

Navigating through the Wake County Stormwater Management Review Process for Preliminary Subdivision Submittals and Construction Plans Reviews

PURPOSE:

This document is intended to assist the Stormwater designer to address Wake County recently adopted Stormwater Volume Management using Natural Resources Conservation Services (NRCS) Curve Numbers (CN) for **Residential** Preliminary and Construction site plans submittals.

BACKGROUND:

In April 2005, the balanced committee formed (the Wake County Stormwater Ordinance Committee) and agreed on its purpose: Develop an economically and environmentally sound Stormwater ordinance to recommend to the County. The group agreed Stormwater management should be basic to subdivision design; and, a balanced committee with equal representation from development and environmental interests developed the requirements. Although the ordinance allows open choices such as Volume Based and Natural Practices, it uses credits and an incentive to encourage developers to choose natural practices. The NRCS, Urban Hydrology for Small Watersheds (TR-55) factors existing hydrologic soil groups, and cover type to obtain a proposed Curve Number. The Stormwater ordinance simplifies these proposed cover conditions into three categories: Woods in good condition, Open Space in good condition, and impervious areas.

PROCESS:

The Wake County Regular/Major Residential Subdivision process can be described as three processes: The Preliminary Plan, Construction Plan and Final Plat. The following processes will be divided into individual processes and explain why this information is important so that the submittal and review process is streamlined for Stormwater Management.

I. Preliminary Plan Review Process:

- A. Familiarize yourself with Article 9, Stormwater Management of the Unified Development Ordinance, the Stormwater Technical Manual and Design Tool. See link: <http://www.wakegov.com/water/watershed/stormwater/default.htm>
- B. Develop your preliminary Stormwater plans accordingly.
- C. Minimum Submittal Requirements for Stormwater Preliminary Plan Review include:
 - Stormwater Narrative- this describes the intent on how the applicant plans to meet the Maximum Composite CN.
 - Submit Stormwater Design Tool Worksheets: *Summary, Target CN, Preliminary Plan, Post Development CN* (see link & Note tabs on excel spread sheet) http://www.wakegov.com/NR/ronlyres/A94D769E-9DDD-49D8-B2AA-E12308519627/0/FINAL_Wake_SW_Tool.xls
 - 1970 Soil Survey- this supports applicants computation for post development CN.
 - Demonstration of Installation for Onsite Sewage Disposal and Repair Layout Plan- this supports the applicants minimum area and location of Open Space requirements to meet requirement of onsite systems. These areas cannot be credited for Woods. See part "D" for guidelines.
 - Site plans supporting post-construction conditions, i.e. impervious areas, open space and woods.
- D. Supply the Onsite Sewage Disposal system layout. See link for form: <http://www.wakegov.com/NR/ronlyres/35D7C2ED-C006-48E0-9148-12CD09EEFB3F/0/SoilScientistReviewChecklist.doc>
- E. The Stormwater staff DRS comments will be specified as two types:
 - Comments that are required to be addressed for preliminary plan approval and
 - Comments that will need to be addressed at construction plan submittal.

- F. Refer to Zoning and Subdivision website for submittal deadline and review timelines. See link: <http://www.wakegov.com/planning/subdivisions/reviewschedules.htm> Upon staff completion of the Development Review Services (DRS), review comments will be sent to the applicant. The applicant has 2 weeks to re-submit preliminary plans to address staff comments.
- G. Resubmit Amended Preliminary Plans to Wake County Zoning and Subdivision for review and approval. Note Amended Preliminary plans must be resubmitted within review timeline period.

II. Construction Plan Review Process:

- A. Familiarize yourself with Article 9, Stormwater Management of the Unified Development Ordinance, the Stormwater Technical Manual and Design Tool. See link: <http://www.wakegov.com/water/watershed/stormwater/default.htm>
- B. Develop Stormwater plans accordingly and address construction plan comments from the preliminary review (See I-E, previous).
- C. Minimum Submittal Requirements for Stormwater Construction Plan Review include:
- Stormwater Narrative- this describes the intent on how the applicant plans to meet the Maximum Composite CN.
 - Request for Construction Plan Approval Form. See Link: <http://www.wakegov.com/NR/ronlyres/AA6A9380-070E-4D05-8330-C76FE4040D07/0/RequestforPlanApproval.pdf>
 - Stormwater Checklist. See Link: <http://www.wakegov.com/NR/ronlyres/1D836442-42D8-4BB4-BA0C-AB5F498BC178/0/Checklist.pdf>
 - Submit all Stormwater Design Tool Worksheets: *Summary, Target CN, Preliminary Plan, Post Development CN, Pre-development, Post Development Tc, Peak Flow Calcs, Nitrogen* (see link & Note tabs on excel spread sheet) http://www.wakegov.com/NR/ronlyres/A94D769E-9DDD-49D8-B2AA-E12308519627/0/FINAL_Wake_SW_Tool.xls
 - Supply and Support all Disconnected Impervious surface credits, if specified.
 - Stormwater Maintenance Agreement, Operations & Maintenance Manual, Inspections Checklist and Draft As-Built Documents (Refer to Stormwater Design Manual for typical Forms).
 - Stormwater New Subdivision Construction Plan Review Fees: <http://www.wakegov.com/water/watershed/efs.htm>
 - Site plans supporting post-construction conditions, i.e. impervious areas, open space and woods.
 - Submit 2 sets of plans and calculations to Wake County Environmental Services, PO Box 550, 336 Fayetteville Street Mall, Suite 101, Raleigh, NC 27601
- D. The Stormwater department will send a Receipt Letter to the applicant within 15 working days specifying the status of the review as complete or incomplete (see below). Applicant should include E-Mail address to expedite this process.
- Complete: the environmental engineer accepts the plan for review and a thorough detailed review will commence.
 - Incomplete: the environmental has determined that there is insufficient data, supporting documentations to fulfill review requirements.
- E. Notification of Plan Approval or Disapproval. Within thirty (30) working days from the receipt of a complete plan, the Engineer will notify the applicant of the construction plan findings. It is the goal of Environmental Services to review the Stormwater construction plan and achieve approved plans within specified timelines. Plans resubmitted to address disapproval plan comments, will be acted upon within fifteen (15) working days.