

## APPENDIX C: STORMWATER PLAN REQUIREMENTS—HIGH-DENSITY PROJECTS

High-Density projects—those that exceed 24% built-upon area or two dwelling units per acre—require detailed stormwater management plans, which should include, at a minimum, the following elements. This form is intended to be an informational tool and may not be exhaustive of all requirements. Please contact the City of Lenoir Stormwater Administrator at (828) 757-2186 for specific questions or circumstances.

### To be submitted at the time of application:

- Design Drawings
  - Site Plans
    - 1"=50' (or larger) scale
    - Existing conditions
    - Proposed conditions at ultimate build-out
    - Environmental features (water, vegetation, etc.)
    - Impacted off-site drainage
    - Identified drainage areas
    - Pretreatment and treatment areas
    - High flow bypass for volumes exceeding the design storm runoff volume
    - Maintenance Access Easement (25' wide around the perimeter of each BMP and 25' wide extending to a public ROW)
    - Any required or necessary drainage easements
  - Plan Details
    - 1"=30' (or larger) scale for each BMP
    - 1 foot contour lines
    - Pretreatment and treatment areas
    - High flow bypass for volumes exceeding the design storm runoff volume
    - Maintenance Access Easement (see Site Plan Requirements for dimensions)
    - Any required or necessary drainage easements
  - Section View
    - 1"=20' (or larger) scale for each BMP
    - Underdrain system (if applicable)
    - Inlet and outlet structures
    - 3:1 side slopes
    - ALL relevant elevations (inverts, ponding depths, underdrains, overflow devices, berms, etc.)
  - Additional Plan Sheets
    - Erosion Control Plan (for Erosion Control permitting contact NCDENR Asheville Regional Office at 828-296-4500)
    - Detailed landscape plan
    - Storm sewer profiles
- Calculations supporting designed plan
- Design checklist for each BMP from the NCDENR Design Manual
- Soil Report determining seasonal high-water table

### GENERAL NOTES

- ⇒ All structural BMPs must be designed to treat runoff from the first inch of precipitation from ALL built-upon area, draw down in 48-120 hours, and remove at least 85% TSS.
- ⇒ Stormwater Management Plans shall be prepared by a qualified registered North Carolina professional engineer, surveyor, soil scientist or landscape architect.
- ⇒ Implementation of the City of Lenoir Phase II Stormwater Management Program is guided by the Caldwell County Phase II Stormwater Ordinance and the City of Lenoir Administrative Manual for the Phase II Stormwater Ordinance
- ⇒ The City of Lenoir Phase II Stormwater Management Program uses the NC Stormwater BMP Manual as a guide for acceptable BMP design.

### To be submitted subsequent to issuance of permit:

- Prior to construction:
  - Construction Performance Security
- To be recorded with Register of Deeds:
  - Operation and Maintenance Manual
  - Operation and Maintenance Agreement
  - Written Access Easement
  - Final Plat with Access Easement
- Prior to Certificate of Occupancy:
  - Certified As-Built Drawings
  - Certification of Completion
  - Record of Construction
  - Maintenance Security
- Annually:
  - Annual Inspection Report

### Additional permitting may be required, including but not limited to:

- NCDENR Erosion and Sedimentation Control
- NCDENR 401 Water Quality Certification
- USACE 404 (Stream, Wetland, Water impacts)

Contact the appropriate authority to determine applicability and requirements.

**\*\*\*Please provide 1 full size set of drawings, 1 set of drainage calculations, and access to electronic copies of each.\*\*\***