</p> <ul style="list-style-type: none"> • In Zone Two provided ground cover is established within timeframes required by the Sedimentation and Erosion Control Act, vegetation in Zone One is not compromised, and runoff is released as diffuse flow in accordance with Section 7-1.9(A)6)e of this Ordinance. • In Zones one and two to control impacts associated with uses approved by Sedalia or that have received a variance, provided that sediment and erosion control for upland areas is addressed, to the maximum extent practical, outside the buffer. • In-stream temporary erosion and sediment control measures for work within a stream channel that is authorized under Sections 401 and 404 of the Federal Water Pollution Control Act. • In-stream temporary erosion and sediment control measures for work within a stream channel. 	<p>X</p> <p>X</p>	<p>X</p> <p>X</p>	
<p>Utility, electric, aerial, perpendicular crossings of stream and other surface waters subject to this Ordinance^{2,3,5}:</p> <ul style="list-style-type: none"> • Disturb equal to or less than 150 linear feet of riparian buffer • Disturb greater than 150 linear feet of riparian buffer 	<p>X</p>	<p>X</p>	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6)c of this Ordinance.

Use	Exempt *	Allowable *	Allowed with Mitigation* W-55
Utility, electric, aerial, other than perpendicular crossings ⁵ : <ul style="list-style-type: none"> • Impacts in Zone Two • Impacts in Zone One^{2,3} 		X	X
Utility, electric, underground, perpendicular crossings ^{3,4,5} : <ul style="list-style-type: none"> • Disturb less than or equal to 40 linear feet of riparian buffer • Disturb greater than 40 linear feet of riparian buffer 	X	X	
Utility, electric, underground, other than perpendicular crossings ⁴ : <ul style="list-style-type: none"> • Impacts in Zone Two • Impacts in Zone One¹ 	X X		
Utility, non-electric, perpendicular crossings of streams and other surface waters subject to this Ordinance ^{3, 5} : <ul style="list-style-type: none"> • Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width • Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width • Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 150 linear feet of riparian buffer 	X	X X	 X X

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6c of this Ordinance.

Use	Exempt *	Allowable *	Allowed with W-56 Mitigation*
Utility, non-electric, other than perpendicular crossings ^{4,5} : <ul style="list-style-type: none"> • Impacts in Zone Two • Impacts in Zone One 		X	X
Vegetation management: <ul style="list-style-type: none"> • Emergency fire control measures provided that topography is restored • Mowing or harvesting of plant products in Zone Two • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees that are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering stability of the streambank. • Removal of individual trees which are dead, diseased or damaged. • Removal of poison ivy • Removal of invasive exotic vegetation as defined in: <i>Smith, Cherri L. 1998. Exotic Plant Guidelines. Dept. of Environment and Natural Resources. Division of Parks and Recreation. Raleigh, NC. Guideline #30</i> 	X X X X X X X		
<ul style="list-style-type: none"> • Vehicular access roads leading to water-dependent structures as defined in 15A NCAC 02B .0202, provided they do not cross the surface water and have minimum practicable width not exceeding ten feet. 		X	
<ul style="list-style-type: none"> • Water dependent structures as defined in 15A NCAC 02B .0202 where installation and use result in disturbance to riparian buffers. 		X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6c of this Ordinance.

Use	Exempt *	Allowable *	Allowed with Mitigation* W-57
Water supply reservoirs: <ul style="list-style-type: none"> • New reservoirs where a riparian buffer that meets the requirements of Sections 7-1.9(A)6d and 7-1.9(A)6e of this Ordinance is established adjacent to the reservoir • New reservoirs where a riparian buffer that meets the requirements of Sections 7-1.9(A)6d and 7-1.9(A)6e of this Ordinance is not established adjacent to the reservoir 		X	X
Water wells <ul style="list-style-type: none"> • Single family residential water wells • All other water wells 	X	X	
Wetland, stream and buffer restoration that results in impacts to the riparian buffers: <ul style="list-style-type: none"> • Wetland, stream and buffer restoration that requires NC Division of Water Quality approval for the use of a 401 Water Quality Certification • Wetland, stream and buffer restoration that does not require Division of Water Quality approval for the use of a 401 Water Quality Certification 	X	X	
Wildlife passage structures		X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 7-1.9(A)6c of this Ordinance.

¹Provided that:

- No heavy equipment is used in Zone One.
- Vegetation in undisturbed portions of the buffer is not compromised.
- Felled trees are removed by chain.
- No permanent felling of trees occurs in protected buffers or streams.
- Stumps are removed only by grinding.
- At the completion of the project the disturbed area is stabilized with native vegetation.
- Zones one and two meet the requirements of Sections 7-1.9(A)6d and 7-1.9(a)6e.

²Provided that, in Zone One, all of the following BMPs for overhead utility lines are used. If all of these BMPs are not used, then the overhead utility lines shall require a no practical alternative evaluation by the Town, as defined in Section 7-1.9(A)7a.

- A minimum zone of 10 feet wide immediately adjacent to the water body shall be managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed.
- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain where trees are cut.
- Riprap shall not be used unless it is necessary to stabilize a tower.

- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Active measures shall be taken after construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.

³Provided that poles or aerial infrastructure shall not be installed within 10 feet of a water body unless Sedalia completes a no practical alternative evaluation as defined in Section 7-1.9(A)7)a.

⁴Provided that, in Zone One, all of the following BMPs for underground utility lines are used. If all of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by Sedalia, as defined in Section 7-1.9(A)7)a.

- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain, except in the trench where trees are cut.
- Underground cables shall be installed by vibratory plow or trenching.
- The trench shall be backfilled with the excavated soil material immediately following cable installation.
- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Measures shall be taken upon completion of construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.

⁵Perpendicular crossings are those that intersect the surface water at an angle between 75 degrees and 105 degrees.

c. Requirements for Categories of Uses

Uses designated in Section 7-1.9(A)6)b of this Ordinance as exempt, allowable, and allowable with mitigation within a riparian buffer shall have the following requirements:

i. Exempt.

Uses designated as exempt are permissible without authorization by Sedalia provided that they adhere to the limitations of the activity as defined in Section 7-1.9(A)6)b of this Ordinance, the Table of Uses. In addition, exempt uses shall be designed, constructed and maintained to minimize soil disturbance and to provide the maximum water quality protection practicable, including construction, monitoring, and maintenance activities.

ii. Allowable.

Uses designated as allowable may proceed provided that there are no practical alternatives to the requested use pursuant to Section 7-1.9(A)7)a of this Ordinance. This includes construction, monitoring, and maintenance activities. These uses require written authorization from the Town.

iii. Allowable with Mitigation.

Uses designated as allowable with mitigation may ~~W-59~~ provided that there are no practical alternatives to the requested use pursuant to Section 7-1.9(A)7)a of this Ordinance and an appropriate mitigation strategy has been approved pursuant to Section 7-1.9(A)7)a. These uses require written authorization from the Town.

7) Permits Procedures, Requirements, and Approvals

a. Determination of No Practical Alternatives / Request for Authorization Certificate

i. Persons who wish to undertake uses designated as allowable or allowable with mitigation shall submit a request for a “no practical alternatives” determination to the Town. The applicant shall certify that the project meets all the following criteria for finding “no practical alternatives”:

- (1) The basic project purpose cannot be practically accomplished in a manner that would better minimize disturbance, preserve aquatic life and habitat, and protect water quality;
- (2) The use cannot practically be reduced in size or density, reconfigured or redesigned to better minimize disturbance, preserve aquatic life and habitat, and protect water quality; and
- (3) Best management practices shall be used if necessary to minimize disturbance, preserve aquatic life and habitat, and protect water quality.

ii. The applicant shall also submit at least the following information in support of their assertion of “no practical alternatives”:

- (1) The name, address and phone number of the applicant;
- (2) The nature of the activity to be conducted by the applicant;
- (3) The location of the activity, including the jurisdiction;
- (4) A map of sufficient detail to accurately delineate the boundaries of the land to be utilized in carrying out the activity, the location and dimensions of any disturbance in riparian buffers associated with the activity, and the extent of riparian buffers on the land;
- (5) An explanation of why this plan for the activity cannot be practically accomplished, reduced or reconfigured to better minimize disturbance to the riparian buffer, preserve aquatic life and habitat and protect water quality; and
- (6) Plans for any best management practices proposed to be used to control the impacts associated with the activity.

iii. Within 60 days of a submission that addresses Section 7-1.9(A)7)a.ii, the Town shall review the entire project and make a finding of fact as to whether the criteria in Section 7-

1.9(A)7)a.i of this Ordinance have been met. A finding of “no practical alternatives” shall result in issuance of an Authorization Certificate. Failure to act within 60 days shall be construed as a finding of “no practical alternatives” and an Authorization Certificate shall be issued to the applicant unless one of the following occurs:

- (1) The applicant agrees, in writing, to a longer period;
- (2) The Town determines that the applicant has failed to furnish requested information necessary to the Town decision;
- (3) The final decision is to be made pursuant to a public hearing; or
- (4) The applicant refuses access to its records or premises for the purpose of gathering information necessary to the Town’s decision.

iv. The Town may attach conditions to the Authorization Certificate that support the purpose, spirit and intent of this Ordinance.

v. Any appeals of determinations regarding Authorization Certificates shall be referred to the Director of the Division of Water Quality, c/o the 401 Oversight Express Permitting Unit, or its successor. The Director’s decision is subject to review as provided in G.S. 150B Articles 3 and 4.

b. Variances

i. Requirements for Variances.

Persons who wish to undertake prohibited uses may pursue a variance. The Town may grant minor variances. For major variances, the Town shall prepare preliminary findings and submit them to the Division of Water Quality, 401 Oversight Express Permitting Unit, or its successor for approval by the Environmental Management Commission. The variance request procedure shall be as follows:

(1) For any variance request, the Town shall make a finding of fact as to whether there are practical difficulties or unnecessary hardships that prevent compliance with the riparian buffer protection requirements. A finding of practical difficulties or unnecessary hardships shall require that the following conditions are met:

- (I) If the applicant complies with the provisions of this Ordinance, he/she can secure no reasonable return from, nor make reasonable use of, his/her property. Merely proving that the variance would permit a greater profit from the property shall not be considered adequate justification for a variance. Moreover, the Town shall consider whether the variance is the minimum possible deviation from the

terms of this Ordinance that shall make reasonable use of the property possible;

- (II) The hardship results from application of this Ordinance to the property rather than from other factors such as deed restrictions or other hardship;
 - (III) The hardship is due to the physical nature of the applicant's property, such as its size, shape, or topography, such that compliance with provisions of this ordinance would not allow reasonable use of the property;
 - (IV) The applicant did not cause the hardship by knowingly or unknowingly violating this Ordinance;
 - (V) The applicant did not purchase the property after the effective date of this Ordinance, and then request a variance; and
 - (VI) The hardship is rare or unique to the applicant's property.
- (2) The variance is in harmony with the general purpose and intent of the State's riparian buffer protection requirements and this Ordinance and preserves its spirit; and
 - (3) In granting the variance, the public safety and welfare have been assured, water quality has been protected, and substantial justice has been done.

ii. Minor Variances

A minor variance request pertains to activities that will impact only Zone Two of the riparian buffer. Minor variance requests shall be reviewed and approved based on the criteria in Section 7-1.9(A)7)a.i. through Section 7-1.9(A)7)a.iii by the Town pursuant to G.S. 153A-Article 18, or G.S. 160A-Article 19. The Town may attach conditions to the variance approval that support the purpose, spirit and intent of the riparian buffer protection program. Request for appeals to decisions made by the Town shall be made in writing to the Director of the Division of Water Quality c/o the 401 Oversight Express Permitting Unit, or its successor. The Director's decision is subject to review as provided in G.S. 150B Articles 3 and 4.

iii. Major Variances

A major variance request pertains to activities that will impact any portion of Zone One or any portion of both Zones One and Two of the riparian buffer. If Sedalia has determined that a major variance request meets the requirements in Section 7-1.9(A)7)b.i, then it shall prepare a preliminary finding and submit it to the NC Environmental Management Commission c/o the Division of Water Quality, 401 Oversight Express Permitting Unit, or its successor, for approval. Within 90 days

after receipt by Sedalia, the Commission shall **W-62** preliminary findings on major variance requests and take one of the following actions: approve, approve with conditions and stipulations, or deny the request. Appeals from a Commission decision on a major variance request are made on judicial review to Superior Court.

c. Mitigation

i. This item shall apply to persons who wish to impact a riparian buffer in the Jordan watershed when one of the following applies:

(1) A person has received an Authorization Certificate pursuant to Section 7-1.9(A)7)a of this Ordinance for a proposed use that is designated as “allowable with mitigation;” or

(2) A person has received a variance pursuant to Section 7-1.9(A)7)b of this Ordinance and is required to perform mitigation as a condition of a variance approval.

ii. Issuance of the Mitigation Approval

Sedalia shall issue a mitigation approval upon determining that a proposal meets the requirements set out in this Ordinance. The approval shall identify at a minimum the option chosen, the required and proposed areas, and either the mitigation location or the offset payment amount as applicable.

iii. Options for Meeting the Mitigation Requirement

The mitigation requirement may be met through one of the following options:

(1) Payment of a compensatory mitigation fee to the Riparian Buffer Restoration Fund pursuant to 15A NCAC 02B .0269 (Jordan Water Supply Nutrient Strategy: Riparian Buffer Mitigation Fees to the NC Ecosystem Enhancement Program) contingent upon acceptance of payments by the NC Ecosystem Enhancement Program, or to a private mitigation bank that complies with banking requirements of the US Army Corps of Engineers, currently set out at <http://www.saw.usace.army.mil/WETLANDS/Mitigation/mitbanks.html> or from the US Army Corps of Engineers, P.O. Box 1890, Wilmington, NC, 28402-1890, and the applicable trading criteria in Rule 15A NCAC 02B .0273;

(2) Donation of real property or of an interest in real property pursuant to Section 7-1.9(A)7)c.vi of this Ordinance; or

(3) Restoration or enhancement of a non-forested riparian buffer pursuant to the requirements of Section 7-1.9(A)7)c.vii of this Ordinance.

iv. The Area of Mitigation

Sedalia shall determine the required area of mitigation which shall apply to all mitigation options identified in Section 7-1.9(A)7)c.iii of this Ordinance and as further specified in the requirements for each option set out in this Section, according to the following:

- (1) The impacts in square feet to each zone of the riparian buffer shall be determined by Sedalia by adding the following:
 - (I) The area of the footprint of the use causing the impact to the riparian buffer;
 - (II) The area of the boundary of any clearing and grading activities within the riparian buffer necessary to accommodate the use; and
 - (III) The area of any ongoing maintenance corridors within the riparian buffer associated with the use.
- (2) The required area of mitigation shall be determined by applying the following multipliers to the impacts determined in Section 7-1.9(A)7)c.iv.(1) of this Ordinance to each zone of the riparian buffer:
 - (I) Impacts to Zone One of the riparian buffer shall be multiplied by three;
 - (II) Impacts to Zone Two of the riparian buffer shall be multiplied by one and one-half; and
 - (III) Impacts to wetlands within Zones One and Two of the riparian buffer that are subject to mitigation under 15A NCAC 2H .0506 shall comply with the mitigation ratios in 15A NCAC 2H .0506.

v. The Location of Mitigation

For any option chosen, the mitigation effort shall be located within the same subwatershed of the Jordan watershed, as defined in 15A NCAC 02B.0262, and the same distance from the Jordan Reservoir as the proposed impact, or closer to the Reservoir than the impact, and as close to the location of the impact as feasible. Alternatively, the applicant may propose mitigation anywhere within the same subwatershed of the Jordan watershed, as defined in 15A NCAC 02B.0262, provided that the mitigation proposal accounts for differences in delivery of nutrients to the affected arm of Jordan Reservoir resulting from differences between the locations of the buffer impact and mitigation. Additional location requirements for the property donation option are enumerated in Section 7-1.9.(A)(7)c.vi.(3)(I) of this Ordinance.

vi. Donation of Property

Persons who choose to satisfy their mitigation determination by donating real property or an interest in real property shall meet the following requirements:

- (1) The donation of real property interests may be used to either partially or fully satisfy the payment of a compensatory mitigation fee to the Riparian Buffer Restoration Fund pursuant to 15A NCAC 02B .0269. The value of the property interest shall be determined by an appraisal performed in accordance with Section 7-1.9(A)7)c.vi.(4)(IV) of this Ordinance. The donation shall satisfy the mitigation determination if the appraised value of the donated property interest is equal to or greater than the required fee. If the appraised value of the donated property interest is less than the required fee calculated pursuant to 15A NCAC 02B .0269, the applicant shall pay the remaining balance due.
- (2) The donation of conservation easements to satisfy compensatory mitigation requirements shall be accepted only if the conservation easement is granted in perpetuity.
- (3) Donation of real property interests to satisfy the mitigation determination shall be accepted only if such property meets all of the following requirements:
 - (I) In addition to the location requirements of Section 7-1.9(A)7)c.v of this Ordinance, the property shall be located within an area that is identified as a priority for restoration in, or is otherwise consistent with the goals of, the *Basinwide Wetlands and Riparian Restoration Plan for the Cape Fear River Basin* developed by NC Division of Water Quality pursuant to G.S. 143-214.10;
 - (II) The property shall contain riparian buffers not currently protected by the State's riparian buffer protection program that are in need of restoration as defined in Section 7-1.9(A)7)c.vii.(4) of this Ordinance;
 - (III) The restorable riparian buffer on the property shall have a minimum length of 1000 linear feet along a surface water and a minimum width of 50 feet as measured horizontally on a line perpendicular to the surface water;
 - (IV) The size of the restorable riparian buffer on the property to be donated shall equal or exceed the area of mitigation responsibility determined pursuant to Section 7-1.9(A)7)c.iv of this Ordinance;
 - (V) Restoration shall not require removal of man-made structures or infrastructure;

- (VI) The property shall be suitable to be successfully restored, based on existing hydrology, soils, and vegetation;
 - (VII) The estimated cost of restoring and maintaining the property shall not exceed the value of the property minus site identification and transaction costs;
 - (VIII) The property shall not contain any building, structure, object, site, or district that is listed in the National Register of Historic Places established pursuant to Public Law 89-665, 16 U.S.C. 470 as amended;
 - (IX) The property shall not contain any hazardous substance or solid waste;
 - (X) The property shall not contain structures or materials that present health or safety problems to the general public. If wells, septic, water or sewer connections exist, they shall be filled, remediated or closed at owner's expense in accordance with state and local health and safety regulations;
 - (XI) The property and adjacent properties shall not have prior, current, and known future land use that would inhibit the function of the restoration effort; and
 - (XII) The property shall not have any encumbrances or conditions on the transfer of the property interests.
- (4) At the expense of the applicant or donor, the following information shall be submitted to the Town with any proposal for donations or dedications of interest in real property:
- (I) Documentation that the property meets the requirements laid out in Section 7-1.9(A)7c.vi.(3) of this Ordinance;
 - (II) US Geological Survey 1:24,000 (7.5 minute) scale topographic map, county tax map, USDA Natural Resource Conservation Service County Soil Survey Map, and county road map showing the location of the property to be donated along with information on existing site conditions, vegetation types, presence of existing structures and easements;
 - (III) A current property survey performed in accordance with the procedures of the North Carolina Department of Administration, State Property Office as identified by the State Board of Registration for Professional Engineers and Land Surveyors in "Standards of Practice for Land Surveying in North Carolina."

Copies may be obtained from the North Carolina State Board of Registration for Professional Engineers and Land Surveyors, 3620 Six Forks Road, Suite 300, Raleigh, North Carolina 27609;

(IV) A current appraisal of the value of the property performed in accordance with the procedures of the North Carolina Department of Administration, State Property Office as identified by the Appraisal Board in the "Uniform Standards of Professional North Carolina Appraisal Practice." Copies may be obtained from the Appraisal Foundation, Publications Department, P.O. Box 96734, Washington, D.C. 20090-6734; and

(V) A title certificate.

vii. Riparian Buffer Restoration or Enhancement

Persons who choose to meet their mitigation requirement through riparian buffer restoration or enhancement shall meet the following requirements:

- (1) The applicant may restore or enhance a non-forested riparian buffer if either of the following applies:
 - (I) The area of riparian buffer restoration is equal to the required area of mitigation determined pursuant to Section 7-1.9(A)7)c.iv of this Ordinance; or
 - (II) The area of riparian buffer enhancement is three times larger than the required area of mitigation determined pursuant to Section 7-1.9(A)7)c.iv of this Ordinance;
- (2) The location of the riparian buffer restoration or enhancement shall comply with the requirements in Section 7-1.9(A)7)c.v of this Ordinance;
- (3) The riparian buffer restoration or enhancement site shall have a minimum width of 50 feet as measured horizontally on a line perpendicular to the surface water;
- (4) Enhancement and restoration shall both have the objective of establishing a forested riparian buffer according to the requirements of this Item. Enhancement shall be distinguished from restoration based on existing buffer conditions. Where existing trees are sparse, that is greater than or equal to 100 trees per acre but less than 200 trees per acre, a buffer may be enhanced. Where existing woody vegetation is absent, that is less than 100 trees per acre, a buffer may be restored;
- (5) The applicant shall first receive an Authorization Certificate for the proposed use according to the requirements of Section 7-1.9(A)7)a of this Ordinance.

After receiving this determination, the applicant shall submit a restoration or enhancement plan for approval by the Town of Sedalia. The restoration or enhancement plan shall contain the following:

- (I) A map of the proposed restoration or enhancement site;
- (II) A vegetation plan. The vegetation plan shall include a minimum of at least two native hardwood tree species planted at a density sufficient to provide 320 trees per acre at maturity;
- (III) A grading plan. The site shall be graded in a manner to ensure diffuse flow through the riparian buffer;
- (IV) A fertilization plan; and
- (V) A schedule for implementation;

(6) Within one year after the Town has approved the restoration or enhancement plan, the applicant shall present proof to Sedalia that the riparian buffer has been restored or enhanced. If proof is not presented within this timeframe, then the person shall be in violation of both the State's and the Town's riparian buffer protection program;

(7) The mitigation area shall be placed under a perpetual conservation easement that will provide for protection of the property's nutrient removal functions, and

(8) The applicant shall submit annual reports for a period of five years after the restoration or enhancement showing that the trees planted have survived and that diffuse flow through the riparian buffer has been maintained. The applicant shall replace trees that do not survive and restore diffuse flow if needed during that five-year period.

8) Site Inspections and Enforcement

a. Site Inspections

- i. Agents, officials, or other qualified persons authorized by the Town may periodically inspect riparian buffers to ensure compliance with this ordinance.
- ii. Notice of the right to inspect shall be included in the letter of approval of each variance and buffer authorization.
- iii. Authorized agents, officials or other qualified persons shall have the authority, upon presentation of proper credentials, to enter and inspect at reasonable times any property, public or private, for the purpose of investigating and inspecting the site of any riparian buffer. No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of Sedalia, while that person is inspecting or attempting to inspect

a riparian buffer nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out their official duties. The Town shall have the power to conduct such investigations as deemed reasonably necessary to carry out the duties as prescribed in this Ordinance.

- iv. Any person engaged in new activities as defined by this Ordinance who fails to meet the requirements of this Ordinance shall be deemed in violation of this Ordinance and subject to enforcement actions under Article 8.

9) Definitions

For the purpose of the Jordan Watershed, these terms shall be defined as follows:

- a. 'Access Trails' means pedestrian trails constructed of pervious or impervious surfaces and related structures to access a surface water, including boardwalks, steps, rails, and signage.
- b. 'Airport Facilities' means all properties, facilities, buildings, structures, and activities that satisfy or otherwise fall within the scope of one or more of the definitions or uses of the words or phrases 'air navigation facility', 'airport', or 'airport protection privileges' under G.S. 63-1; the definition of 'aeronautical facilities' in G.S. 63-79(1); the phrase 'airport facilities' as used in G.S. 159-48(b)(1); the phrase 'aeronautical facilities' as defined in G.S. 159-81 and G.S. 159-97; and the phrase 'airport facilities and improvements' as used in Article V, Section 13, of the North Carolina Constitution, which shall include, without limitation, any and all of the following: airports, airport maintenance facilities, clear zones, drainage ditches, fields, hangars, landing lighting, airport and airport-related offices, parking facilities, related navigational and signal systems, runways, stormwater outfalls, terminals, terminal shops, and all appurtenant areas used or suitable for airport buildings or other airport facilities, and all appurtenant rights-of-way; restricted landing areas; any structures, mechanisms, lights, beacons, marks, communicating systems, or other instrumentalities or devices used or useful as an aid, or constituting an advantage or convenience to the safe taking off, navigation, and landing of aircraft, or the safe and efficient operation or maintenance of an airport or restricted landing area; easements through, or interests in, air space over land or water, interests in airport hazards outside the boundaries of airports or restricted landing areas, and other protection privileges, the acquisition or control of which is necessary to ensure safe approaches to the landing areas of airports and restricted landing areas, and the safe and efficient operation thereof and any combination of any or all of such facilities. Notwithstanding the foregoing, the following shall not be included in the definition of 'airport facilities':

- i. Satellite parking facilities;
 - ii. Retail and commercial development outside of the terminal area, such as rental car facilities; and
 - iii. Other secondary development, such as hotels, industrial facilities, free-standing offices and other similar buildings, so long as these facilities are not directly associated with the operation of the airport, and are not operated by a unit of government or special governmental entity such as an airport authority, in which case they are included in the definition of ‘airport facilities’.
- c. ‘Channel’ means a natural water-carrying trough cut vertically into low areas of the land surface by erosive action of concentrated flowing water or a ditch or canal excavated for the flow of water.
- d. ‘DBH’ means diameter at breast height of a tree measured at 4.5 feet above ground surface level.
- e. ‘Development’ means the same as defined in Rule 15A NCAC 2B .0202(23).
- f. ‘Ditch or canal’ means a man-made channel other than a modified natural stream constructed for drainage purposes that is typically dug through inter-stream divide areas. A ditch or canal may have flows that are perennial, intermittent, or ephemeral and may exhibit hydrological and biological characteristics similar to perennial or intermittent streams.
- g. ‘Ephemeral stream’ means a feature that carries only stormwater in direct response to precipitation with water flowing only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the aquatic bed is always above the water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks the biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water.
- ~~h. ‘Existing development’ means development, other than that associated with agricultural or forest management activities, that meets one of the following criteria:~~
- ~~i. It either is built or has established a vested right based on statutory or common law as interpreted by the courts, for projects that do not require a state permit, as of the effective date of either local new development stormwater programs implemented under Rule 15A NCAC 2B .0265 (Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development) or, for projects requiring a state permit, as of the applicable compliance date established in Rule 15A NCAC 2B .0271 (Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development), Items (5) and (6); or~~

~~ii. It occurs after the compliance date set out in Sub-Item (1)(d) of Rule .0265 (Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development) but does not result in a net increase in built-upon area.~~ **W-70**

- hi. ‘Greenway / Hiking Trails’ means pedestrian trails constructed of pervious or impervious surfaces and related structures including but not limited to boardwalks, steps, rails, and signage, and that generally run parallel to the shoreline.
- ij. ‘High Value Tree’ means a tree that meets or exceeds the following standards: for pine species, 14-inch DBH or greater or 18-inch or greater stump diameter; or for hardwoods and wetland species, 16-inch DBH or greater or 24-inch or greater stump diameter.
- jk. ‘Intermittent stream’ means a well-defined channel that contains water for only part of the year, typically during winter and spring when the aquatic bed is below the water table. The flow may be heavily supplemented by stormwater runoff. An intermittent stream often lacks the biological and hydrological characteristics commonly associated with the continuous conveyance of water.
- kl. ‘Jordan nutrient strategy’ or ‘Jordan water supply nutrient strategy’ means the set of Rules 15A NCAC 2B .0262 through .0273 and .0311(p).
- lm. ‘Jordan Reservoir’ means the surface water impoundment operated by the US Army Corps of Engineers and named B. Everett Jordan Reservoir, as further delineated for purposes of the Jordan nutrient strategy in Rule 15A NCAC 2B .0262(4).
- mn. ‘Jordan watershed’ means all lands and waters draining to B. Everett Jordan Reservoir.
- ~~o.~~ ~~New Development’ means any development project that does not meet the definition of existing development set out in this Ordinance.~~
- np. “Perennial stream” means a well-defined channel that contains water year round during a year of normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water for a perennial stream, but it also carries stormwater runoff. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.
- oq. “Perennial waterbody” means a natural or man-made basin, including lakes, ponds, and reservoirs, that stores surface water permanently at depths sufficient to preclude growth of rooted plants. For the purpose of the State’s riparian buffer protection program, the waterbody must be part of a natural drainage way (i.e., connected by surface flow to a stream).

- pf.** ‘Shoreline stabilization’ is the in-place stabilization of an ~~water~~ shoreline. Stabilization techniques which include “soft” methods or natural materials (such as root wads, or rock vanes) may be considered as part of a restoration design. However, stabilization techniques that consist primarily of “hard” engineering, such as concrete lined channels, riprap, or gabions, while providing bank stabilization, shall not be considered stream restoration.
- qs.** ‘Stream restoration’ is defined as the process of converting an unstable, altered or degraded stream corridor, including adjacent riparian zone and flood-prone areas to its natural or referenced, stable conditions considering recent and future watershed conditions. This process also includes restoring the geomorphic dimension, pattern, and profile as well as biological and chemical integrity, including transport of water and sediment produced by the stream’s watershed in order to achieve dynamic equilibrium. ‘Referenced’ or ‘referenced reach’ means a stable stream that is in dynamic equilibrium with its valley and contributing watershed. A reference reach can be used to develop natural channel design criteria for stream restoration projects.
- rt.** Stream” means a body of concentrated flowing water in a natural low area or natural channel on the land surface.
- st.** ‘Stump diameter’ means the diameter of a tree measured at six inches above the ground surface level.
- tv.** “Surface waters” means all waters of the state as defined in G.S. 143-212 except underground waters
- uw.** “Tree” means a woody plant with a DBH equal to or exceeding five inches or a stump diameter exceeding six inches.
- vx.** ‘Temporary road’ means a road constructed temporarily for equipment access to build or replace hydraulic conveyance structures such as bridges, culverts, pipes or water dependent structures, or to maintain public traffic during construction.

7-1.10. Stream Channelization.

Perennial Streams in water supply district shall not be channelized without prior approval by the Town Council.

7-1.11. Activities Regulated by Other Governmental Agencies.

(A) *Designated Agencies:* The following are the designated agencies responsible for implementing the requirements of the Water Supply Watershed Protection Rules as adopted by the N.C. Environmental Management Commission for the specified activity:

- 1) Agriculture-Guilford Soil and Water Conservation District;
- 2) Silviculture-N.C. Division of Forest Resources.

(B) *Transportation:* The North Carolina Department of Transportation shall comply with the practices outlined in its document entitled "Best Management Practices for the Protection of Surface Waters," which is incorporated by reference.

(C) *Hazardous Materials:*

- 1) The Guilford County Fire Marshal and the Guilford County Emergency Management Assistance Agency are the designated management agencies responsible for implementing the provisions of this Subsection pertaining to hazardous materials.
- 2) An inventory of all hazardous materials used and stored in the watershed shall be maintained. A spill/failure containment plan and appropriate safeguards against contamination are required. Waste minimization and appropriate recycling of materials is encouraged.
- 3) Properties in the WCA or GWA shall comply with the requirements of the following hazardous substances regulations if materials listed in the Superfund Amendments and Reauthorization Act (SARA) Section 302 Extremely Hazardous Substances (42 USC 11000 et seq.), or Section 311 of the Clean Water Act, as amended (CWA) (33 USC 1251 et seq.; oil and hazardous substances) are stored or used on the site.

7-1.12. Variances.

(A) General:

- 1) Requests for stormwater management/watershed protection variances shall be submitted in writing on forms supplied by the governing jurisdiction and with a completed stormwater management/watershed development plan showing all pertinent information relative to the site in question. Information not shown on the stormwater management/watershed development plan or not presented in writing shall not be considered pertinent to the variance request.
- 2) For each request for a minor or major stormwater management/watershed variance, the Enforcement Officer shall notify all other local governments having jurisdiction within the same water supply watershed or using the affected water supply for consumption. A comment period of at least fourteen (14) days shall be allowed before the Town Council hearing.
- 3) In granting variances the jurisdiction may require such conditions as will secure, insofar as practicable, the objectives of the requirements being modified.
- 4) The applicant must demonstrate hardship that the regulations impose on the property, not just apply for a waiver of the rules.
- 5) The applicant must submit a plan that demonstrates equal or better performance than the current regulations.
- 6) Before the Governing Body may grant a minor watershed variance or recommend approval to the North Carolina Environmental Management Commission (EMC) for a major variance, it shall make the following three findings, and shall include the factual reasons on which they are based.
 - a) There are practical difficulties or unnecessary hardships in the way of carrying out the strict letter of the watershed requirements, and all of the following conditions exist:
 - i) If the applicant complies with the provisions of this rule, the applicant can secure no reasonable return from, nor make reasonable use of the subject property. Merely proving that the variance would permit a greater profit from the property shall not be considered adequate justification for a variance. Moreover, the EMC or Enforcement Officer, or designee shall consider whether the variance is the minimum possible deviation from the terms of the rule that shall make reasonable use of property possible.
 - ii) The hardship results from the application of the rule to the property rather than from other factors such as deed restrictions or other hardships.
 - iii) The hardship is due to the physical nature of the applicant's property, such as size, shape, or topography, which is different from that of neighboring properties.
 - iv) The applicant did not cause the hardship by knowingly or unknowingly violating the Rule.
 - v) The applicant did not purchase the property after the effective date of the Rule, and then request an appeal to maximize the use of the property. The applicant is entitled to a variance if a valid hardship is demonstrated.
 - vi) The hardship is unique to the applicant's property, rather than the result of conditions that are widespread. If other properties are equally subject to the hardship created in the restriction, then granting a variance would be a special privilege denied to others, and would not promote equal justice.

- b) The variance is in harmony with the general purpose and intent of the Ordinance and preserves its spirit.
- c) In the granting of the variance the public safety and welfare have been assured, water quality has been protected, and substantial justice has been done.

(B) *Minor Stormwater/Watershed Variances:* The Town Council is designated to approve minor stormwater management and watershed variances. Any minor variance approved by the Town Council may be appealed to the governing body within fifteen (15) days.

(C) *Major Stormwater/Watershed Variances:* The North Carolina Environmental Management Commission (EMC) is designated to approve major stormwater management and watershed variances. The review process shall be the same as in subsection (B) above, except that the Governing Body shall make recommendations to the EMC. The Variance application, hearing notices, and minutes from each committee and board review shall be forwarded to the EMC, which shall approve or deny the variance.

7-1.13. Watershed Reporting.

Stormwater Management/Watershed Variances: The Enforcement Officer shall keep a record of all stormwater management/watershed variances. This record shall be submitted for each calendar year to the Division of Water Quality Management on or before January 1st of the following year and shall provide a description of each project receiving a minor or major variance and the reasons for granting the variance.

7-2. WATERSHED PROTECTION DISTRICTS AND PERFORMANCE STANDARDS

7-2.1. National Pollutant Discharge Elimination System (NPDES).

(A) *District Boundaries:* The NPDES district covers all the territory encompassed in Sedalia, North Carolina.

(B) *Maximum Development Density and Minimum Lot Size:*

- 1) All developments located in the NPDES non-water supply district shall be limited to the maximum density and minimum lot size based upon the development's current zoning.
- 2) All developments located in the NPDES water supply district shall follow the density and development requirements of the GWA and WCA performance tables.

(C) *Performance Standards:* The Stormwater Management/Watershed Development Plan for any development covered by this Section shall be prepared and submitted in accordance with the performance standards found in Table 7-2-1. The owner, developer, or person submitting the Stormwater Management/Watershed Development Plan shall indicate which performance standard they have chosen for review and approval. Development that cumulatively disturbs less than one acre is exempt from the requirements of this section

Table 7-2-1
NPDES Performance Standards

DISTRICT	LOW DENSITY OPTION	HIGH DENSITY OPTION ^a
NPDES, non-water supply areas	2 DU/1 AC; 0-24% BUA	greater than 2 DU/1 AC; greater than 24% BUA

^a Development under the High Density Option shall require Engineering Statement by a registered professional engineer, with seal (Article 7-1.6(B)) certifying the control and treatment of the run-off from a one (1) inch rain and the discharge of the storage volume shall be equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm.

NOTES:

- 1) DU = Dwelling Unit(s); AC=Acre; Percentage (%) refers to built-upon area of lot, parcel, or tract.
 - 2) Single family detached residential developments will be evaluated on the basis of dwelling units per acre.
 - 3) All other residential and all non-residential developments will be evaluated on the basis of built-upon area percentage.
- (D) *Runoff Control:* When runoff control is required for development using the high density option [see definition in Section 2-1.2 (Drainage and Watershed Protection)] the runoff control shall be by use of a best management practice meeting the performance standards of the following:
- 1) Control and treat the runoff from the first one inch of rain.
 - 2) Discharge the storage volume at a rate equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm.
 - 3) Remove an eighty-five (85%) percent average annual amount of Total Suspended Solids and meeting the guidelines in the latest edition of the Guilford County Water Quality Protection Manual.
 - 4) Drawdown of treatment volume shall be no faster than forty-eight (48) hours but no slower than one hundred twenty (120) hours.

7-2.2. General Watershed Areas (GWA).

- (A) *GWA District Boundaries:* The GWA district extends from the outer boundary of the WCA to the outer boundary of the watershed of a designated water supply reservoir or intake.
- (B) *Maximum Development Density and Minimum Lot Size:* All developments in the GWA, not utilizing Public Sewer, shall be limited to the maximum density of 1 DU/1 Acre and minimum lot size based upon the development's current zoning. The minimum required lot size shall not include the area in a Special Purpose Lot used for Off-site Sewage Treatment Systems. Developments utilizing Public Sewer shall be limited to the maximum density shown in Table 7-2-2 and minimum lot size based upon the Development's current zoning.
- (C) *Performance Standards:* The Watershed Development Plan for any development covered by this Section shall be prepared and submitted in accordance with the performance standards found in Table 7-2-2. The owner, developer, or person submitting the Watershed Development Plan shall indicate which performance standard they have chosen for review and approval. Development in the Lake Mackintosh watershed that cumulatively disturbs less than one acre is exempt from the requirements of this section.

Table 7-2-2
GWA Performance Standards

WATERSHED	LOW DENSITY OPTION	HIGH DENSITY OPTION ^a
<u>WS-IV</u> Lake Mackintosh (Big Alamance Creek)	2 DU/1 AC; 0-24% BUA	greater than 2 DU/1 AC; 24.01%-70% BUA

^a Development under the High Density Option shall require Engineering Statement by a registered professional engineer, with seal (Article 7-1.6(B)) certifying the control and treatment of the run-off from a one (1) inch rain and the discharge of the storage volume shall be equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm.

NOTES:

1. DU = Dwelling Unit(s); AC=Acre; Percentage (%) refers to built-upon area of the zone lot, parcel, or tract.
2. Single family detached residential developments will be evaluated on the basis of dwelling units per acre
3. All other residential and all non-residential developments will be evaluated on the basis of built-upon area percentage

(D) *Runoff Control*: When runoff control is required for development using the high density **W-75** [see definition in Section 2-1.2 (Drainage and Watershed Protection)] the runoff control shall be by use of a best management practice meeting the performance standards of the following:

- 1) Control and treat the runoff from the first one inch of rain.
- 2) Discharge the storage volume at a rate equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm.
- 3) Remove an eighty-five (85%) percent average annual amount of Total Suspended Solids and meeting the guidelines in the latest edition of the Guilford County Water Quality Protection Manual.
- 4) Drawdown of treatment volume shall be no faster than forty-eight (48) hours but no slower than one hundred twenty (120) hours.

(E) *GWA-Watershed Classification WS-IV*: Development in all WS-IV watersheds shall not exceed seventy (70) percent maximum built-upon area.

7-2.3. Watershed Critical Areas (WCA).

(A) *General*. The Watershed Critical Area is a district covering the portion of the watershed adjacent to a designated existing or proposed water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed.

(B) *District Description*.

(1) *WCA Boundary*: The Guilford County Stormwater Management/Designated Water Supply Watershed Map shows the defined Watershed Critical Area boundaries. The WCA boundary shall not be less than one-half (1/2) mile from the normal pool elevation and draining to existing or proposed designated reservoirs.

(2) *Divisions within the Watershed Critical Area*: The WCA consists of four divisions as follows:

- 1) Tier 1
 - a) Tier 1 consists of those lands within two hundred (200) feet of the existing or proposed normal pool elevation.
 - b) Tier 1 areas are intended for public purpose and should remain undisturbed.
- 2) Tier 2
 - a) Tier 2 consists of those lands lying within an area bounded by Tier 1 and a line parallel to and seven hundred and fifty (750) feet in distance from the normal pool elevation.
 - b) Tier 2 areas are intended primarily for public purpose with the following exception. Tier 2 areas surrounding Lake Mackintosh are not intended for public purpose unless and until more than twenty-five (25) percent of the WCA for the reservoir becomes urban in character, by meeting any of the tests defined in NCGS Section 160A-48(c).
- 3) Tier 3
 - a) Tier 3 consists of those lands lying within an area bounded by Tier 2 and a line parallel to and three thousand (3,000) feet from the normal pool elevation.
 - b) Tier 3 areas shall not exceed the WCA Boundary.
- 4) Tier 4: Tier 4 consists of those lands lying in the area between the outer boundary of Tier 3 and the WCA Boundary.

(C) *Runoff Minimization*: The density and built-upon area coverage limits defined in Table 7-3-1 shall apply within the WCA.

Table 7-3-1

WCA Density and Built-Upon Area Coverage Limits
(expressed as dwelling units/gross acre or % maximum)

	LOW DENSITY OPTION			
WATERSHED	Tier 1	Tier 2	Tier 3	Tier 4
Lake Mackintosh	N/A	1 DU/5 AC;	1 DU/3 AC;	1 DU/1 AC;

(Big Alamance Creek)		0-2.5%	0-4.0%	0-12.0% W-76
WATERSHED	High Density Option (requires public sewer)			
	Tier 1	Tier 2	Tier 3	Tier 4
Lake Mackintosh (Big Alamance Creek)	N/A	1 DU/5 AC; 0-2.5%	2 DU/1 AC; 4.01-34%	2 DU/1 AC; 12.01-40%

NOTES:

- 1) DU= Dwelling Unit(s); AC = Acre; Percentage (%) refers to built-upon area of the zone lot, parcel, or tract.
- 2) Single family detached residential developments will be evaluated on the basis of dwelling units per acre
- 3) All other residential and all non-residential developments will be evaluated on the basis of built-upon area percentage

(D) *Land Disturbance Minimization:*

- 1) *Erosion Control Plan:* See Section 7-4.1 (General Requirements) to determine when an erosion control plan is required.
- 2) *Street Standards:* Refer to Article V (Subdivision: Procedures and Standards) for the minimum street standards. To the extent practicable, the construction of new roads in the WCA should be avoided.
- 3) *Land Disturbance:*
 - a) No land disturbing activity is allowed within stream buffers, open channel drainageways carrying runoff from a 6.01 acre or more drainage basin, greater than fifteen (15) percent slopes adjacent to drainageways, or Water Quality Conservation Easements, except for utilities, watershed devices, and road crossings.
 - b) The transfer of stormwater from a drainage area of five (5) acres or greater by piping or channeling between sub-basins within the Watershed Critical Area (WCA) is not permitted, unless approved by the Town Council. The piping or channeling of stormwater from the watershed critical area to a General Watershed Area (GWA) or to a non-watershed basin is allowed.
 - c) Land Disturbance Limits:

	Tier 1	Tier 2	Tier 3	Tier 4
Maximum Land Disturbance	NA	10% of usable property	60% of usable property	75% of usable property

Usable Property = (Total Site Area) - (Area in stream buffers, open channel drainageways carrying runoff from a 6.01 acre basin or greater, 15 percent slopes adjacent to drainageways, Water Quality Conservation Easements, floodplains, or natural wetlands)

(E) *Protection of Fragile Areas:*

- 1) Slopes greater than fifteen (15) percent and wetlands.
 - a) Slopes greater than fifteen (15) percent lying adjacent and parallel to natural drainageways or streams, and wetlands shall remain in a natural and undisturbed condition except for road crossings, utilities, erosion control devices and runoff control devices.
 - b) Dedication of these areas to the local jurisdiction and the public as drainageway and open space may be required wherever authorized by Article 7-1.8 or any other provision in local ordinances.
 - c) Where such dedication is not required, a water quality conservation easement shall be recorded over such wetlands and slopes.

- d) Where a water quality conservation easement serves to bring two (2) or more properties into compliance with WCA requirements, the Town Council may require that the wetlands and slopes covered by such easements be held as common area by an owners' association.
- 2) Drainage.
- a) Drainage shall be provided by means of open channels. Piping of drainage to cross roadways is allowed.
- b) All open channel drainageways carrying runoff from a 6.01 acre or greater drainage basin shall have protected channels or remain in a natural and undisturbed state, except for road crossings, utilities, erosion control devices and runoff control devices.
- c) The undisturbed area width shall be the easement width as specified in Article 7-1.8 (Drainage).
- 3) Development on the best soils and terrain of any site is encouraged.
- 4) Clustering of residential development may be required by the Town Council in accordance with Section 4-4.1(B) (Cluster Development).
- (F) *Spill Risk Reduction:*
- (1) *Prohibited Uses:* The following uses shall be prohibited in a WCA district:

	DESCRIPTION	SIC INDUSTRY GROUP MAJOR GROUP NUMBERS
a)	<u>Agricultural Uses</u>	
	Animal Feeder/Breeder	0210
b)	<u>Agricultural Services</u>	
	Chemical Treatment and Fertilizer Application for Crops, Weed Control for Crop Operations, including Aerial Crop Dusting	0710, 0721
c)	<u>Mining Uses</u>	
	Mining and Quarrying	1000
d)	<u>Business, Professional and Personal Services</u>	
	Automobile Rental or leasing	7510
	Automobile Repair Services, Major	0000
	Automobile Repair Services, Minor	0000
	Automobile Towing and Storage Services	7549
	Boat Repairs	3730
	Car Wash	7542
	Commercial Chemical and Biological Research	8731
	Furniture Stripping or Refinishing (including secondary or accessory operations)	7641

	Equipment Repair, Heavy	7690
	Agricultural Equipment Repair, Boiler Cleaning and Repair, Cesspool Cleaning, Engine Repair, except automotive, Farm Machinery Repair, Industrial Truck Repair, Machinery Cleaning, Motorcycle Repair Service, Rebabbiting, Repair of Service Station Equipment, Sewer Cleaning and Rodding, Tank and Boiler Cleaning Service, Tank Truck Cleaning Service, Tractor repair, and Welding Repair Shops	
	Heavy Construction Equipment Rental and Leasing	7350
	Lawn Care, Lawn Fertilizing Services, Lawn Spraying Services, Ornamental Shrub and Tree Services with Spraying	0780
	Laundry or Drycleaning Plant	7211, 7216, 7217, 7218
	Laundromats, Coin-operated	7215
	Pest or Termite Control Services	7342
	Septic Tank Services	7699
	Truck Driving Schools	8249
	Truck and Utility Trailer Rental and Leasing, Light	0000
	Truck Tractor and Semi Rental and Leasing, Heavy	0000
	Truck Washing	7542
e)	<u>Retail Trade</u>	
	Fuel Oil Sales	5980
	Convenience Stores with fuel pumps	5411
	Motor Vehicle Sales (new and used)	5511
	Motorcycle Sales	5571
	Recreational Vehicle Sales	5561
	Service Stations, gasoline	5541
	Truck Stops	5541
f)	<u>Wholesale Trade</u>	
	Agricultural Chemicals, Pesticides, Fertilizers	5191
	Chemical and Allied Products	5169
	Motor Vehicles	5012
	Nursery Stock, Plants Potted	5193
	Paints and Varnishes	5198
	Petroleum and Petroleum Products	5170

	Scrap and Waste Materials	5093
g)	<u>Transportation, Warehousing, and Utilities</u>	
	Air Transportation Facilities	4789
	Bus Terminal and Service Facilities	4100, 4170
	Hazardous and Radioactive Waste (transportation, Storage, Disposal.)	4953
	Inert Debris Landfills, Major	0000
	Landfills of any character, minor or major in Lower Randleman Lake Watershed--WCA	0000
	Petroleum Contaminated Soil Remediation Disposal Sites	0000
	Pipelines, except Natural Gas	4600
	Railroad Terminal or Yard	4010
	Recycling Processing Centers	0000
	Refuse and Raw Material Hauling	4212
	Sanitary Sewer and Water Treatment Plant Sludge Application Sites	0000
	Sewage Treatment Plants	4952
	Solid Waste Disposal (nonhazardous)	4953
	Trucking or Freight Terminals	4230, 4213
h)	<u>Manufacturing and Industrial Uses</u>	
	Animal Slaughter or Rendering	0000 (2010)
	Arms and Weapons	3480
	Asbestos, Abrasive, and Related Products	3290
	Asphalt Plant	2951
	Batteries	3690
	Chemicals, Paints and Allied Products	2800
	Concrete, Cut Stone and Clay Products	3240, 3270
	Cement, Hydraulic	3241
	Contractors, Heavy construction	1600
	Contractors, Special Trade	1700
	Dairy Products	2020
	Fats and Oils, Animal	2077
	Fats and Oils, Plant	2070
	Fish, Canned, Cured or Frozen	2091

	Leather and Leather Products (tanning)	3110
	Magnetic and Optical Recording Media	3695
	Meat and Poultry, Packing and Processing (no rendering)	2010
	Metal Coating and Engraving	3470
	Paper Products (no coating or laminating)	2670
	Paper Products (coating or laminating)	2670
	Petroleum and Related Products	2900
	Primary Metal Products and Foundries	3300
	Pulp and Paper Mills	2610
	Rubber and Plastics, Misc.	3000
	Rubber and Plastics, Raw	3000
	Salvage Yards, Auto Parts	5015
	Salvage Yard, Scrap Processing	5903
	Solvent Recovery	7389
	Surface Active Agents	2843
	Textile Products, (no Dying and Finishing)	2200
	Textile Products, (with Dying and Finishing)	2260

2) *Containment Structures:*

- a) Storage tanks for fuels and chemicals and associated pumping and piping shall be provided a spill containment system.
- b) Such containment systems shall be of sufficient volume to contain one hundred (100) percent of all the tank(s) contents stored in the area and shall have a leak detection system installed.
- c) The containment system shall be approved by the Enforcement Officer or designee and the Fire Marshal.
- d) Such tanks and containment structures shall not be placed closer than one thousand (1,000) feet to the normal pool elevation of the existing or proposed reservoir.

3) *Underground Storage Tanks:* Underground storage tanks for fuels and chemicals shall not be permitted except as approved by the Town Council.

4) *Point Source Discharges:*

- a) No expansion of any existing private wastewater facilities or establishment of any new public or private wastewater treatment plants of any kind shall be permitted. On-site individual residential septic systems approved by the Guilford County Health Department are permitted. Off-site individual residential septic systems are permitted in Tier 4 only, with a) reduction in overall density to 1 DU/1.25 Acre or less or b) in a Rural Preservation District (or equivalent clustered) zoning.
- b) Industrial pre-treatment facilities which prepare wastewater for discharge into a public sewer system shall be permitted in WCA districts.

(G) *Storm Water Management:*

1) *Control of Run-off:* Run-off from built-upon areas shall be controlled as follows:

- a) If the built-upon area is greater than twelve (12%) percent the runoff control shall be by use of a best management practice meeting the performance standards of the following:
 - 1) Control and treat the runoff from the first one inch of rain.

- 2) Discharge the storage volume at a rate equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm.
 - 3) Remove an eighty-five percent (85%) average annual amount of Total Suspended Solids, and meeting the guidelines in the latest edition of the Guilford County Water Quality Protection Manual.
 - 4) Drawdown of treatment volume shall be no faster than forty-eight (48) hours, but no slower than one hundred twenty (120) hours.
- 2) *Design Approval:* All designs for runoff control structures, shall meet the requirements of Section 7-1.6 (Improvements) and shall be subject to the approval of the Enforcement Officer, or designee.

7-2.4. Jordan Lake Watershed Area

(A) General. Beginning with and subsequent to its effective date, this ordinance shall be applicable to all development and redevelopment in the Jordan Lake Watershed, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to this ordinance.

B) Exemptions

- 1) Development in Jordan Lake Watershed that cumulatively disturbs less than one acre for single family, duplex residential property and recreational facilities and less than one-half acre for commercial, industrial, institutional, multifamily residential, or local government property and is not part of a Larger Common Plan of Development, Redevelopment or Sale is exempt from the nutrient loading requirements of the water quality control provisions of this section.
- 2) Development that cumulatively disturbs less than the thresholds mentioned above is not exempt if such activities are part of a Larger Common Plan of Development, Redevelopment or Sale, even though multiple, separate or distinct activities take place at different times on different schedules.
- 3) Development that is exempt from permit requirements of Section 404 of the federal Clean Water Act as specified in 40 CFR 232 (primarily, ongoing farming and forestry activities) are exempt.

(C) New development and redevelopment within the Jordan Lake Watershed Districts is subject to nutrient loading requirements. The Load Accounting Tool approved by the Division of Water Quality shall be used to determine the predevelopment and postdevelopment nutrient loading rates of the new development and the required engineered stormwater controls to achieve the loading requirements set within this Section.

- 1) Nutrient loading contributed by new development shall not exceed 3.8 pounds per acre per year for nitrogen and 1.43 pounds per acre per year for phosphorus, except as provided below. In cases where the postdevelopment loading targets estimated by the tool exceed the rate targets above, both of the following measures shall be taken:
 - a) On-site Engineering Stormwater Controls
Onsite stormwater controls shall achieve a loading rate for nitrogen that does not exceed 6 pounds per acre per year for single-family detached and duplex residential development and 10 pounds per acre per year for other development including multifamily residential, commercial and industrial.

b) Off-site management measures

Off-site measures include utilizing a private mitigation bank or other method approved by the Division of Water Quality. Off-site management measures shall be used to offset the difference between the postdevelopment nitrogen and phosphorus loading rates, as determined by the tool, and the target rates of 3.8 pounds per acre per year for nitrogen and 1.43 pounds per acre per year for phosphorus.

2) Proposed new development that replaces or expands structures or improvements that legally existed after December 1, 2001, and results in a net increase in built-upon area shall meet one of the following requirements:

a) The postdevelopment nutrient loading rates for nitrogen and phosphorous, as determined by the tool for the entire site, are 8% less for nitrogen and 5% less for phosphorus than the predevelopment nutrient loading rates.

b) The entire site meets the loading targets set in Subsection 1) above.

ARTICLE 1
PURPOSE AND AUTHORITY

1-1 SHORT TITLE

This Ordinance shall be known and may be cited as the "Town of Sedalia Development Ordinance", except as referred to herein, where it shall be known as "this Ordinance".

1-2 REPEALS AND ENACTMENT

1-2.1 Repeal of Inconsistency

All ordinances, or portions thereof, of the Town of Sedalia, which relate to zoning, subdivision, and land use which are inconsistent with the provisions of this Ordinance are hereby repealed to the extent of such inconsistency.

1-2.2 Enactment

This Ordinance is hereby enacted and shall be the Development Ordinance for the Town of Sedalia.

1-2.3 Effective Date

This Ordinance shall become effective on January 1, 2000.

1-3 PURPOSE

1-3.1 General Purpose

It is the purpose of this Ordinance to promote the health, safety, morals, and general welfare of the residents of the Town of Sedalia through the regulations of this Ordinance.

1-3.2 Zoning Regulation Purpose

The zoning regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Lessen congestion in the streets;
- (B) Secure safety from fire, panic and other dangers;
- (C) Provide adequate light and air;
- (D) Prevent the overcrowding of land;
- (E) Avoid undue concentration of population;
- (F) Facilitate the adequate and economic provision of transportation, water, sewage, schools, park, and other public services;
- (G) Protect water quality within watershed critical areas and/or designated municipal watersheds;
- (H) Preserve and enhance visual attractiveness and economic vitality; and
- (I) Require appropriate setbacks for buildings and other structures to facilitate the safe movement of vehicular and pedestrian traffic, provide adequate fire lanes and ensure adequate distance from dust, noise and fumes created by vehicular traffic.
- (J) Establish a zoning vested right upon the approval of a site specific development plan pursuant to NCGS 160A-385.1

1-3.3 Cluster and Zero Side Setback Regulation Purpose

The single family dwelling cluster and zero side setback regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Encourage innovation in residential development by providing efficient, attractive, flexible and environmentally sensitive design;
- (B) Lower the costs of housing by reducing the lot size and the per dwelling unit linear footage of streets, water lines, storm sewers and sanitary sewers;
- (C) Reduce the future cost of infrastructure maintenance and, therefore, the burden upon taxpayers and ratepayers;
- (D) Encourage development in areas which have major streets and utility lines in place, but are experiencing little or no development;
- (E) Protect water quality, preserve wildlife habitats, and protect natural features such as streams, lakes, wetlands, and trees; and
- (F) Reduce the amount of grading necessary for site preparation.

1-3.4 Planned Unit Development Purpose

The planned unit development regulations, adopted and prescribed in this ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Promote all of the purposes listed in Section 1-3.3 (Cluster and Zero Side Setback Regulation Purpose);
- (B) Allow diversification of uses in developments intended as cohesive, unified projects;
- (C) Allow variation in the relationship of residential and nonresidential uses and structures in such cohesive, unified projects;
- (D) Reduce travel time by providing opportunities for employment and services closer to residences; and
- (E) Encourage innovation by offering flexibility in design and layout requirements to achieve a greater choice of living and working environments.

1-3.5 Historic District Overlay Purpose

The historic district overlay regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Protect, safeguard and conserve the heritage of the community;
- (B) Promote the sound and orderly preservation of historic areas as a whole, and of the individual properties therein, which embody important elements of social, economic, political or architectural history for the education, pleasure and enrichment of all citizens; and
- (C) Enhance property values within historic areas.

1-3.6 Scenic Corridor Overlay Purpose

The scenic corridor overlay regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Preserve and enhance the appearance and operational characteristics of certain designated roadways; and
- (B) Address development issues of special concern with specific requirements which relate to land use, traffic movement, access, environment, signage, landscaping, visual quality and aesthetics.

1-3.7 Manufactured Housing Overlay Purpose

The manufactured housing overlay regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Provide alternative, affordable housing opportunities for low and moderate income residents in residential areas by allowing for the use of manufactured dwellings;
- (B) Establish requirements designed to assure acceptable similarity in exterior appearance between manufactured dwellings and single family dwellings that have been or might be constructed on adjacent or nearby lots; and
- (C) Protect property values and preserve the character and integrity of the community or individual neighborhoods within the community.

1-3.8 Subdivision Regulation Purpose

The subdivision (including group development) regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Promote orderly growth and development;
- (B) Provide for suitable residential and nonresidential developments with adequate streets and utilities and appropriate building sites;
- (C) Provide for the distribution of population and traffic in a manner which shall avoid congestion and overcrowding;
- (D) Provide for the coordination of streets within subdivisions with existing or planned streets and with other public facilities;
- (E) Provide for the dedication or reservation of rights-of-way or easements for street and utility purposes;
- (F) Provide for the dedication or reservation of adequate spaces for public lands and buildings;
- (G) Encourage design that is protective of environmental quality;
- (H) Provide for the dedication or reservation of recreation, park and greenway areas; and
- (I) Provide proper land records for the convenience of the public and for better identification and permanent location of real property boundaries.

1-3.9 Sign Regulation Purpose

The sign regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Encourage the effective use of signs as a means of visual communication;
- (B) Promote a positive community appearance for the enjoyment of all citizens;
- (C) Maintain and enhance the aesthetic environment and the community's ability to attract sources of economic development and growth;
- (D) Protect the public from damage or injury attributable to distractions and/or obstructions caused by improperly designed or located signs; and
- (E) Protect existing property values in both residential and nonresidential areas.

1-3.10 Off-Street Parking, Stacking, and Loading Regulation Purpose

The off-street parking, stacking, and loading regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Ensure a sufficient amount of off-street parking, stacking, and loading areas for various land uses;
- (B) Ensure easy, convenient circulation of vehicles within parking and loading areas;
- (C) Minimize the potential for conflict with traffic on public streets; and
- (D) Permit the shared use of parking areas by establishments and/or activities which have different hours of operation.

1-3.11 Planting Yard Purpose

The planting yard regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Create a better quality of life for the community by encouraging preservation of existing trees and vegetation;
- (B) Provide visual buffering and enhance beautification;
- (C) Establish appropriate separation between land uses;
- (D) Provide the separation necessary to permit certain land uses to coexist harmoniously which might not do so otherwise;
- (E) Safeguard and enhance property values and protect public and private investment;
- (F) Enhance the community's competitive position in economic development and tourism by improving views, particularly along streets; and
- (G) Reduce the negative impact of glare, noise, trash, odors, overcrowding, traffic, lack of privacy, and visual disorder when incompatible land uses adjoin one another.

1-3.12 Watershed Protection Purpose

The watershed protection regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Protect those portions of designated water supply watersheds which lie closest to existing and proposed water supply reservoirs from activities which could degrade water quality in the reservoirs;
- (B) Reduce the volume of nutrients and other chemicals which could enter the water supply by reducing the amount of runoff which any given development will generate;
- (C) Minimize land disturbance to reduce the amount of sediment washing into streams and lakes and to enhance the infiltration of runoff into soil; thus alleviating the sedimentation of water supply lakes which reduces their storage capacity, shortens their useful life, and makes them less able to withstand drought;
- (D) Reduce the probability of the release of harmful chemicals into water supply reservoirs, either through natural catastrophe or human error; and
- (E) Provide for natural and engineered methods for managing the stormwater which flushes contaminants off of built-upon areas in the designated water supply watersheds and which may reach water supply reservoirs unless controlled.

1-3.13 Soil Erosion and Sedimentation Control Purpose

The soil erosion and sedimentation control regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate to:

- (A) Regulate certain land-disturbing activity to control accelerated erosion and sedimentation to prevent the pollution of water and other damage to lakes, watercourses and other public and private property by sedimentation; and
- (B) Establish procedures through which the purposes of soil erosion and sedimentation control can be fulfilled.

1-3.14 Flood Damage Prevention Purpose

The flood damage prevention regulations, adopted and prescribed in this Ordinance, are found by the Governing Body to be necessary and appropriate in order to:

- (A) Permit only that development within the floodplain which is appropriate in light of the probability of flood damage and which represents a reasonable social and economic use of land in relation to the hazards involved; and
- (B) Minimize public and private losses due to flood conditions in specific areas by enactment of provisions designed to:
 - 1) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
 - 2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
 - 3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
 - 4) Control filling, grading, dredging and other development which may increase erosion or flood damage;

- 5) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands;
- 6) Protect human life and health;
- 7) Minimize expenditure of public money for costly flood control projects;
- 8) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- 9) Minimize prolonged business interruptions;
- 10) Minimize damage to public facilities and utilities such as water, sewer, gas, electric, and telephones lines and streets and bridges located in flood plains;
- 11) Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas;
- 12) Permit and encourage the retention of open land uses which will be so located and designed as to constitute a harmonious and appropriate part of the physical development of the community and which will not impede the flow of floodwaters; and
- 13) Ensure that potential buyers are notified whenever property is in a flood hazard area.

1-4 JURISDICTION

The provisions of this Ordinance shall apply to all the territory encompassed in the Town of Sedalia, North Carolina herein referred to as "the Jurisdiction". This Ordinance shall govern the development and use of land and structures therein, as provided for by NCGS 160A (Cities).

1-5 AUTHORITY

This Ordinance is adopted pursuant to portions of one or more of the following authorities in NCGS: Chapter 63 (Aeronautics), Chapter 69 (Fire Protection), Chapter 74 (Environmental Controls), Chapter 95 (Department of Labor and Labor Regulations), Chapter 106 (Agricultural Regulations), Chapter 113A (Pollution Control and Environment), Chapter 119 (Gasoline and Oil Inspection and Regulations), Chapter 121 (Environmental Controls), Chapter 130A (Public Health), Chapter 133 (Public Works), Chapter 136 (Roads and Highways), Chapter 143 (State Departments, Institutions, and Commissions), Chapter 160A (Cities), Chapter 157 (Housing Authorities), Chapter 168 (Handicapped Persons). This Ordinance may be amended from time to time as required or allowed by subsequent legislative enactments.

1-6 ABROGATION

This Ordinance is not intended to repeal, abrogate, annul, impair or interfere with any existing easements, covenants, deed restrictions, agreements, rules, regulations, or permits previously adopted or issued pursuant to law.

1-7 INTERPRETATION OF ORDINANCE

1-7.1 Minimum Requirements

In the interpretation and application of this Ordinance, all provisions shall be considered to be minimum requirements and deemed neither to limit nor repeal any other powers granted under state statutes.

1-7.2 Greater Restrictions Govern

These regulations shall be the minimum requirements for administration, enforcement, procedures, restrictions, standards, uses, variances, and all other areas addressed by this Ordinance. If any federal or state law or any other

existing ordinance or regulation allows lesser regulation this Ordinance shall govern so that, in all cases, the more restrictive limitation or requirement shall govern. Whenever regulations imposed by this Ordinance are less restrictive than regulations imposed by any governmental authority through regulation, rule or restriction, the regulations imposed by that authority shall govern. Regardless of any other provision of this Ordinance, no land shall be developed or used, and no structure shall be erected or maintained in violation of any state or federal regulation.

1-7.3 Rounding of Numbers

All calculations that result in a part or fraction of a whole number shall be rounded up to the next highest whole number, unless otherwise provided in this Ordinance.

1-7.4 Density

- (A) **Rounding:** In calculating density, all calculations that result in a part or fraction of a whole number shall be rounded down to the next lowest whole number.
- (B) **Dwelling Unit Equivalence:**
- 1) **Congregate Care Facilities and Private Dormitories:** For the purpose of calculating density for congregate care facilities and private dormitories, two (2) bedrooms shall be equivalent to one (1) dwelling unit.
 - 2) **Single Room Occupancy (SRO) Residences:** For the purpose of calculating density for single room occupancy (SRO) residences, a rooming unit of less than one hundred and fifty (150) square feet shall be equivalent to one-half (1/2) a dwelling unit and a rooming unit of one hundred and fifty (150) square feet or more shall be equivalent to one (1) dwelling unit.

1-7.5 Figures

The figures provided in this Ordinance are designed to provide a visual explanation to selected Sections of the Ordinance. If any illustration appears to be in conflict with the text of the Ordinance, the text shall govern.

1-8 RULES OF CONSTRUCTION

1-8.1 Word Interpretation

Words not defined in this Ordinance shall be given their ordinary and common meaning.

1-8.2 Rules of Construction

For the purposes of this Ordinance, the following rules of construction shall apply:

- (A) **Tense:** Words used in the present tense include the future tense;
- (B) **Singular and Plural:** Words used in the singular number include the plural number, and the plural number includes the singular number, unless the context of the particular usage clearly indicates otherwise;
- (C) **Mandatory Meaning:** The words "shall," "will," and "must" are mandatory in nature implying an obligation or duty to comply with the particular provision;
- (D) **Gender:** Words used in the male gender include the female gender; and
- (E) **References:** Any reference to an Article or Section shall mean an Article or Section of this Ordinance, unless otherwise specified.

1-9 COMPLIANCE

1-9.1 Compliance

No building, premises, or structure shall be constructed, erected, modified, converted, occupied, placed, maintained or moved, and no land use shall be commenced, maintained, or modified, except as authorized by this Ordinance.

1-9.2 Conformance with Requirements

Except as herein provided, no applicable permit shall be issued or granted that does not conform to the requirements of this Ordinance. Developments which have received Guilford County Technical Review Committee, Enforcement Officer approval, or a building permit prior to the effective date of this Ordinance, may proceed in accordance with such approval or permit while such approval or permit remains in effect.

1-10 RELATION TO THE COMPREHENSIVE PLAN

The administration, enforcement and amendment of this Ordinance shall be accomplished with consideration of recommendations presented in the documents comprising the Comprehensive Plan. These documents include, but are not limited to the following: land use plan, thoroughfare plan, collector street plan, small area plans, community facilities plan, capital improvement plan, economic development strategies, housing assistance plan, recreation plan, greenways plan, drainage and open space plan and watershed management plan.

1-11 ESTABLISHMENT OF OFFICIAL ZONING MAP

1-11.1 Official Zoning Map

The Jurisdiction is hereby divided into zones, or districts, as established in Article IV (Zoning).

1-11.2 Map Certification

The Official Zoning Map shall be identified by the signature of the Mayor of the the Town of Sedalia, attested by the Town Clerk, and bear the seal of the Jurisdiction, together with the effective date of this Ordinance.

1-11.3 Map Changes

If changes are made in district boundaries or other matters portrayed on the Official Zoning Map, such changes shall be entered on the Official Zoning Map.

1-11.4 Unauthorized Changes

No changes in zoning district boundaries shall be made on the Official Zoning Map, except in conformance with the procedures set forth in this Ordinance. Any unauthorized change shall be considered a violation of this Ordinance.

1-11.5 Map Location

Regardless of the existence of purported copies of the Official Zoning Map which may from time to time be made or published, the Official Zoning Map, which shall be located in the Guilford County Planning Department, shall be the final authority as to the current zoning of property within the Jurisdiction.

1-11.6 Map Damage and Replacement

In the event that the Official Zoning Map becomes damaged, destroyed, lost, or difficult to interpret because of the nature or number of changes and additions, the Governing Body may by resolution adopt a replacement Official Zoning Map which shall supersede the prior Official Zoning Map. Unless the prior Official Zoning Map has been lost, or has been totally destroyed, the prior map or any significant remaining parts thereof, shall be preserved, together with all available records pertaining to its adoption or amendment.

1-11.7 Replacement of Official Zoning Map

The new Official Zoning Map may correct drafting or other errors or omissions in the prior Official Zoning Map, but no such correction shall have the effect of amending the original Official Zoning Map; or any subsequent amendment thereof. The replacement Official Zoning Map shall be identified by the signature of the Mayor of the Town of Sedalia, be attested by the Town Clerk, and bear the seal of the Jurisdiction.

1-12 INTERPRETATION OF DISTRICT BOUNDARIES

1-12.1 Boundary Interpretation

Where uncertainty exists as to the boundaries of any district shown on the Official Zoning Map, the following rules shall apply:

- (A) Centerline: Where a boundary line lies within and follows a street or alley right-of-way, a railroad right-of-way, or utility easement, the boundary shall be construed to be in the center of such street or alley right-of-way, railroad right-of-way, or utility easement. If such a street or alley right-of-way, railroad right-of-way, or utility easement forming the boundary between two separate zoning districts is abandoned or removed from dedication, the district boundaries shall be construed as following the centerline of the abandoned or vacated road bed or utility easement.
- (B) Edge Line: Where a boundary line follows the edge of a street or alley right-of-way, a railroad right-of-way, or utility easement, the boundary shall be construed to be in the edge of such street or alley right-of-way, railroad right-of-way, or utility easement. If such a street or alley right-of-way, railroad right-of-way, or utility easement forming the boundary between two separate zoning districts is abandoned or removed from dedication, the district boundaries shall be construed as following the edge of the abandoned or vacated road bed or utility easement.
- (C) Lot Line: Boundaries indicated as approximately following lot lines shall be construed as following such lot lines. In the event that a district boundary line divides a lot or tract, each part of the lot or tract so divided shall be used in conformity with the regulations established by this Ordinance for the district in which said part is located.
- (D) City Limits: Boundaries indicated as approximately following city limits or extraterritorial boundary lines shall be construed as following the city limits or extraterritorial boundary lines.
- (E) County Line: Boundaries indicated as approximately following county lines shall be construed as following the county line.
- (F) Watercourses: Boundaries indicated as approximately following the centerlines of streams, rivers, canals, lakes, or other bodies of water shall be construed to follow such center lines.
- (G) Extensions: Boundaries indicated as parallel to, or as extensions of street or alley rights-of-way, channelized waterways, railroad rights-of-way, utility easements, lot lines, city limits, county lines, or extraterritorial boundaries, shall be so construed.
- (H) Scaling: Where a district boundary does not coincide with any boundary lines as above and no distances are described by specific ordinance, the boundary shall be determined by the use of the scale appearing on the map. In the case of Flood Zones, Corps of Engineers work maps, if available, shall be used for scaling.
- (I) Watersheds: Outer boundaries of General Watershed Area districts indicated as approximately following ridge lines or streets shall be construed to follow ridge lines (the actual drainage basin boundaries). Watershed Critical Area district outer boundaries not forming the inner boundaries of General Watershed Area districts shall be construed in the same manner. Boundaries between General Watershed Area districts and Watershed Critical Area districts indicated as approximately following major landmarks (identifiable major features) such as streets shall be construed to follow the centerlines of such features or, where applicable, the projections of the centerlines of such features.

1-12.2 Interpretation by Board of Adjustment

Where existing natural or man-made features on the ground are at variance with those shown on the Official Zoning Map, or are not covered by Section 1-12.1 (Boundary Interpretation), the Board of Adjustment shall interpret the district boundary.

1-13 SEVERABILITY

1-13.1 Invalidation

Should any Section, sentence, clause, phrase, or word of this Ordinance be held invalid or unconstitutional by a Court of competent jurisdiction of either the State of North Carolina or the United States, such decision shall not affect, impair, or invalidate the validity of the remaining parts of this Ordinance which can be given effect without the invalid provision.

1-13.2 Prejudicial Application

If any section, sentence, clause, phrase, or word of this Ordinance be held invalid or unconstitutional in its application to a particular case, such decision shall not affect or prejudice its application to other cases.

1-13.3 Lawful Presumption

There shall be a conclusive presumption when an Enforcement Officer or board authorizes regulatory action, that such officer or board would not have authorized such action except in the belief that such action was lawful.

ARTICLE VIII ENFORCEMENT

8-1 VIOLATIONS

Any of the following shall be a violation of this Ordinance and shall be subject to the enforcement remedies and penalties provided by this Article and by state law.

8-1.1 Development Without Permit

To engage in any development, use, construction, remodeling or other activity of any nature upon the land or improvements thereon subject to the jurisdiction of this Ordinance without all required permits, certificates or other forms of authorization as set forth in this Ordinance.

8-1.2 Development Inconsistent With Permit

To engage in any development, use, construction, remodeling, or other activity of any nature in any way inconsistent with any approved plan, permit, certificate, or other form of authorization granted for such activity.

8-1.3 Violation by Act or Omission

To violate, by act or omission, any term, variance or waiver, condition, or qualification placed by the governing body or its agent boards upon any required permit, certificate or other form of authorization for the use, development or other activity upon land or improvements thereon.

8-1.4 Use in Violation

To erect, construct, reconstruct, alter, repair, convert, maintain or use any building or structure or to use any land in violation or contravention of this Ordinance, or any other regulation made under the authority conferred thereby.

8-1.5 Subdivide in Violation

To subdivide land in violation of this Ordinance or transfer or sell land by reference to, exhibition of, or any other use of a plat or map showing a subdivision of the land before the plat or map has been properly approved under this Ordinance and recorded in the Office of the Register of Deeds. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring land does not exempt the transaction from violation of this Ordinance.

8-1.6 Continue a Violation

Each day's violation of any provision of this Ordinance is a separate and distinct offense.

8-2 ENFORCEMENT INTENT

8-2.1 Questions

It is the intention of this Ordinance, unless otherwise provided, that all questions arising in connection with the enforcement of this Ordinance shall be presented first to the Enforcement Officer and that such questions shall be presented to the Board of Adjustment only on appeal from the Enforcement Officer's decision. An appeal from the decision of the Board of Adjustment shall be by proceedings in the nature of certiorari to the Superior Court as provided by law.

8-2.2 Governing Body

It is further the intention of this Ordinance that the duties of the Governing Body in connection with this Ordinance shall not include the hearing and passing upon disputed questions that may arise in connection with the enforcement thereof.

8-3 ENFORCEMENT PROCEDURE

When the Enforcement Officer or his agent finds a violation of this Ordinance, it shall be his duty to notify the owner or occupant of the land, building, structure, sign, or use of the violation. The owner or occupant shall immediately remedy the violation.

8-3.1 Notice of Violation

If the owner or occupant of the land, building, sign, structure, or use in violation fails to take prompt corrective action, the Enforcement Officer shall give the owner or occupant written notice, by certified or registered mail to his last known address, or by personal service or by posting notice of the violation conspicuously on the property:

- (A) that the land, building, sign, structure, or use is in violation of this Ordinance;
- (B) the nature of the violation, and citation of the section of this ordinance violated; and
- (C) the measures necessary to remedy the violation.

8-3.2 Appeal

Any owner or occupant who has received a Notice of Violation may appeal in writing the decision of the Enforcement Officer to the Board of Adjustment (unless this Ordinance has specified that another board shall hear the appeal of the violation) within fifteen (15) days following the date of the Notice of Violation. The Board of Adjustment, or other designated board, shall hear an appeal within a reasonable time, and it may affirm, modify, or revoke the Notice of Violation. In the absence of an appeal, the remedies and penalties sought by the Enforcement Officer in the Notice of Violation shall be final.

8-3.3 Order of Corrective Action

If upon a hearing held pursuant to an appeal as prescribed above, the Board of Adjustment shall find that the owner or occupant is in violation of this Ordinance, the Board of Adjustment shall make an order in writing to the owner or occupant affirming the violation and ordering compliance.

8-3.4 Failure to Comply with an Order

If the owner or occupant of a property fails to comply with a Notice of Violation from which no appeal has been taken, or an Order of Corrective Action following an appeal, the owner or occupant shall be subject to such remedies and penalties as may be provided for by state law and Section 8-4 (Remedies). If the owner or occupant fails to comply with the remedies and penalties prescribed, enforcement shall be sought through an order of a court of competent jurisdiction.

8-4 REMEDIES

Anyone or all of the following procedures may be used to enforce the provisions of this Ordinance.

8-4.1 Injunction

Any violation of this Ordinance or of any condition, order, or requirement, or remedy adopted pursuant hereto may be restrained, corrected, abated, mandated, or enjoined by other appropriate proceeding pursuant to state law.

8-4.2 Civil Penalties

Any person who violates any provisions of this Ordinance shall be subject to the assessment of a civil penalty under the procedures provided in Section 8-5 (Civil Penalties – Assessments and Procedures).

8-4.3 Denial of Permit or Certificate

The Enforcement Officer may withhold or deny any permit, certificate, occupancy or other form of authorization on any land, building, sign, structure or use in which there is an uncorrected violation of a provision of this Ordinance or of a condition or qualification of a permit, certificate or other authorization previously granted.

8-4.4 Conditional Permit or Temporary Certificate

The Enforcement Officer may condition the authorization of any permit or certificate upon the correction of the deficiency, payment of civil penalties within a specified time, or the posting of a compliance security approved by appropriate governmental authority.

8-4.5 Stop Work Orders

Whenever a building, sign, or structure, or part thereof is being constructed, reconstructed, altered or repaired in violation of this Ordinance, the Enforcement Officer may order the work to be immediately stopped. The stop order shall be in writing and directed to the owner, occupant, or person doing the work. The stop order shall state the specific work to be stopped, the specific reasons for the stoppage, and the conditions under which the work may be resumed. Such action shall be in accordance with NCGS 160A-421 or 153A-361, as applicable, or the NC Building Code.

8-4.6 Revocation of Permits

The Enforcement Officer may revoke and require the return of a permit by notifying the permit holder in writing stating the reason for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, or specifications; refusal or failure to comply with the requirements of state or local laws, or for false statements or misrepresentations made in securing the permit. Any permit mistakenly issued in violation of an applicable state or local law may also be revoked.

8-4.7 Criminal Penalties

Any violation of this Ordinance shall be a misdemeanor or infraction as provided by NCGS 14-4, subject to a maximum fine of \$500.00.

8-5 CIVIL PENALTIES – ASSESSMENT AND PROCEDURES

8-5.1 Penalties

Any person who violates any provisions of this Ordinance shall be subject to assessment of a civil penalty in the amount of \$25.00 for the first violation; \$50.00 for the second violation; \$100.00 for the third violation; and \$200.00 for the fourth and succeeding violations thereafter. Except that any penalties assessed under subsection 3-14 (C) shall be stayed until all appeals are resolved.

8-5.2 Notice

No civil penalty shall be assessed until the person alleged to be in violation has been notified of the violation in accordance with Section 8-3.1 (Notice of Violation). If after receiving a notice of violation under Section 8-3.1, the owner or other violator fails to take corrective action, a civil penalty may be imposed under this Section in the form of a citation. The citation shall be served in the manner of a Notice of Violation. The citation shall state the nature of the violation, the civil penalty to be imposed upon the violator and shall direct the violator to pay the civil penalty within fifteen (15) days of the date of the notice.

8-5.3 Responsible Parties

The owner or occupant of any land, building, structure, sign, or use of land or part thereof and any architect, builder, contractor, agent or any other person who participates or acts in concert, assists, directs, creates, or maintains any condition that is in violation of the requirements of this Ordinance may be held responsible for the violation and subject to the civil penalties and remedies herein provided.

8-5.4 Continuing Violation

For each day the violation is not corrected, the violator will be guilty of an additional and separate offense and subject to additional civil penalty.

8-5.5 Demand for Payment

The Enforcement Officer shall make written demand for payment upon the property owner or the person in violation, and shall set forth in detail a description of the violation for which the civil penalty has been imposed.

8-5.6 Nonpayment

If payment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to legal counsel for institution of a civil action in the appropriate division of the General Courts of Justice for recovery of the civil penalty. Provided, however, if the civil penalty is not paid within the time prescribed, the Enforcement Officer may have a criminal summons or warrant issued against the violator. Upon conviction, the violator shall be subject to any criminal penalty the court may impose pursuant to NCCGS 14-4.

8-6 CIVIL PENALTIES – SOIL EROSION AND SEDIMENTATION CONTROL

8-6.1 General

Any person who violates any provisions of Section 7-4 (Soil Erosion and Sedimentation Control), or the Act, or rules or orders adopted or issued pursuant to this Ordinance, or who initiates or continues a land-disturbing activity for which an erosion and sedimentation control plan is required, or not in accordance with the terms, conditions, and provisions of an approved erosion and sedimentation control plan, shall be subject to a civil penalty. No civil penalty shall accrue in excess of \$500 per day, in addition to the penalty for failure to submit an erosion and sedimentation control plan as provided in Section 8-6.5 (Erosion and Sedimentation Control Plan).

8-6.2 Notice of Violation

No penalty shall be assessed until the person alleged to be in violation has been notified of the violation by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice shall describe the violation with reasonable particularity, set forth the measures necessary to achieve compliance with the plan, specify a reasonable time period within which the violation must be corrected, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action. If, after the allotted time period has expired, the violator has not completed corrective action, a civil penalty may be assessed from the date of receipt of the the notice of violation. However, no time period for compliance need be given for failure to submit a soil erosion and sedimentation control plan for approval or for obstructing, hampering or interfering with an authorized representative while in the process of carrying out his official duties. Each day of continuing violation shall constitute a separate violation.

8-6.3 Notice of Assessment

The Enforcement Officer shall determine the amount of the civil penalty to be assessed under this subsection, shall make written demand for payment upon the person in violation, and shall set forth in detail a description of the violation for which the penalty has been imposed. In determining the amount of the penalty the Enforcement Officer shall consider the degree and extent of harm caused by the violation and the cost of rectifying the damage. Notice of the assessment shall be by registered or certified mail or other means reasonably calculated to give actual notice. If payment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to the Town of Sedalia attorney for institution of a civil action in the appropriate division of the General Courts of Justice for recovery of the penalty. Such civil actions must be filed within three (3) years of the date the final decision was served on the violator.

8-6.4 Specific Civil Penalties

Civil penalties for specific violations of Section 7-4 (Soil Erosion and Sedimentation Control) shall be assessed as follows:

- (A) Grading Without Permit: \$500.00 per day for failure to secure a valid grading permit prior to conducting a land-disturbing activity for which a soil erosion and sedimentation control plan is required.
- (B) Failure to Protect: \$500.00 per day for failure to take all reasonable measures to protect public property, or private property, including lakes and/or natural watercourses, from damage caused by land-disturbing activities.

- (C) Failure to Follow Plan: \$300.00 per day for failure to conduct a land–disturbing activity in accordance with the provisions of an approved erosion and sedimentation control plan.
- (D) Failure to Install Devices: \$500.00 per day for failure, when more than one (1) acre is disturbed (\$250 per day when one (1) acre or less is disturbed), to install erosion and sedimentation control devices sufficient to retain the sediment generated by the land–disturbing activity within the boundaries of the tract(s) and prevent off–site sedimentation. .
- (E) Failure to Maintain Measures: \$300.00 per day for failure to maintain satisfactory erosion and sedimentation control measures, structures and/or devices on the site that are designed to provide protection from the calculated maximum peak rate of runoff from the ten (10)–year storm or the twenty–five (25)–year storm in a High Quality Storm (HQW) zone.
- (F) Failure to Maintain Temporary Measures: \$250.00 per day for failure to maintain temporary erosion and sedimentation control measures and facilities during the development of the site.
- (G) Failure to Maintain Slopes: \$250.00 per day for failure on graded slopes and fills to maintain an angle sufficient to retain vegetative cover or other adequate erosion and sedimentation control devices or structures.
- (H) Failure to Cover Slopes: \$250.00 per day for failure within thirty (30) days of completion of any phase of grading to plant or otherwise provide exposed, graded slopes or fills with ground cover, devices, or structures sufficient to restrain erosion.
- (I) Failure to Plant Cover: \$250.00 per day for failure on a tract when more than one (1) acre is disturbed, to plant or otherwise provide ground cover sufficient to restrain erosion within thirty (30) working days or one–hundred and twenty (120) calendar days, fifteen (15) working days or sixty (60) calendar days in High Quality Water Zones, whichever is the shorter, following completion of construction or development.
- (J) Failure to Revise Plan: \$250.00 per day for failure to file an acceptable, revised erosion and sedimentation control plan after being notified of the need to do so.
- (K) Failure to Maintain Buffer: \$250.00 per day for failure to retain a buffer zone of sufficient width along a lake or natural watercourse to confine visible siltation within the twenty–five (25%) percent of the buffer zone nearest the land–disturbing activity.
- (L) Interference with Official Duties: \$500.00 per day for obstructing, hampering, or interfering with any authorized agent of the Jurisdiction or the Sedimentation Control Commission while in the process of carrying out his official duties.
- (M) Failure to Provide Control: \$250.00 per day for failure to install or maintain erosion control devices, or prevent off–site sedimentation on sites of land–disturbing activity not requiring a grading permit and with disturbed area of less than one (1) acre.

8–6.5 Erosion and Sedimentation Control Plan

Any person who fails to submit an erosion and sedimentation control plan as required by this Ordinance shall be subject to a single, noncontinuing civil penalty of not more than \$1,000.00. Any person may be subject to additional civil penalties for violation of any other provision of this Ordinance or rules or orders adopted or issued pursuant to this Ordinance.

8–6.6 Civil Penalty Use

Civil penalties collected for erosion and sedimentation control violations shall be used or disbursed as directed by NCGS 113A–64(a).

8-7 CRIMINAL PENALTY – SOIL EROSION AND SEDIMENTATION CONTROL

Any person who knowingly or willfully violates any soil erosion and sedimentation control provisions of this Ordinance, or rule or order adopted or issued pursuant to the soil erosion and sedimentation control provisions, 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 misdemeanor punishable by imprisonment not to exceed ninety (90) days, or by a fine not to exceed \$5,000, or both

8-8 INJUNCTIVE RELIEF – SOIL EROSION AND SEDIMENTATION CONTROL

Whenever the Enforcement Officer has reasonable cause to believe that any person is violating or threatening to violate this Ordinance or any rule or order adopted or issued pursuant to this Ordinance, or any term, condition, or provision of an approved soil erosion and sedimentation control plan the Enforcement Officer 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 the Jurisdiction, for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the Superior Court of Guilford County. Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgements as are necessary to abate the violation 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 Ordinance.

8-9 OTHER POWERS AND ACTIONS**8-9.1 State and Common Law Remedies**

In addition to other enforcement provisions contained in this Article, the Governing Body may exercise any and all enforcement powers granted to it by state law or common law.

8-9.2 Previous Enforcement

Nothing in this Ordinance shall prohibit the continuation of previous enforcement actions.

8-10 REMEDIES CUMULATIVE AND CONTINUOUS**8-10.1 Cumulative Violations**

All such remedies provided herein shall be cumulative. To the extent that North Carolina law may limit the availability of a particular remedy set forth herein for a certain violation or a part thereof, such remedy shall remain available for other violations or other parts of the same violation.

8-10.2 Repeat Violations

If an owner or occupant repeats the same violation within a five (5) year period from the date of the initial violation, it shall be considered to be a continuation of the initial violation and shall be subject to additional penalties and remedies.

8-11 ACTION BY OTHERS**8-11.1 Adjacent or Neighboring Property**

In addition to the remedies of the local government hereunder, if any building or structure is erected, constructed, reconstructed, repaired, converted or maintained, or any building, structure or land is used in violation of this Ordinance, any other appropriate authority or any adjacent, nearby or neighboring property owner who would be affected by such violation may institute injunction, mandamus or other appropriate action or proceeding to prevent the occupancy of such building, structure or land, or the continuance of any construction whatsoever in violation of this Ordinance.

8-11.2 Land Purchaser

In the event that a purchaser buys land for which there is a surety to secure performance of improvements, after a period of two (2) years has passed since the date of Final Plat recordation, the purchaser may bring action to enforce completion of the improvements. In such a case, the purchaser may seek specific performance.